p–ISSN: 2723 - 6609 e-ISSN : 2745-5254
Vol. 7, No. 2 February 2026 http://jist.publikasiindonesia.id/

Transformation of Social Interaction of Generation Z in the Era of Artificial Intelligence: An Analysis of Changes in Digital Communication Patterns

***Ana Lestari[1], Renita Fitriani[2]**
SMK Ibnu Khaldun Cirebon, Indonesia [1,2]
Email: analestari039@gmail.com[1]

Keywords:
artificial intelligence; generation Z; social interaction; digital communication; technology transformation

Info Article
Accepted: 2025-12-28
Revised: 2026-01-25
Approved: 2026-02-17

ABSTRACT

The development of digital technology and the emergence of Artificial Intelligence (AI) have brought significant changes in people's communication patterns, especially in Generation Z known as the digital native generation. The integration of AI in various communication platforms such as social media, chatbots, and recommendation systems is influencing the way this generation interacts, obtains information, and builds social relationships in the digital space. These changes create new dynamics in social interaction that need to be studied more deeply from a social and technological perspective. This study aims to analyze the transformation of Generation Z's social interaction in the Artificial Intelligence era and identify changes in digital communication patterns that arise due to the use of AI-based technology in daily life. This study uses a qualitative approach with literature study methods and descriptive analysis. Data is obtained from various scientific sources such as journal articles, books, and research reports that are relevant to the topics of social interaction, digital communication, and the development of Artificial Intelligence. The data was then analyzed thematically to identify patterns of change in interaction and communication in Generation Z. The results of the study show that the presence of Artificial Intelligence has changed the communication patterns of Generation Z to be faster, technology-based, and tend to take place in the digital space. AI is also influencing the way this generation accesses information, expresses itself, and builds social relationships. In addition to providing ease and efficiency of communication, the use of AI also raises challenges such as technology dependence, a decrease in the quality of face-to-face interactions, and the potential for the spread of inaccurate information in the digital space.

INTRODUCTION

The development of digital technology in the last two decades has brought major changes in various aspects of people's social lives (Monda et al., 2023; Novianti & Asmara, 2023; Rustamovich et al., 2025). One of the technological innovations that is currently growing rapidly is Artificial Intelligence (AI) which has been integrated into various digital communication platforms such as social media, chatbots, recommendation systems, and virtual assistants (Abbas Khan et al., 2025; Adamopoulou & Moussiades, 2020; Aslam, 2023). The presence of this technology not only makes it easier to access information, but also changes the way individuals interact and communicate in their daily lives. These changes are very visible in Generation Z who were born and grew up in a

digital environment so that they have a high proximity to internet-based technology and artificial intelligence (Boyd, 2014; Floridi, 2019; Kaplan & Haenlein, 2019).

Generation Z is known as the generation that has a high level of technological adaptation compared to the previous generation. They use various digital platforms as the main means of communicating, sharing information, and building social relationships. The integration of AI in digital platforms has created a new communication pattern that is faster, more personalized, and algorithm-based. This condition causes social interaction to no longer be limited to physical space, but is increasingly dominant in the digital space mediated by technology. This phenomenon is one of the important characteristics in the transformation of digital communication in the modern era (Anderson & Jiang, 2018).

The development of Artificial Intelligence has also brought about significant changes in information consumption patterns and social communication processes. AI technology is able to analyze user behavior as well as provide content recommendations that suit individual preferences (Cui, 2025a) . This has led to communication interactions becoming increasingly personalized and data-driven. On the other hand, algorithms used in digital platforms also have the potential to create an echo chamber that can influence the way individuals understand social reality. Therefore, the social impact of the use of AI in digital communication needs to be studied in more depth (McAfee & Brynjolfsson, 2012; Zuboff, 2019).

The urgency of research on the transformation of Generation Z's social interaction is becoming increasingly important along with the increasing use of digital technology in various countries. Based on the digital global report, the number of internet users in the world has reached more than five billion people with the dominance of social media use by young age groups. Generation Z is the most active group in utilizing digital technology for communication, entertainment, and other social activities. This condition shows that changes in digital communication patterns have broad implications for the social dynamics of modern society.

