Unlocking Civic Participation: The Power of Digital Literacy for Indonesian Digital Natives

Deni Zein Tarsidi^{1,2*}, Karim Suryadi¹, Dasim Budimansyah¹, Rahmat Rahmat¹

¹Civic Education Department, Universitas Pendidikan Indonesia ²Pancasila and Civic Education, Universitas Pasundan *Email: denizein@upi.edu

Received for publication: 28 May 2023. Accepted for publication: 25 July 2023.

Abstract

This research aims to explore the role of digital literacy in unlocking the potential of civic participation among Indonesian digital natives. In an increasingly advanced digital era, Indonesian digital natives have become a significant group in their role as active users of social media and digital technology. The study utilizes the Grounded Theory method with 15 digital native respondents from various educational backgrounds. Through the analysis of word cloud and word tree features, as well as the creation of a theoretical model using NVivo 12 Plus software for MacBook, this research highlights the importance of digital literacy in strengthening the participation of Indonesian digital natives. The analysis results indicate that digital literacy is a crucial factor in empowering digital natives to participate in the digital world actively. Digital natives with good digital literacy skills can read and evaluate the information they encounter and actively discuss it on social media and in real-world interactions. In this context, digital literacy is expected to have a positive impact on the use of social media by digital natives. By enhancing digital literacy, digital natives can play an active role in reading and evaluating information and participating in constructive discussions on social media and in the real world. With a deeper understanding of digital literacy and the participation of digital natives, we can develop educational strategies and policies that support more inclusive and empowered civic participation of digital citizens.

Keywords: Civic Participation, Civic Engagement, Digital Literacy, Digital Natives, Social Media

Introduction

Digital natives, who have grown up in the digital era, have become a significant demographic group today. As active users of digital technology, they have great potential to contribute to civic participation and engagement. Civic participation plays a crucial role in shaping democratic societies, fostering active citizenship, and addressing social and political issues. In Indonesia, where citizen involvement has become increasingly important, optimizing the power of digital literacy among digital natives can unlock their potential to drive positive change.

In Indonesia, the growth of internet users has experienced a significant increase in recent years. Data from We Are Social in 2023 shows that Indonesia's internet users have reached over 276.4 million, with an internet penetration rate of 77%. Additionally, social media users have also been on the rise, with the number of social media users in Indonesia reaching approximately 167 million people.

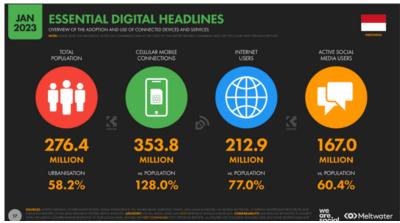


Figure 1. Internet Users in Indonesia in 2023, Source: (Kemp, 2023)

In the context of this research, this growth becomes highly relevant as social media plays a strong role in shaping social interactions and citizen participation. With a large number of social media users in Indonesia, there is a great opportunity to utilize it as a means to strengthen the social and political engagement of digital natives. However, despite the rapid growth in internet and social media usage in Indonesia, there is still a need for a deeper understanding of the conditions and characteristics of digital natives in this country. Previous studies have shown that digital natives in Indonesia have distinct traits and challenges in developing digital literacy and civic participation. Therefore, this research aims to understand further how digital literacy can play a significant role in unlocking the participation potential of digital natives in Indonesia. By considering the significant growth of internet and social media users in Indonesia, as well as the challenges and potentials of digital natives in this country, this research is expected to contribute significantly to our understanding of the importance of digital literacy in opening doors to more active and impactful citizen participation for digital natives in Indonesia.

However, in the context of the growth of social media and the participation of digital natives in Indonesia, several issues need to be thoroughly understood. Previous research has revealed challenges in developing effective digital literacy and citizen participation. One of the issues identified is the digital divide between digital natives in urban and rural areas. In an article by Wang et al. (2023), they found that internet access and social media usage are more limited in rural areas than in urban areas. Social media usage can hinder the participation of digital natives in rural areas in developing digital literacy skills and engaging in social and political activities.

Additionally, research conducted by Bennet et al. (2008) shows that digital natives in Indonesia also face challenges in identifying and filtering valid and accurate information on social media. With much content circulating on social media, it is sometimes difficult for digital natives to distinguish facts from opinions or even hoaxes. The inability to verify the truthfulness of information can impede their participation in impactful discussions and debates. Furthermore, the study by Yamamoto et al. (2020) reveals that digital natives in Indonesia also face challenges in understanding the social and political implications of the content they consume. They tend to be less critical of the information they receive and may only sometimes be aware of its impact on society and politics. Less critical can hinder their participation in deeper and more impactful social and political activities.

