



SYSTEMATIC LITERATURE REVIEW: COMMUNICATION TRANSFORMATION IN THE DIGITAL IMMIGRANT GENERATION IN THE USE OF SOCIAL MEDIA AND CHANGES IN SOCIAL INTERACTION PATTERNS

Putri Sosanti Sembiring¹, Dwianita², Blangi Intan Maharani³

^{1,2,3}Politeknik Negeri Medan, Indonesia

*Corresponding Author: putrisosanti@polmed.ac.id

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ABSTRACT

The transformation of digital technology has brought significant changes in the way humans communicate. The digital immigrant generation, individuals who were born before the digital era but adapted to technology, experience challenges and changes in their daily communication patterns. This article is a literature review that examines how communication transformation in the digital immigrant generation in the use of social media and its impact on social interaction patterns. Digital immigrants face challenges in digital literacy and information security, but social media allows them to stay connected with their families and form new communities. By reviewing previous studies, this article describes the adaptation process of digital immigrants to social media, the barriers they face, and how social media opens up spaces of social inclusion for digital immigrants, allowing them to form new communities, communicate across generations, and reduce loneliness.

Keywords: Digital Immigrant, Social Media, Communication Transformation, Digital Literacy, Social Interaction, Technology Adaptation

1. INTRODUCTION

The development of digital communication technology in the last two decades has revolutionized the way humans interact. Social media and digital platforms are now the main means of communicating, disseminating information, and building social networks. This change has been accelerated by the COVID-19 pandemic, which has forced people to rely on technology in almost all aspects of life, from work to social relationships. This condition brings its own challenges for digital immigrants, individuals born before 1980 (over 45 years old), whose childhood was not surrounded by technology. They started using and understanding

technology and the internet as adults, thus requiring an adaptation process (Prensky 2001).

Based on data from the Central Bureau of Statistics (BPS) 2023, around 27% of the Indonesian population aged 45 years and above have social media accounts and use the internet for various purposes, including social communication and access to information. However, there are significant differences in how digital immigrants use social media compared to digital natives (individuals born after 1994). As a generation that did not grow up with digital technology, digital immigrants often face difficulties in adapting to the evolving use of social media (Humaizi et al., 2024).

Research conducted by Saputra & Purwanto (2021) revealed that although digital participation in the digital immigrant generation in Indonesia is increasing, there are still significant gaps in terms of technical skills, information security, and utilization of social media for productive purposes. The study showed that only 38% of respondents aged 45 and above were comfortable using more than two social media platforms, and most still had difficulty in understanding the basic features of the applications (Ritonga et al., 2024).

In line with this, Apriani and Lestari (2022) stated that digital immigrants tend to utilize social media as a means of family communication and information consumption, not to form a digital identity as is commonly done by the younger generation. However, in the context of the COVID-19 pandemic, the intensity of social media use by digital immigrants has increased significantly, especially in the use of WhatsApp and Facebook as the main communication channels. In using social media, they tend to be more limited to private communication and less explorative in interacting publicly in the digital world. This suggests the need to understand the communication dynamics of this generation in order to design strategies that are more inclusive and empower digital immigrants in their use of social media (Ritonga et al., 2024).

From a theoretical perspective, the Unified Theory of Acceptance and Use of Technology (UTAUT) developed by Venkatesh et al. (2003) provides an important framework for understanding the factors that influence technology adoption by digital immigrants. This adaptation not only affects digital skills, but also shapes new patterns of social interaction.

Many digital immigrants find it difficult to keep up with the ever-changing technology, and have concerns about the security and privacy of their personal data online. There are also limitations in their understanding of the use of more complex digital applications and platforms (Sikumbang et al., 2024).

Through this literature review, the researcher wants to explore more deeply how the communication transformation experienced by digital immigrants through the use of social media not only impacts the way they communicate, but also affects their social interaction patterns. Adaptation to social media can change

the way they interact with family, friends and communities, and affect their involvement in various social activities.

2. RESEARCH METHOD

The design used in this study is a literature review or literature review. Literature review is a written summary of journal articles, books, and other documents that describe the past and current state of information, organize the literature into topics, and document the need for the proposed research (Creswell, 2014).