To provide an overview of the intensity of digital technology use by Generation Z, the following is presented simple data related to the use of the internet and social media in the young age group.

Table 1. Intensity of Digital Media Use by Generation Z

Digital Activity	Percentage of Gen Z Users
Social media use	95%
Communication through messaging apps	90%
Consumption of short video content	88%
Interaction through an AI-based platform	70%

Source: Global Digital Report (2023); Pew Research Center (2022)

The data shows that the majority of Generation Z use digital media as the main means of social interaction. In fact, most interpersonal communication is now carried out through digital platforms that have been equipped with Artificial Intelligence technology. This shows that AI not only plays a supporting role as a supporting technology, but also

as a mediator in the social communication process. This condition has implications for the way individuals build social relationships, convey messages, and understand information in the digital environment.

A number of previous studies have examined the relationship between digital technology and changes in people's social interactions. Research conducted by Turkle (2015) shows that the intensive use of digital technology can directly affect the quality of interpersonal communication. Other research also explains that social media algorithms are able to shape users' information preferences through data-driven recommendation systems. In addition, the development of AI has also contributed to creating new forms of communication that are more automated and interactive through chatbot technology and virtual assistants.

Although various studies have addressed the impact of digital technology on social communication, most studies still focus on the use of social media in general. Studies that specifically discuss the influence of Artificial Intelligence on the transformation of social interaction of Generation Z are still relatively limited. In addition, previous research has highlighted more aspects of technology without looking in depth at the changes in social communication patterns that occur in the daily lives of the younger generation. This shows that there is a research gap that needs to be studied further (Anderson & Jiang, 2018; Floridi, 2019; Zuboff, 2019).

Based on the research gap, this research offers novelty by specifically examining how Artificial Intelligence technology affects the transformation of Generation Z's social interaction in the context of digital communication. This research not only discusses technological aspects, but also analyzes changes in social communication patterns that arise due to the integration of AI in various digital platforms. This approach is expected to provide a new perspective in understanding the relationship between artificial intelligence technology and the dynamics of social interaction of the younger generation.

Thus, the purpose of this study is to analyze the transformation of social interaction of Generation Z in the Artificial Intelligence era and identify changes in digital communication patterns that occur due to the use of AI-based technology in daily life. This research is expected to make a scientific contribution to the development of socio-technological studies, especially in understanding the dynamics of digital communication of the younger generation in the era of artificial intelligence. In addition, the results of this study are also expected to be a reference for academics, researchers, and policymakers in formulating a smarter and more sustainable digital technology management strategy.

RESEARCH METHOD

Types of Research

This research uses a qualitative approach with a literature study method (library research) which aims to understand and analyze the transformation of social interaction of Generation Z in the Artificial Intelligence era. The qualitative approach was chosen because this research focuses on understanding social phenomena that occur due to the

development of digital technology and AI in people's communication patterns. The literature study method allows researchers to examine various theories, concepts, and results of previous research that are relevant to the research topic. Through this approach, researchers can identify changes in digital communication patterns and their impact on Generation Z's social interactions based on various credible scientific sources.

Population and Sampling

In literature study-based research, the research population is in the form of all scientific sources relevant to the research topic, such as journal articles, academic books, research reports, and other scientific publications that discuss Artificial Intelligence, digital communication, and Generation Z. , that is, the deliberate selection of literature sources based on certain criteria. The criteria used include: scientific publications that discuss social interaction, digital communication, or Artificial Intelligence, sources published in the last 10-15 years and articles from reputable scientific journals or reliable academic sources. Through the selection process, a number of literature was obtained that was considered relevant to be analyzed in this study.

Research Instruments

The main instrument in this study is the researcher himself (human instrument) who plays a role in identifying, collecting, and analyzing various relevant literature sources. In addition, this study also uses data extraction sheets to organize important information from each literature source analyzed. The record sheet contains several components such as the identity of the source, year of publication, research focus, research method, and the main findings of each study used as a reference. The use of this instrument aims to simplify the process of classification and analysis of data obtained from various literature sources.