In facing these challenges, the theory of digital literacy becomes highly relevant in understanding the role and importance of digital understanding and skills for digital natives in developing civic participation through social media. Several previous studies have proposed concepts of digital literacy relevant to this context. One relevant theory is the Digital Literacy Theory proposed by Gil de Zúñiga, Jung, and Valenzuela. They suggest that digital literacy encompasses individuals' abilities to understand, use, and analyze information obtained through digital media (Gil de Zúñiga et al., 2012). In the context of this research, the theory of digital literacy can be used to depict the importance of digital understanding and skills for digital natives in developing civic engagement through social media (Yeşilyurt & Vezne, 2023).

Furthermore, the theory of digital literacy is also associated with the concept of critical digital literacy introduced (Spector, 2015). Critical digital literacy emphasizes the importance of developing critical abilities in digital natives to understand, analyze, and evaluate information encountered in digital media regarding the difficulties faced by digital natives in identifying and filtering valid and accurate information on social media (Nascimbeni & Vosloo, 2019). Another theory that can be considered is the concept of participatory digital literacy introduced by Robinson (2009). Participatory digital literacy refers to individuals' abilities to actively participate and contribute in digital contexts, including social and political participation. Rastati emphasizes that digital natives in Indonesia also need to develop the ability to understand the social and political implications of the content they consume on social media (Rastati, 2018).

The Theory of Civic Engagement emphasizes the importance of individual involvement in political and social activities as active social participation (Verba et al., 1995). In the context of this research, this theory can be used to understand how digital literacy and citizen participation through social media can influence the engagement of digital citizens in Indonesia. Research conducted by Samsuddin et al. shows that digital natives with high levels of digital literacy are more likely to participate actively in social media political participation (Samsuddin et al., 2016). They argue that digital natives who can effectively utilize social media to express their opinions, engage in political discussions, and disseminate information have the potential to contribute to society and change political realities. Additionally, Chadwick's research highlights the role of social media in shaping digital political participation (Chadwick, 2013). It suggests that digital natives can use social media to mobilize support, organize campaigns, and spread political messages widely. Social media also provides a platform for digital natives to engage in larger social and political movements. In another study by Loader et al., they emphasize that digital natives' participation in social media can strengthen their voices in political discussions, provide a platform for expressing and channelling political aspirations, and enable interactions with political leaders and civil society organizations (Loader et al., 2014).

Gardikiotis et., in their theory "Mobilization and Participation", revealed that social media plays a crucial role in mobilizing political participation (Gardikiotis et al., 2020). They emphasized that digital natives can utilize social media to mobilize support, organize protests, and encourage more active political participation. The research conducted by Bekafigo and McBride supports this theory by demonstrating that political participation through social media can motivate digital natives to engage in political campaigns, influence public opinion, and contribute to the decision-making processes (Bekafigo & McBride, 2013). Furthermore, the "Networked Politics" theory proposed by Theocharis is also relevant. Their study underscored that social media provides opportunities for digital natives to engage in broader political networks (Theocharis, 2015). Digital natives can form and join online groups, share information, and engage in discussions and collaborations to achieve

common political goals. The research conducted by Vaccari, Valeriani, Barberá, Bonneau, Jost, Nagler, and Tucker also supports this theory by indicating that active social media users among digital natives are more likely to be involved in offline politics, such as voting and participating in political campaigns (Vaccari et al., 2015).

In Indonesia, the main difference of this paper from previous research is its focus on digital natives as a crucial group in understanding the relationship between digital literacy and political participation through social media. Previous studies may have discussed the concept of digital literacy in general or broader contexts without specific emphasis on digital natives. This paper also associates the theory of digital literacy with additional concepts, such as critical and participatory digital literacy. This provides a more holistic perspective and highlights the importance of developing critical abilities and active participation of digital natives in the digital context, including political and social participation. Moreover, previous research may have examined the relationship between digital literacy and political participation without focusing on social media as the primary platform for digital natives' political participation. This paper emphasizes the role of social media in shaping the political participation of digital natives, including mobilizing support, political campaigns, and interactions with political leaders.

This research is also expected to provide a deeper understanding of digital literacy among digital natives in Indonesia, including their understanding, usage, and ability to analyze the information they encounter in digital media. By understanding the relationship between digital literacy and digital natives' political participation, this research can provide important insights for developing more effective educational and training strategies to enhance digital understanding and skills and increase political participation among digital natives in Indonesia. Therefore, this research has the potential to provide a better understanding of digital literacy and digital natives' political participation in Indonesia and contribute to building a more participatory and democratic society in the digital era.

Methodology

The Grounded Theory research method is used as the conceptual framework in this study. This method, developed by Glaser and Strauss, focuses on developing a theory grounded in data discovered during the research process (Glaser, 2008; Strauss & Corbin, 2008). The Grounded Theory approach allows researchers to go beyond existing theories and gain new insights specific to the context of digital literacy and participation among digital natives in Indonesia. By employing the Grounded Theory method, it is hoped to uncover and analyze the relationship between digital literacy and civic participation among digital natives in Indonesia. This method enables researchers to understand phenomena within a broader context and gain in-depth insights into the experiences and perspectives of digital natives regarding digital literacy and their participation in social media.