This literature study uses SPIDER which according to Cooke, A., Smith, D., & Booth, A. (2012), SPIDER is a search strategy tool specifically designed to identify qualitative and mixed methods research by focusing on Sample, Phenomenon of Interest, Design, Evaluation, and Research Type. SPIDER used by researchers includes categories:

1. Sample (S) The digital immigrant generation in Indonesia, specifically individuals born before 1980.
2. Phenomenon of Interest (PI): The use of social media and changes in social interaction patterns.
3. Design (D): Literature study from Google Scholar and SINTA accredited journals with a range of years 2014-2024.
4. Evaluation (E): Analysis of communication adaptation and its impact on social interaction.
5. Research type (R): Relevant qualitative and quantitative studies.

The literature search was conducted through the Google Scholar and SINTA database with the keywords: "digital immigrant", 'social media', 'digital communication', 'social interaction patterns', 'technology adaptation', and 'Indonesia'. Articles selected were those that met the inclusion criteria: journal publishing deadline of maximum 10 years (2014-2024), using Indonesian and English, original articles (research articles), research subjects in the articles were digital immigrants born before 1980 and articles were available in full text.

The following is a literature synthesis table using the SPIDER approach, based on relevant scientific journals (published 2014-2024) that discuss the role and adaptation of digital immigrants in the use of digital technology and social media. Data is sourced from commonly available journals on Google Scholar, and SINTA.

No	Author & Year	Sample (S)	Phenomenon of Interest (PI)	Design (D)	Evaluation (E)	Research Type (R)
1.	Saputra & Purwanto (2021), Pekommas Journal	Age > 45 years, Jakarta	Adaptation to the use of social media (FB, WA)	Survey & interview	Digital literacy barriers, family roles	Mixed-method
2.	Apriani & Lestari (2022), ISKI Journal of Communication	Digital immigrants in urban areas	Changes in communication patterns on social media	Narrative study	Domination of social media as a means of family communication	Qualitative
3.	Rahayu (2023), Journal of Communication Studies	Elderly groups in digital villages	Digital literacy and technology adoption factors	UTAUT-based survey	The influence of social influence and performance expectancy	Quantitative descriptive
4.	Irawan & Yuliana (2020), Journal of Mass Communication	Elderly Facebook users	The use of social media in social relations	Phenomenological study	Media utilization for self-actualization and reducing loneliness	Qualitative
5.	Nuraini et al. (2019), Journal of Communication Research	Digital literacy elderly community	Technology adaptation strategies by the older generation	In-depth interview	Learning motivation, technical challenges, and access	Qualitative
6.	Setiawan & Handayani (2020), Journal of Technology & Society	Elderly in urban-rural environment	Digital inequality and inclusion efforts	Case study	Identification of infrastructure and education barriers	Qualitative
7.	Firmansyah (2018), Journal of Sociotechnology ITB	Age 50-65 years	Digital participation in e-government	Survey	Low level of participation due to technological constraints	Qualitative
8.	Yulita & Haryanto (2017), Komunika UIN Sunan Kalijaga	Elderly WhatsApp users	Digital platform-based family communication	Qualitative study	Emotional function of social media in family	Qualitative

3. RESULT AND ANALYSIS

Communication transformation in the digital immigrant generation is a complex phenomenon that involves changes in the way older individuals interact, adapt and build relationships in a digitized social context. Social media has become a new interaction space that brings together intergenerational communication needs and changing social dynamics in a digital society. In addition, communication transformation in the digital immigrant generation not only reflects the process of

technology adoption, but also reflects efforts to social adaptation to contemporary communication dynamics. There are 5 main aspects in this process: adaptation to social media, changes in social interaction patterns, intergenerational communication, Digital Literacy and Security Challenges, and Social Media as a Space of Inclusion, which emerged as a response to the development of digital technology.

Digital Immigrant Adaptation Of Social Media

Digital immigrant adaptation to social media is a gradual process influenced by communication needs, social support, and perceived benefits. According to Saputra and Purwanto (2021), this adaptation is often driven by the desire to stay connected with family, especially children and grandchildren who are more digitally literate. In this case, social media such as WhatsApp, Facebook, and YouTube are the platforms most easily accessed and used by this generation.

The Unified Theory of Acceptance and Use of Technology (UTAUT) model by Venkatesh et al. (2003) explains that digital adaptation is influenced by four main factors: performance expectancy, effort expectancy, social influence, and facilitating conditions. In the context of digital immigrants, social influence from family has a dominant role. A study by Rahayu (2023) confirms that digital immigrants who are accompanied by family or community are more likely to feel confident in trying new digital features.

However, this adaptation process is not free from challenges. Many older people or digital immigrants still experience difficulties in operating complex features, understanding digital privacy, and distinguishing valid information from hoaxes (Nuraini et al., 2019). Therefore, user-centered digital literacy is crucial.