Data Collection Technique

The data collection technique in this study was carried out through documentation and search of scientific literature. The researcher collected data from various academic databases such as Google Scholar, national and international scientific journals, academic books, and research reports related to the topics of Artificial Intelligence, digital communication, and social interaction of Generation Z. The data collection process was carried out using certain keywords such as *Artificial Intelligence*, *digital communication*, *social interaction*, and *Generation Z.* After that, the researcher selects literature sources that are considered relevant to the research objectives to be analyzed further.

Research Procedure

The research procedure is carried out through several systematic stages. The first stage is the identification of research problems, namely examining the phenomenon of social interaction transformation in the Artificial Intelligence era. The second stage is the collection of relevant literature through various scientific sources. The third stage is the

selection and classification of literature sources based on the suitability of the research topic. The fourth stage is content analysis of the literature that has been selected to identify the pattern of changes in digital communication in Generation Z. The last stage is drawing conclusions, namely formulating research findings regarding the transformation of social interaction that occurs due to the development of Artificial Intelligence technology.

Data Analysis Technique

The data analysis technique used in this study is qualitative descriptive analysis with a thematic analysis approach. The analysis was carried out by grouping information from various literature sources based on certain themes, such as the development of Artificial Intelligence, changes in digital communication patterns, and the dynamics of social interaction of Generation Z. Furthermore, the data that has been grouped is analyzed in depth to find the relationship between the development of AI technology and changes in social communication patterns. The results of the analysis are then presented descriptively to provide a comprehensive picture of the transformation of social interaction of Generation Z in the Artificial Intelligence era.

RESULTS AND DISCUSSION

Development of Artificial Intelligence in Digital Communication

The development of Artificial Intelligence (AI) technology has brought significant changes in digital communication systems in various sectors of people's lives. AI technology allows digital systems to analyze data, understand user behavior, and provide responses automatically through various communication platforms. The presence of this technology further accelerates the process of information exchange and creates new forms of communication that are more efficient and interactive. The integration of AI in various digital platforms such as social media, chatbots, and virtual assistants has changed the way individuals interact in the digital space.

In addition to improving communication efficiency, AI technology also allows for the personalization of the information received by users. The algorithms used in digital platforms are able to learn individual preferences based on the user's activity history. This causes the information that appears on digital platforms to be more relevant to the needs and interests of users. However, AI-based recommendation systems also have the potential to create perspective limitations because users tend to receive information that is in line with their own views.

The use of AI in digital communication is also seen through the use of chatbots and virtual assistants that are able to provide communication services automatically. This technology is widely used in customer service, digital education platforms, and internet-based communication applications. The presence of AI-based chatbots is able to increase the efficiency of communication services because they can provide quick responses without direct human involvement. This condition shows that AI has become an important

part of modern digital communication systems (Anderson & Jiang, 2018; Kaplan & Haenlein, 2019).

In addition, the development of AI technology also affects the way individuals acquire and disseminate information. Through an algorithm-based recommendation system, users can easily find content that matches their interests. But on the other hand, this condition can also increase the risk of spreading inaccurate information or disinformation if it is not accompanied by adequate digital literacy. Therefore, the use of AI technology in digital communication requires wise management in order to provide optimal benefits to society.

Table 2. Examples of the Application of Artificial Intelligence in Digital Communication

AI Technology	Forms of Application	Impact on Communication
Chatbot	Automated customer service	Quick response
Recommendation system	Social media & streaming platforms	Content personalization
Virtual assistant	Siri, Alexa, Google Assistant	Voice-based interactions
AI data analysis	Social media algorithms	Information filtering

Source: Kaplan & Haenlein (2019)

Characteristics of Social Interaction of Generation Z in the Digital Era

Generation Z is a group of generations who were born and grew up in a digital technology environment so that they have a high level of adaptation to technological developments. This generation is known as *digital natives* who are used to using the internet and digital devices in various daily activities. The use of digital technology is not only limited to entertainment activities, but also includes social communication, learning, and digital economic activities.