This study involves 15 digital natives as the primary participants. Participants are selected based on inclusion criteria, including being 18-25 years old, actively accessing and using social media, and having diverse levels of digital literacy. Consideration is also given to the diversity of educational backgrounds, occupations, and levels of participation when selecting participants. Data for this research is collected through in-depth interviews with the participants. Interviews are conducted face-to-face or through digital communication platforms such as video conferences. The interviews focus on the participants' experiences and perceptions regarding digital literacy and civic engagement participation. In addition to interviews, data is also collected through participant observation and analysis of relevant documents.

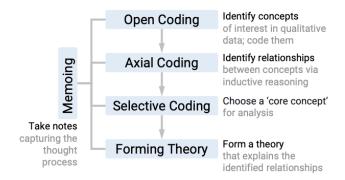


Figure 2. The stages in grounded theory, from Dillon Source: (Chandrasegaran et al., 2017)

The first step is to collect initial data from in-depth interviews, observations, or document analysis related to digital literacy and civic participation among digital natives in Indonesia. This data will serve as the basis for developing new theories. The collected data will then be analyzed through open coding. In open coding, the researcher will thoroughly read the data, identify, and label each concept, pattern, or theme that emerges from the data. Open coding is done without any theoretical constraints or prior assumptions. After conducting open coding, the researcher will group related concepts into more abstract categories. These categories will aid in understanding and organizing the collected data. Next, the researcher will use focused coding to develop more in-depth concepts. The researcher will revisit the collected data and analyze the previously created categories. Focused coding helps identify complex relationships and patterns between existing concepts.

Substantive theory is directly related to the observed phenomena in the study and provides a deeper understanding of digital literacy and civic participation among digital natives in Indonesia. Once the substantive theory is developed, the researcher verifies the theory by revisiting the collected data. The researcher seeks evidence that supports or confirms the developed theory and identifies cases that are inconsistent with the theory. This step is crucial to ensure the validity and reliability of the resulting theory. The final step is integrating the developed theory into a broader conceptual framework. The generated Grounded Theory can be linked to existing theories or serve as the basis for developing a more comprehensive new theory.

The collected data is analyzed using the Grounded Theory approach. The NVivo 12 Plus software for MacBook facilitates the analysis. The Grounded Theory approach allows researchers to identify patterns, themes, and new concepts that emerge from the data in an inductive manner. The analysis process involves constant comparison, open coding, focused coding, and the development of more abstract categories. By utilizing NVivo, researchers can efficiently manage, analyze, and visualize data. This software assists in organizing concepts, identifying patterns, and developing theories based on the collected data, by the Grounded Theory approach employed in this study.

Results and Discussion

1. The availability of information provides opportunities for digital natives in Indonesia to engage in civic participation through social media actively

In this research, we used NVivo 12 for MacBook to analyze the word cloud of data obtained from digital natives in Indonesia. The analysis results indicated that the most frequently appearing word was "information."



Figure 3. Word Frequency Source: Data analysis using NVivo 12 Plus for MacBook

One relevant theory is the Digital Literacy theory proposed by Gil de Zúñiga, Jung, and Valenzuela (2012). This theory states that digital natives need to have the ability to understand, use, and analyze information obtained through digital media. In the context of our research, the word "information" in the word cloud indicates the importance of digital literacy for digital natives in Indonesia in accessing and managing the information they encounter in digital media. Additionally, the concept of Critical Digital Literacy introduced by Spector (2015) is also relevant in the context of this research. Critical digital literacy emphasizes the critical abilities of digital natives in understanding, analyzing, and evaluating the information they encounter in digital media. The word "information" in the word cloud suggests that digital natives in Indonesia need skills to filter and select valid and accurate information on social media.

Regarding civic participation, the theory of Civic Engagement developed by Verba, Schlozman, and Brady (1995) can also be associated with the word "information" in the word cloud. This theory emphasizes the importance of individual participation in political and social activities as a form of active social participation. In the context of our research, the word "information" suggests that digital natives in Indonesia use digital media, particularly in accessing political and social information, to engage in civic participation actively. Furthermore, the theory of "Mobilization and Participation" expressed by Bennett and Segerberg can also be linked to the presence of the word "information" in the word cloud. This theory states that social media is crucial in mobilizing political participation (W. L. Bennett & Segerberg, 2013). The word "information" in the word cloud indicates that digital natives in Indonesia use social media to obtain political and social information, mobilize support, and engage in more active political activities.