Changes in Patterns of Social Interaction

Before the digital age, digital immigrant communication relied heavily on face-to-face and in-person interactions in physical communities. However, social media has transformed these forms of communication to be more flexible and open across time and space. Apriani and Lestari's study (2022) shows that social media has become the main space for digital immigrants to maintain interpersonal relationships, access news, and expand their social networks.

Previously limited interaction patterns are now expanding into synchronous (real-time chat) and asynchronous (status posting, commenting) communication. Digital immigrants begin to build new communities virtually, such as neighborhood WhatsApp groups, online religious communities, or digital elderly forums. Irawan and Yuliana (2020) note that social media serves as a medium of self-actualization that helps the elderly overcome loneliness and strengthen their social identity in the digital era.

However, limitations in accessing content and low trust in technology are still barriers. This creates a digital divide that causes some digital immigrants to be

marginalized from digital social interaction spaces, especially those who live in rural areas or do not have digital companions (Setiawan & Handayani, 2020).

Intergenerational Communication

One important dimension in the transformation of digital immigrant communication is the occurrence of more intensive intergenerational communication through social media. According to Yulita and Haryanto (2017), platforms such as WhatsApp have become a bridge of communication between parents and their children who are busy or live far apart. This communication is not only informative, but also emotional and symbolic, such as sending each other prayer messages, family pictures, or videos of daily activities (Ritonga et al., 2023).

This intergenerational communication promotes mutual understanding and exchange of digital culture. Children or grandchildren often act as digital facilitators who help parents understand how to use devices or apps. However, differences in communication styles and perceptions of digital etiquette can trigger misunderstandings between generations, especially in the context of family groups (Apriani & Lestari, 2022). This phenomenon shows the importance of an intergenerational digital literacy approach, which is a digital education program that involves two or more generations in a mutually supportive learning process. This model has the potential to strengthen family relationships, reduce the digital divide and increase social cohesion in an era of technological transformation.

Digital Literacy and Security Challenges

While there has been a significant increase in the use of social media and digital devices by digital immigrants, this process has not been without obstacles. The two main challenges faced by this group are low digital literacy and concerns over personal data security. These challenges are multidimensional and closely related to age, educational background and technological experience. According to Nuraini et al. (2019), many digital immigrants face difficulties understanding technical terms, digital security procedures, and a tendency to fall victim to disinformation.

Setiawan and Handayani (2020) in their case study found that only a small proportion of digital immigrants understand privacy settings on social media applications. Most elderly users do not know how to set up two-factor authentication, do not read the terms of use of the application, and often use passwords that are easy to guess or the same for all accounts. This points to the need for an inclusive and context-oriented approach to digital literacy for older adults (Ohorella et al., 2024).

Social Media as a Space of Inclusion

Social media has evolved into more than just a communication and entertainment tool. For the digital immigrant generation, social media serves as a

space of social inclusion, allowing them to connect, interact and feel part of a larger community. Social inclusion through social media brings many benefits in terms of social participation, interpersonal relationship development, and individual empowerment in a digital context.

On the other hand, social media provides a great opportunity as a space for social inclusion and civic participation. Rahayu (2023) notes that with educative approaches and community engagement, digital immigrants are able to develop relevant digital skills and support their participation in public discussions, government digital services, and online-based community activities. For example, in theme-based groups or communities (e.g., mothers' or elderly groups), they can share stories about their lives, complain, or provide support to fellow members. This process of sharing experiences and getting social feedback can be very beneficial for reducing loneliness and improving their mental well-being.

4. CONCLUSION

The communication transformation of the digital immigrant generation shows significant changes in the way they interact and communicate in the digital world. Social media has served as a key tool that enables digital immigrants to stay connected with family, form new communities, and access social and economic opportunities. Nonetheless, their adaptation to digital technology is still faced with major challenges, such as limited digital literacy and data security being major concerns. Digital immigrants often find it difficult to understand app interfaces and privacy settings, which limits their ability to use social media to its full potential. On the other hand, social media also opens up important spaces of social inclusion for digital immigrants, providing them with opportunities to develop socially and emotionally. The cross-generational communication that occurs through digital platforms strengthens family ties and minimizes the distance between generations. While there is a digital divide that needs to be addressed, social media remains a significant empowerment tool. Therefore, policies that support digital literacy education and equitable access to technology are necessary to ensure that digital immigrants can actively and safely participate in the digital world.