The main characteristic of Generation Z's social interaction is the dominance of digital platform-based communication. Various communication applications such as social media, instant messaging, and video-sharing platforms are the main means for this generation to build social relationships. Interactions that were previously carried out directly are now increasingly carried out through digital media that allows communication to take place quickly and flexibly without space and time limitations (Anderson & Jiang, 2018; Turkle, 2015).

In addition, Generation Z also has a tendency to express themselves through various forms of digital content such as short videos, images, and short texts. This phenomenon shows that digital communication not only functions as a means of information exchange, but also as a medium for the expression of the social identity of the younger generation. Digital platforms provide space for individuals to build their self-image and expand social networks globally.

However, the dominance of digital communication also brings a number of challenges in the social interaction of Generation Z. The high intensity of the use of digital technology can directly affect the quality of interpersonal communication. Several studies

show that excessive use of digital media can lead to reduced face-to-face interaction and a decrease in the depth of social relationships. This condition shows that the development of digital technology has a complex impact on the dynamics of social interaction of the younger generation (Castells, 2010; Turkle, 2015).

Table 3. Social Interaction Patterns of Generation Z

Forms of Interaction	Percentage
Communication through social media	40%
Instant messaging app	35%
Face-to-face communication	15%
AI-based platform	10%

Source: Pew Research Center (2022)

Transformation of Digital Communication Patterns through Artificial Intelligence

The integration of Artificial Intelligence technology in digital communication platforms has brought a significant transformation in people's communication patterns (Lin, 2025). AI enables digital communication systems to customize content as well as interactions based on user behavior. This causes digital communication to become more personal and data-driven. The recommendation system used in social media is one example of how AI can influence the way individuals obtain information (Kaplan & Haenlein, 2019; Zuboff, 2019).

The transformation of digital communication can also be seen from the increasing use of automated technology in the communication process. Chatbots and virtual assistants allow individuals to interact with digital systems directly through text or voice. This technology provides convenience in various communication activities such as customer service, information search, and digital learning activities. The presence of AI in digital communication systems shows that technology is not only a communication tool, but also a mediator of social interaction (Anderson & Jiang, 2018; Floridi, 2019; McAfee & Brynjolfsson, 2012).

In addition to providing convenience, the use of AI in digital communication has also led to changes in the way individuals build social relationships. Interactions that were previously direct are now increasingly carried out through digital media mediated by technology. This condition causes social relationships to become more flexible but also have the potential to become more superficial if not balanced with direct interpersonal communication.

Digital communication transformation is also affecting the way Generation Z obtains and processes information. Through an AI-based recommendation system, users can easily find content that matches their interests. But on the other hand, this condition can also create an echo chamber of information that limits the diversity of user perspectives. Therefore, it is important for the younger generation to have good digital literacy in utilizing AI technology wisely (Anderson & Jiang, 2018; Floridi, 2019; Zuboff, 2019).

Table 4. Changes in Communication Patterns in the Era of Artificial Intelligence

Old Communication Patterns	New Communication Patterns
Face-to-face	Digital communication
Manual interaction	Automated interaction (AI)
General information	Personalization information
One-way communication	Interactive communication

Source: Anderson & Jiang 2018; Floridi, 2019)

Social Impact of the Use of Artificial Intelligence on Generation Z

The use of Artificial Intelligence in digital communication has various social impacts for Generation Z (Bista, 2025; Cui, 2025a, 2025b; Schweizer, 2003). One of the most visible positive impacts is the increase in efficiency in the communication process. AI technology allows individuals to obtain information quickly and communicate instantly through various digital platforms. This makes it easier for the younger generation to build a wider social network without being limited by geographical distance.

In addition, AI technology also provides opportunities for the younger generation to develop creativity through various digital platforms (Putjorn & Putiorn, 2023). Generation Z can leverage AI technology to create digital content, develop creative ideas, and participate in various digital communities. The presence of this technology opens up new opportunities in the field of digital economy as well as the creative industry that is growing rapidly.