In this discussion, the word "information" in the word cloud indicates the importance of information in digital citizenship participation in Indonesia. Digital natives must possess digital literacy and critical skills in managing and discerning the information they encounter in digital media. Moreover, the abundance of information in digital media provides opportunities for digital natives to

actively engage in political and social participation. This research contributes significantly to understanding the role of digital natives as agents of change in developing citizen participation through social media. With a better understanding of how digital natives utilize information in the digital context, steps can be taken to enhance their digital literacy and critical skills, enabling them to become more effective contributors to society and transform the political landscape in Indonesia.

Furthermore, these findings underline the importance of developing policies and programs supporting digital literacy and citizen participation in Indonesia. The government, educational institutions, and civil society organizations need to collaborate in providing relevant education and training for digital natives, including the use and evaluation of information encountered on social media. In doing so, digital natives will have the necessary skills to actively participate in political discussions, disseminate valid information, and contribute to political decision-making processes. However, it is important to recognize the existing digital divide in Indonesia. Some digital natives may have limited access to technology and information, hindering their participation in the digital realm. Therefore, strategic measures should address these disparities, including expanding internet and technology access and providing affordable and relevant training. Through strong digital literacy, good critical skills, and adequate access to information, digital natives can become active agents of change in society. With the support of appropriate policies and programs, the potential of digital natives in developing citizen participation through social media can be realized, bringing about positive impacts on social and political change in Indonesia.

2. Digital literacy can have a positive impact on the participation of Indonesian digital natives through their ability to read, discern, and discuss information obtained through social media and offline interactions

This study focuses on the role of digital literacy in unlocking the potential of digital citizenship participation among Indonesian digital natives. Through the analysis of word tree features on the collected data, it was found that digital literacy is an important factor that strengthens the participation of Indonesian digital natives. Digital literacy enables them to read and discern the information they encounter and actively discuss it on social media and in real-world interactions.

The findings of this research support the theory of "Enhanced Digital Literacy," which states that enhanced digital literacy can positively impact digital citizenship participation. With the ability to read and discern information obtained through social media, Indonesian digital natives can actively engage in discussions and share their thoughts with their friends online and offline. This indicates that digital literacy is key to unlocking their participation potential. In the context of social media use, digital literacy serves as a strong foundation in enabling Indonesian digital natives to optimize the use of social media for civic participation.

The "Enhanced Digital Literacy" theory contributes to our understanding of the importance of enhanced digital literacy in unlocking the potential of digital native participation in Indonesia. In this context, another relevant theory is the "Theory of Digital Citizenship", introduced by Ribble (2011). This theory emphasizes the importance of understanding and applying responsibility, ethics, and responsible behaviour in the digital environment. With enhanced digital literacy, digital natives can develop attitudes and behaviours aligned with the principles of digital citizenship. They will be more inclined to use social media wisely, respect online privacy and security, and actively participate in the digital community by promoting valid information and contributing positively to public discussions.

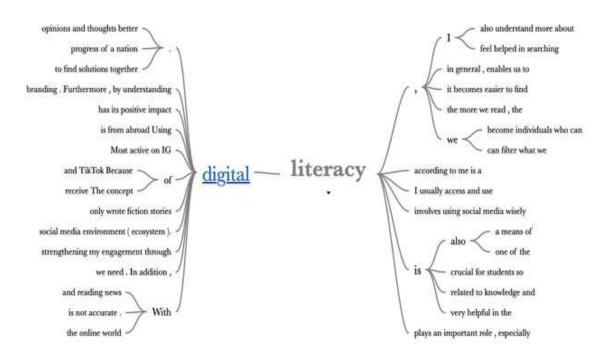


Figure 4. Word Tree of the Use of the Term "Digital Literacy" By Nvivo

Additionally, the "Social Learning Theory" proposed by Bandura (1977) can be linked to enhanced digital literacy. This theory emphasizes the influence of the social environment on learning and adopting new behaviours. In the context of digital literacy, digital natives can learn and adopt better digital literacy behaviours through the influence and examples provided by peers, family, and online communities. With a supportive and encouraging environment for digital literacy, digital natives will be more capable of utilizing social media in beneficial and productive ways.

By integrating the "Enhanced Digital Literacy," "Theory of Digital Citizenship," and "Social Learning Theory," this research can broaden our understanding of the importance of enhanced digital literacy in enhancing digital citizenship participation in Indonesia. Good digital literacy not only enables digital natives to access information effectively but also helps them become responsible, ethical, and actively participating digital citizens in society.