References

- Apriani, R., & Lestari, R. (2022). Changes in digital immigrant communication patterns in using social media. *Communication Journal of the Indonesian Communication Scholars Association (ISKI)*, 7(1), 45-56. <https://doi.org/10.25008/jkiski.v7i1.241>
- Arrahi, M. H., & Eshraghi, A. (2019). Digital natives vs digital immigrants: A multidimensional view on interaction with social technologies in organizations. *Journal of Enterprise Information Management*, 32(6), 1051–1070. <https://doi.org/10.1108/JEIM-04-2018-0071>

- Bennett, S., Maton, K., & Kervin, L. (2008). The 'digital natives' debate: A critical review of the evidence. *British Journal of Educational Technology*, 39(5), 775–786. <https://doi.org/10.1111/j.1467-8535.2007.00793.x>
- Correa, T., Straubhaar, J., Chen, W., & Spence, J. (2019). Brothers and sisters online: Communication and media use among multigenerational families. *New Media & Society*, 21(2), 472–491.
- Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed.). Sage Publications.
- Dalimunthe, M. A., & Ananda, S. (2024). Representation of Nationalism in Local Media (Critical Discourse Analysis on Local Media Waspada Online). *Cakrawala: Journal of Citizenship Teaching and Learning*, 2(2), 198-217.
- Firmansyah, A. (2018). Elderly participation in e-government: A study of Dukcapil online service users. *Journal of Sociotechnology*, 17(1), 45-52. <https://doi.org/10.5614/sostek.v17i1.250>
- Hamzah, A. H. P., & Siregar, R. Y. (2023). Application of communication ethics by digital immigrant lecturers to digital native students as a communication strategy in online learning. *JiIP - Scientific Journal of Education Science*, 6(3), 1523-1526. <https://doi.org/10.54371/jiip.v6i3.1713>
- Humaizi, Hasan NNN, Dalimunthe MA, Ramadhani E. (2024). Harmony in virtual space: Forum Kerukunan Umat Beragama (FKUB) development communication in creating digital literacy based on religious moderation. *Journal of Infrastructure, Policy and Development*. 8(7): 4299. <https://doi.org/10.24294/jipd.v8i7.4299>
- Irawan, R., & Yuliana, N. (2020). Social media and social relations of the elderly: A case study of elderly Facebook users. *Journal of Mass Communication*, 13(2), 89-98. <https://ejournal.unisba.ac.id/index.php/jkm/article/view/2345>
- Jarrahi, M. H., & Eshraghi, A. (2019). Digital natives vs digital immigrants: A multidimensional view on interaction with social technologies in organizations. *Journal of Enterprise Information Management*, 32(6), 1051–1070. [https://doi.org/10.1108/JEIM-04-2018-0071:contentReference\[oaicite:2\]{index=2}](https://doi.org/10.1108/JEIM-04-2018-0071:contentReference[oaicite:2]{index=2})
- Leung, L., Fung, A., & Lee, P. S. N. (2012). Older adults' adoption of mobile communication technology: An exploration of the influence of age, social influence, and perceived ease of use. *Telematics and Informatics*, 29(3), 232–241.
- Macale, A. M., & Quimbo, J. D. J. (2019). Digital immigrants teaching digital natives: A call for a paradigm shift. *Journal of Science Teachers and Educators*, 2(1), 1–9. <https://doi.org/10.14658/pupj-phrg-2021-1-2>
- Meckel, M., & Wirth, W. (2014). Digital natives or digital immigrants? The impact of user characteristics on online trust. *Journal of Computer-Mediated Communication*, 19(3), 463–474. <https://doi.org/10.1111/jcc4.12045>
- Nimrod, G. (2018). Technophobia among older Internet users. *Educational Gerontology*, 44(2), 148–162.
- Nuraini, T., Sari, P., & Budi, A. (2019). Digital immigrant adaptation strategies in using communication technology. *Journal of Communication Research*, 22(1), 33-44. <https://doi.org/10.17509/jpk.v22i1.13456>
- Ohorella, N. R., Fauziah, D., & Dalimunthe, M. A. (2024). Brand Awareness Communication Strategy in Setujuan Coffee Marketing on Instagram Social