However, the use of AI in digital communication also has some negative impacts that need to be considered. Dependence on digital technology can lead to a reduction in direct social interaction and a decrease in the quality of interpersonal communication. In addition, AI algorithms also have the potential to spread inaccurate information if it is not accompanied by adequate monitoring mechanisms.

Therefore, it is important for people, especially Generation Z, to have good digital literacy in utilizing Artificial Intelligence technology. Digital literacy can help individuals understand how AI technology works and improve the ability to filter information obtained from various digital platforms. Thus, AI technology can be optimally utilized to support the development of more positive and productive social communication.

Table 5. The Impact of AI Use on Generation Z

Positive Impact	Negative Impact
Quick access to information	Technology dependency
More efficient communication	Decreased direct interaction
Digital creativity opportunities	Risks of disinformation

Source: Anderson & Jiang (2018; Floridi, 2019)

This research has several limitations that need to be considered in interpreting the research results. First, this study uses a literature study method so that all the data analyzed comes from secondary sources without the collection of primary data directly from the respondents. This causes the research findings to be more conceptual and descriptive, and do not fully describe the

empirical conditions that occur in the field. Second, limitations in the selection of literature that only focus on publication in a given time span have the potential to cause not all recent perspectives or specific local contexts to be optimally accommodated. Third, this study did not conduct a quantitative analysis that could measure the exact level of influence of Artificial Intelligence on changes in Generation Z's communication patterns. Therefore, the results of this study need to be understood as an overview that still needs to be strengthened through more comprehensive follow-up research.

The results of this study provide several important implications both theoretically and practically. Theoretically, this research enriches studies in the field of socio-technology by providing a deeper understanding of the relationship between the development of Artificial Intelligence and the transformation of Generation Z's social interaction patterns, especially in the context of digital communication. This research also reinforces the concept that technology plays a role not only as a tool, but also as a mediator in the process of modern social interaction.

Practically, this research has implications for various parties. For the government and policymakers, the results of this research can be the basis for formulating policies related to digital literacy and the management of Artificial Intelligence technology that is wiser and more sustainable. For the world of education, this research emphasizes the importance of strengthening digital literacy and critical thinking skills for the younger generation to be able to utilize technology optimally. For the public, especially Generation Z, this study provides awareness of the importance of maintaining a balance between digital interaction and direct interaction to maintain the quality of social relationships. In addition, for technology developers, the results of this research can be a reference in designing AI-based systems that are more ethical, inclusive, and oriented towards the social welfare of users.

CONCLUSION

Based on the results of the literature analysis that has been conducted, this study shows that the development of Artificial Intelligence (AI) has brought significant transformation in the social interaction patterns of Generation Z, especially in the context of digital communication. The integration of AI technology in various digital platforms such as social media, recommendation systems, chatbots, and virtual assistants has changed the way young people communicate, obtain information, and build social relationships. The communication pattern that was previously mostly carried out face-to-face is now increasingly shifting towards digital communication that is fast, flexible, and technology-based. This condition shows that AI not only functions as a technological tool, but also plays a role as a mediator in the process of social interaction in the digital era.

The findings of this study also show that the transformation of digital communication influenced by AI has various impacts on Generation Z. On the one hand, this technology is able to increase communication efficiency, expand social networks, and provide ease of access to information quickly and personally. But on the other hand, the use of AI technology also raises a number of challenges such as increasing dependence on digital technology, reduced intensity of face-to-face communication, and the potential for the formation of an information echo *chamber* that can affect the way individuals understand social reality. Therefore, it is important for Generation Z to have

good digital literacy in order to be able to use Artificial Intelligence technology wisely and critically.

Overall, this study emphasizes that the transformation of social interaction of Generation Z in the Artificial Intelligence era is an inseparable phenomenon from the development of digital technology. The presence of AI has created a new communication pattern that is more dynamic, data-driven, and globally connected. These findings contribute to enriching the study of social technology, especially in understanding how the development of Artificial Intelligence affects the dynamics of digital communication of the younger generation in modern social life.