Research by Finkelhor et al., emphasizes the importance of digital literacy in helping digital natives understand and evaluate information effectively (Finkelhor et al., 2021). Livingstone et al. (2021)highlight the significance of content-oriented digital literacy, where digital natives can comprehend and navigate relevant information in the era of digital culture. Al Raqqad found that strong digital literacy is associated with digital political participation (Al Raqqad, 2020). Hargittai underscores the importance of providing access and digital literacy training to all digital natives to avoid participation gaps (Hargittai, 2018). Meanwhile, research by Guess & Munger highlights the role of digital literacy in strengthening digital political participation (Guess & Munger, 2022). In Indonesia, enhanced digital literacy enables digital natives to access, comprehend, and manage information wisely and actively participate in online communities. Through stronger digital participation, digital natives can contribute to social, political, and humanitarian issues relevant to Indonesian society.

In addition to the theories of digital literacy, citizen engagement, and mobilization of participation discussed earlier, other relevant theories can describe the influence of digital literacy on the participation of Indonesian digital natives. One theory that can be associated is the spillover effect theory. The spillover effect theory states that participation in one domain can influence participation in other domains. In the context of this research, strong digital literacy among Indonesian digital natives can influence their participation not only in the political context but also in other areas, such as social, economic, and cultural domains. For example, digital natives who actively participate in politics through social media will likely be more active in voicing social and environmental issues, promoting digital entrepreneurship, or engaging in digital art and cultural activities.

This spillover effect theory is supported by previous research suggesting that participation in online political activities can influence social and economic activities and increase individuals' overall tendency to participate (Mossberger et al., 2007). In other words, Indonesian digital natives with good digital literacy who actively participate in political activities through social media may experience spillover effects that drive them to engage in various broader areas of life.

In the context of this research, strong digital literacy enables Indonesian digital natives to access information and broaden their understanding of various issues relevant to civic engagement participation. They can critically read and filter information, interact with diverse online groups and communities, and develop a deeper understanding of social, political, economic, and environmental issues. This can trigger their motivation and interest in various activities to achieve positive societal change. Kipkoech found that online political participation can positively impact participation in voluntary activities in the community (Kipkoech, 2022). Moreover, this spillover effect theory is also supported by research involving the Indonesian context. Research by Saraswati found that online political participation can influence participation in social activities in Indonesian society (Saraswati, 2018). A study conducted by Anggraheni et al., indicates a connection between online political participation and participation in economic activities, such as online shopping (Anggraheni et al., 2021). This research significantly contributes to strengthening the spillover effect theory in the context of Indonesian digital natives. Through the analysis of word tree features demonstrating that digital literacy can enhance the participation of Indonesian digital natives in various domains of life, this research supports the spillover effect theory, which states that participation in online political activities can have broader effects on participation in social and economic activities.

With strong digital literacy, Indonesian digital natives can read and critically evaluate information, actively discussing it both on social media and in real-world interactions. This is consistent with previous research findings that online political participation can influence participation in social and economic activities (Mossberger et al., 2007). The results of this study are also in line with the findings of a study by Gil de Zúñiga, Weeks, and Ardèvol-Abreu, which show a relationship between online political participation and participation in offline community activities (Gil de Zúñiga et al., 2017). Additionally, this research can be connected to a study which found that online political participation can influence participation in social activities in Indonesian society (Saraswati, 2018). In the context of this research, digital literacy plays a role as a factor enabling Indonesian digital natives to actively participate in online political activities, which in turn can have a positive impact on their participation in social and economic activities. Thus, this study strengthens and complements our understanding of the spillover effect theory in the context of Indonesian digital natives. Digital literacy is a key factor in unlocking the potential for broader and holistic participation for Indonesian digital natives, including in political, social, and economic activities.

In the context of this research, it was found that Indonesian digital natives with good digital literacy who actively participate in political activities through social media can experience a spill-over effect that motivates them to engage in various aspects of life. Digital literacy enables them to read and critically evaluate information, and actively discuss it both on social media and in real-world interactions. This is consistent with the spillover effect theory, which states that online political participation can influence participation in social and economic activities.

By having Enhanced Digital Literacy, Indonesian digital natives can effectively and critically utilize their digital technology skills. Digital literacy helps them access, evaluate, and generate information in a more informed manner. This opens opportunities for them to engage in online political activities that can subsequently influence their participation in various other aspects of life. Thus, Enhanced Digital Literacy is a key factor in driving the spillover effect on the participation of Indonesian digital natives. Strong digital literacy provides the necessary foundation for digital natives to activate their participation in various broader areas of life. Through online political participation driven by digital literacy, they can expand their involvement in social and economic activities, and enhance their overall participation in society.

3. Theoretical Model

Based on the data found through NVivo version 12 plus for MacBook, several important themes emerged regarding building a theoretical model in civic engagement using technology in the digital era. The data indicates that engagement on social media and digital literacy plays a crucial role in developing essential competencies for national development. Firstly, digital literacy is key to ensuring efficient access to information. In a digital era filled with much information, understanding, evaluating, and critically filtering information is crucial. Digital literacy provides the skills and understanding necessary to read wisely in the complex digital space. It enables individuals to grasp the context, verify the truthfulness of information, and avoid the spread of misinformation.