- Media. *Komunika*, 20(02), 46-57.
- Pilayan, J. (2021). Multifaceted potentials of social media: Digital immigrants in focus. *International Journal of Scientific & Technology Research*, 10(3), 163–167. <https://www.ijstr.org/final-print/mar2021/Multifaceted-Potentials-Of-Social-Media-Digital-Immigrants-In-Focus.pdf>
- Prensky, M. (2001). Digital natives, digital immigrants. *On the Horizon*, 9(5), 1–6.
- Priya, N., & Maheswari, P. U. (2024). Screen media-based devices usage patterns: Comparison between digital immigrant parents and digital native adolescents. *Journal of Digital Educational Technology*, 4(1), ep2411. <https://doi.org/10.30935/jdet/14463>
- Quan-Haase, A., Mo, G. Y., & Wellman, B. (2016). Connected seniors: How older adults in East York exchange social support online and offline. *Information, Communication & Society*, 20(7), 967–983.
- Rahayu, S. (2023). Technology acceptance factors in the elderly generation using the UTAUT model. *Journal of Communication Studies*, 11(2), 151-164. <https://doi.org/10.25008/jkk.v11i2.317>
- Ritonga AR, Thamrin MH, Siahaan H, et al. (2024). Promotion Of Ecotourism And Communication Policy in Increasing Tourists In Indonesia. *Journal of Infrastructure, Policy and Development*. 8(8): 4764. <https://doi.org/10.24294/jipd.v8i8.4764>
- Ritonga AR, Veronica A, Ginting LDCU, et al. (2024). Library Promotion In The Development of The Universitas Sumatera Utara Towards A World-Class University. *Journal of Infrastructure, Policy and Development*. 8(6): 4149. <https://doi.org/10.24294/jipd.v8i6.4149>
- Ritonga, A.R., Dalimunthe, M.A., Veronica, A., Ginting, & L. D. C. U (2023). The Effectiveness of Social Media As A Promotional Medium Of The University Of Sumatera Utara (USU) Library. *Talenta Conference Series: Local Wisdom, Social, and Arts (LWSA)* 6 (3), 16-20
- Ritonga, A. R., Dalimunthe, M. A., & Januarini, E. (2024). Utilization Of Digital Media in Improving Student Literacy (Case Study at SDN 10 Rantau Selatan). *CONTENT: Journal of Communication Studies*, 2(02), 01-08.
- Saputra, H., & Purwanto, A. (2021). Elderly digital literacy in social media communication. *Pekommas Journal*, 6(3), 201-212. <https://doi.org/10.30818/jpkm.2021.2060306>
- Setiawan, A., & Handayani, L. (2020). Digital inequality in the elderly: A case study of digital immigrants in urban and rural areas. *Journal of Technology and Society*, 12(1), 65-74. <https://doi.org/10.24843/jtm.v12i1.3222>
- Sikumbang, A. T., Dalimunthe, M. A., Kholil, S., & Nasution, N. F. (2024). Digital Da'wah Indonesia Ulema in the Discourse of Theology. *Pharos Journal of Theology*. 105(1). 1-14. <https://doi.org/10.46222/pharosjot.1051>
- Siregar, R. Y., Lubis, L. A., & Nurbani. (2023). Implementation of the role of digital immigrant lecturers in virtual communication in the teaching and learning process. *Journal of Warta Dharmawangsa*, 17(2), 819-837. <https://doi.org/10.46576/wdw.v17i2.3192>
- Siregar, R. Y., Lubis, L. A., & Nurbani. (2021). Communication strategies of digital immigrant lecturers in the online teaching process. *Ettisal: Journal of Communication*, 6(2). <https://doi.org/10.21111/ejoc.v6i1.6872>
- Thomas, J. D. E., & Thomas, V. (2015). How do digital natives and digital immigrants

- respond differently to interactivity online? *Journal of Interactive Advertising*, 19(3), 463–474. <https://doi.org/10.1080/15252019.2015.1065740>
- Thomas, M. (2014). Digital immigrant parenting in the age of social media. *Journal of Youth Studies*, 17(2), 125-138. <https://doi.org/10.1080/13676261.2014.922138>
- Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. *MIS Quarterly*, 27(3), 425–478.
- Yulita, D., & Haryanto, A. (2017). WhatsApp as a means of communication between generations: A study on elderly users. *Komunika: Journal of Da'wah and Communication*, 11(2), 123-135. <https://doi.org/10.24090/komunika.v11i2.1657>
- Zain, A. H. (2020). Technology acceptance and digital immigrant's ability to adapt. *Journal of Technology Management & Innovation*, 15(1), 53–61. <https://doi.org/10.4067/S0718-27242020000100053>