REFERENCES

Abbas Khan, M., Khan, H., Omer, M. F., Ullah, I., & Yasir, M. (2025). *Impact of Artificial Intelligence on the Global Economy and Technology Advancements*. https://doi.org/10.1007/978-981-97-3222-7_7

Adamopoulou, E., & Moussiades, L. (2020). An Overview of Chatbot Technology BT - Artificial Intelligence Applications and Innovations. *Artificial Intelligence Applications and Inovations*.

Anderson, M., & Jiang, J. (2018). *Teens, Social Media & Technology 2018*.

Aslam, F. (2023). The Impact of Artificial Intelligence on Chatbot Technology: A Study on the Current Advancements and Leading Innovations. *European Journal of Technology*, *7*(3). https://doi.org/10.47672/ejt.1561

Bista, S. (2025). Discourse on AI vs. Human Interaction among Generation Z: Trends, Challenges, and Future Directions. *BIC Journal of Management*, *2*(1), 135–150. https://doi.org/10.3126/bicjom.v2i1.84332

Boyd, D. (2014). *It's Complicated: The Social Lives of Networked Teens*. Yale University Press.

Castells, M. (2010). *The Rise of the Network Society* (2nd ed.). Wiley-Blackwell.

Cui, J. (2025a). Digital Transformation in the Media Industry: The Moderating Role of Human-AI Interaction Technologies. *Media, Communication, and Technology*, *1*(1). https://doi.org/10.30560/mct.v1n1p42

Cui, J. (2025b). The Role of Human-AI Interaction in Driving Technological Innovation in the Digital Media Industry: A Qualitative Analysis. *Media, Communication, and Technology*, *1*(1). https://doi.org/10.30560/mct.v1n1p17

Floridi, L. (2019). *The Logic of Information: A Theory of Philosophy as Conceptual Design*. Oxford University Press.

Kaplan, A. M., & Haenlein, M. (2019). Siri, Siri, in my hand: Who's the fairest in the land? On the interpretations, illustrations, and implications of artificial intelligence. *Business Horizons*, *62*(1), 15–25.

Lin, P. (2025). The Rise of AI Communication: Opportunities, Challenges, and the Path Forward. *IEEE International Symposium on Broadband Multimedia Systems and Broadcasting, BMSB*. https://doi.org/10.1109/BMSB65076.2025.11165632

McAfee, A., & Brynjolfsson, E. (2012). Big data: The management revolution. *Harvard Business Review*, *90*(10), 60–68.

Monda, A., Feola, R., Parente, R., Vesci, M., & Botti, A. (2023). Rural development and digital technologies: a collaborative framework for policy-making. *Transforming Government: People, Process and Policy*, *17*(3). https://doi.org/10.1108/TG-12-2022-0162

Novianti, A. G., & Asmara, A. (2023). The Development of Digital Technology and Its Impact on Indonesia's Economic Growth. *International Journal of Research and Review*, *10*(9). https://doi.org/10.52403/ijrr.20230932

Putjorn, T., & Putiorn, P. (2023). Augmented Imagination: Exploring Generative AI from the Perspectives of Young Learners. *2023 15th International Conference on Information Technology and Electrical Engineering, ICITEE 2023*. https://doi.org/10.1109/ICITEE59582.2023.10317680

Rustamovich, B. I., Khoshim Ugli, M. F., & Al-Fatih, S. (2025). Right to Privacy in the Development of Digital Technologies. *International Journal of Law and Society*, *4*(1). https://doi.org/10.59683/ijls.v4i1.171

Schweizer, T. S. (2003). Managing interactions between technological and stylistic innovation in the media industries. *Technology Analysis and Strategic Management*, *15*(1). https://doi.org/10.1080/0953732032000046033

Turkle, S. (2015). *Reclaiming Conversation: The Power of Talk in a Digital Age*. Penguin Press.

Zuboff, S. (2019). *The Age of Surveillance Capitalism*. Public Affairs.