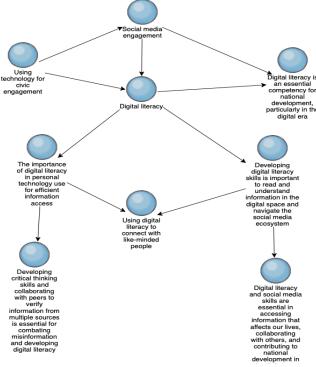


Figure 5. Theoretical Model

Furthermore, developing digital skills is important in navigating the increasingly evolving social media ecosystem. Digital skills provide the ability to interact and participate effectively in the digital space. Through these skills, digital natives can connect with various thoughts and perspectives in the digital realm. This collaboration and interaction enrich their perspectives and enhance their abilities to think critically and creatively. However, it is also important to note that critical thinking skills serve as an indispensable foundation in the face of information overload and the potential spread of misinformation. Digital natives must build the ability to verify the information they encounter, question its sources, and analyze it critically before accepting or sharing it. In a digital era filled with fake news and dubious information, critical thinking skills are crucial in defences against the spread of false information.

Furthermore, developing digital literacy in the digital era requires collaboration from various stakeholders. Formal education, government institutions, civil society, and the private sector must work together to develop effective digital literacy programs. This collaboration will ensure Indonesian digital natives' access to quality and comprehensive digital literacy education. With collaboration, efforts to build digital literacy can become more integrated and sustainable and have a broader impact.

In building a theoretical model, the data found through NVivo version 12 plus for MacBook shows that engagement on social media and digital literacy have a strong relationship in building essential competencies for the digital natives' participation in national development in the digital era. Digital literacy serves as a crucial foundation in ensuring efficient access to information, understanding the digital space, and the ability to think critically. Additionally, developing digital skills enables digital natives to connect with various thoughts and perspectives present in the digital space. In contrast, critical thinking skills are an important foundation in combating the spread of misinformation. Collaboration from various stakeholders is also required to build effective and sustainable digital literacy.

In developing a theoretical model, the theory of digital literacy proposed by Gil de Zúñiga, Jung, & Valenzuela (2012) can serve as a relevant foundation. This theory explains the importance of digital literacy in enhancing digital participation and its positive impact on the use of social media by digital natives. Additionally, the theory of citizen engagement and participation mobilization (Wang et al., 2023) can provide a strong basis for explaining how engagement on social media and digital literacy can strengthen digital citizens' participation in Indonesia. In the context of this research, the theory of spillover effects (Mossberger et al., 2007) is also relevant. This theory explains that participation in online political activities can influence participation in social and economic activities, thus increasing individuals' inclination to participate overall. In this case, the digital participation of Indonesian digital natives in political activities through social media can trigger spillover effects that encourage them to engage in various aspects of life more widely.

Furthermore, the theory of enhanced digital literacy (Jones et al., 2010) can also be connected to this research. This theory highlights the importance of developing digital literacy enriched with digital skills in facing the complex social media ecosystem. With strong digital literacy, digital natives can maximize their learning potential, connections, and participation in the digital space. The theory of digital citizen engagement (Chadwick, 2013) is also relevant in building a theoretical model. This theory emphasizes the importance of active and sustained participation of digital natives in political and social life through technology. With adequate digital literacy, digital natives can significantly influence social change and national development in the digital era.

In addition to the theories mentioned earlier, several other theories can contribute to building a more comprehensive theoretical model for this research. One is the theory of digital participation propensity (Boulianne, 2015). This theory suggests that digital literacy, technological accessibility, and trust in institutions can influence digital citizen participation. In the context of this research, this theory can explain how digital literacy and engagement in social media contribute to the active participation of Indonesian digital natives in political and social activities.

The theory of online social networks (Ellison et al., 2007) can also be applied in building the theoretical model. This theory emphasizes the importance of online social networks in influencing participation and engagement in the digital context. In this research, this theory can help explain how Indonesian digital natives utilize online social networks through digital literacy to build relationships, discuss information, and participate in political and social activities.

Lastly, the technology adoption theory (Turner, 2007) is also relevant to this research. This theory states that technology adoption and use are influenced by factors such as usefulness, ease of use, and relative advantage. In this research, this theory can be used to examine how Indonesian digital natives with good digital literacy perceive the benefits, ease of use, and relative advantage of using social media to participate in political and social activities.

A more comprehensive theoretical model can be constructed by combining the theories above and further analysis of the data obtained through NVivo version 12 plus for MacBook. This model will incorporate digital literacy, social media engagement, spillover effects, enhanced digital literacy, critical thinking skills, digital citizenship engagement, digital participation tendencies, social media mobilization, online identity construction, social networks, and technology adoption. In this theoretical model, digital literacy and social media engagement will be key factors influencing the participation of Indonesian digital natives in political and social activities. Digital literacy will enable them to understand and discern information wisely and verify its accuracy using critical thinking skills. With enriched digital skills, they can interact with diverse thoughts and perspectives in the digital space through online social networks. Active engagement on social media will enable them to participate in relevant campaigns and issues and mobilize broader digital citizenship participation.

In the context of this research, the spillover effect will be an important concept in explaining how participation in online political activities can influence participation in social and economic activities of Indonesian digital natives. Active participation in political activities on social media can trigger spillover effects that encourage them to engage in various broader areas of life. Enhancing digital literacy will be a crucial concept in strengthening this theoretical model. Digital literacy enriched with digital skills will allow Indonesian digital natives to maximize their learning potential, connections, and participation in the digital space. By combining strong digital literacy and skills, they can develop essential competencies for active participation in national development in the digital era. Furthermore, digital citizenship engagement and participation tendencies will provide insights into how Indonesian digital natives significantly influence social change and national development through technology use. Collaboration among various stakeholders is also key to building effective and sustainable digital literacy.

Social media mobilization and online identity construction will also play important roles. Social media can be a powerful tool for mobilizing citizen participation in relevant political and social issues. Additionally, Indonesian digital natives use digital literacy and social media engagement to construct online identities connected to political and social participation. Finally, the theory of technology adoption will provide insights into how Indonesian digital natives perceive the benefits, ease

of use, and relative advantage of using social media for political and social participation. These factors will influence the adoption and usage of social media as a means of participation.

By integrating relevant concepts and theories, a more comprehensive theoretical model can be developed to explain the role of digital literacy, social media engagement, and digital citizenship participation in building essential competencies for national development in the digital era. This model can provide a strong foundation for further research and policy development that promotes the active participation of Indonesian digital natives in political and social activities.

Conclusion

In this study, we explore the role of digital literacy in unlocking the potential of digital citizenship participation among Indonesian digital natives. Through data analysis using NVivo version 12 plus for MacBook, we found that digital literacy is a crucial factor that strengthens the participation of digital natives in political and social activities. Digital literacy enables them to understand and discern information wisely, interact with diverse thoughts in the digital space, and mobilize broader digital citizenship participation. The findings of this study provide a better understanding of how digital literacy can assist Indonesian digital natives in reading and filtering information, as well as activating their participation in social media and real-world interactions. In this context, it is important to build critical thinking skills to verify the available information and avoid misinformation. Additionally, collaboration among various stakeholders is crucial in developing digital literacy in the digital era.

Through the theoretical model we constructed, we identified complex relationships between digital literacy, social media engagement, political and social participation, digital skills, and other factors. This model provides a more comprehensive framework for understanding the role of digital literacy in unlocking the potential of participation among Indonesian digital natives. In conclusion, digital literacy plays a significant role in strengthening the participation of Indonesian digital natives in political and social activities. With good digital literacy, they can read and discern information wisely, interact with diverse thoughts in the digital space, and mobilize broader digital citizenship participation. This research contributes to understanding the importance of digital literacy and social media engagement in fostering the active participation of digital natives in national development in the digital era.

As a recommendation for future research, it is crucial to deepen the analysis of digital literacy by focusing on specific aspects such as information verification skills, critical thinking, or emotional intelligence in the context of digital natives' participation. Additionally, there is a need for further exploration of the impact of social media engagement on the political and social participation of digital natives, including factors influencing the intensity of engagement, the types of content that most affect participation, and patterns of interaction on social media. Comparative studies between digital natives in Indonesia and other countries can also provide a broader understanding of cultural, policy, and environmental factors influencing digital natives' participation. Furthermore, it is important to evaluate the effectiveness of digital literacy education approaches in enhancing the participation and capabilities of digital natives. By conducting further research in this field, opportunities will arise to gain a deeper understanding of the role and impact of digital literacy in unlocking the potential of digital citizenship participation in Indonesia.

References

Al Raqqad, H. K. (2020). The Impact of Social Networking on Enhancing Digital Citizenship

- among Princess Alia College, Al- Balqa'a University Students. *Journal of Educational and Social Research*, 10(5), 53. https://doi.org/10.36941/jesr-2020-0087
- Anggraheni, P., Setyowati, N. T., & Harry, H. (2021). SOCIAL MEDIA AND POLITICAL PARTICIPATION IN INDONESIA: RESTRICTIONS ACCESS AT ANNOUNCEMENT RESULTS OF 2019 PRESIDENTIAL ELECTION. *ASPIRATION Journal*, 2(1), 85–123. https://doi.org/10.56353/aspiration.v2i1.23
- Bandura, A. (1977). Social learning theory. In Social learning theory. Prentice-Hall.
- Bekafigo, M. A., & McBride, A. (2013). Who Tweets About Politics? *Social Science Computer Review*, *31*(5), 625–643. https://doi.org/10.1177/0894439313490405
- 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
- Bennett, W. L., & Segerberg, A. (2013). *The Logic of Connective Action*. Cambridge University Press. https://doi.org/10.1017/CBO9781139198752
- Boulianne, S. (2015). Social media use and participation: a meta-analysis of current research. *Information, Communication & Society, 18*(5), 524–538. https://doi.org/10.1080/1369118X.2015.1008542
- Chadwick, A. (2013). *The Hybrid Media System: Politics and Power*. Oxford University Press. https://doi.org/10.1093/acprof:oso/9780199759477.001.0001
- Chandrasegaran, S., Badam, S. K., Kisselburgh, L., Ramani, K., & Elmqvist, N. (2017). Integrating Visual Analytics Support for Grounded Theory Practice in Qualitative Text Analysis. *Computer Graphics Forum*, 36(3), 201–212. https://doi.org/10.1111/cgf.13180
- Ellison, N. B., Steinfield, C., & Lampe, C. (2007). The Benefits of Facebook "Friends:" Social Capital and College Students' Use of Online Social Network Sites. *Journal of Computer-Mediated Communication*, 12(4), 1143–1168. https://doi.org/10.1111/j.1083-6101.2007.00367.x
- Finkelhor, D., Walsh, K., Jones, L., Mitchell, K., & Collier, A. (2021). Youth Internet Safety Education: Aligning Programs With the Evidence Base. *Trauma, Violence, & Abuse*, 22(5), 1233–1247. https://doi.org/10.1177/1524838020916257
- Gardikiotis, A., Navrozidou, E., & Euaggelou-Navarro, O. (2020). Social media and political participation: the role of social psychological and social media variables. *Psychology: The Journal of the Hellenic Psychological Society*, 23(2), 37. https://doi.org/10.12681/psy_hps.22601
- Gil de Zúñiga, H., Jung, N., & Valenzuela, S. (2012). Social Media Use for News and Individuals' Social Capital, Civic Engagement and Political Participation. *Journal of Computer-Mediated Communication*, 17(3), 319–336. https://doi.org/10.1111/j.1083-6101.2012.01574.x
- Gil de Zúñiga, H., Weeks, B., & Ardèvol-Abreu, A. (2017). Effects of the News-Finds-Me Perception in Communication: Social Media Use Implications for News Seeking and Learning About Politics. *Journal of Computer-Mediated Communication*, 22(3), 105–123. https://doi.org/10.1111/jcc4.12185
- Glaser, B. G. (2008). Conceptualization: On theory and theorizing using grounded theory. *International Journal of Qualitative Methods*, 1(2), 23–38. https://doi.org/10.1103/Physics.3.106
- Guess, A. M., & Munger, K. (2022). Digital literacy and online political behavior. *Political Science Research and Methods*. https://doi.org/10.1017/psrm.2022.17

- Hargittai, E. (2018). The Digital Reproduction of Inequality. In *The Inequality Reader* (pp. 660–670). Routledge. https://doi.org/10.4324/9780429494468-69
- Jones, C., Ramanau, R., Cross, S., & Healing, G. (2010). Net generation or Digital Natives: Is there a distinct new generation entering university? *Computers & Education*, 54(3), 722–732. https://doi.org/10.1016/j.compedu.2009.09.022
- Kemp, S. (2023). *Digital 2023 Global Overview Report*. https://wearesocial.com/uk/blog/2023/01/digital-2023/
- Kipkoech, G. (2022). Connections Between Internet, Social Media News Use, and Political Participation in Kenya. *Social Science Computer Review*, 089443932110587. https://doi.org/10.1177/08944393211058702
- Livingstone, S., & Couvering, E. Van. (2021). Converging Traditions of Research on Media and Information Literacies: Disciplinary, Critical, and Methodological Issues. *Handbook of Research on New Literacies*, *October*, 121–150. https://doi.org/10.4324/9781410618894-12
- Loader, B. D., Vromen, A., & Xenos, M. A. (2014). The networked young citizen: Social media, political participation and civic engagement. *Information, Communication & Society*, 17, 143–150. https://doi.org/10.1080/1369118X.2013.871571
- Mossberger, K., Tolbert, C. J., & McNeal, R. S. (2007). *Digital Citizenship*. The MIT Press. https://doi.org/10.7551/mitpress/7428.001.0001
- Nascimbeni, F., & Vosloo, S. (2019). Digital Literacy for Children: Exploring Definitions and Frameworks. *Unesco*, 01, 1–49.
- Rastati, R. (2018). Media Literacy For Digital Natives: A Generation Z Perspective In Jakarta. *Jurnal Kwangsan*, 6(1), 60. https://doi.org/10.31800/jtp.kw.v6n1.p60--73
- Ribble, M. (2011). Digital Citizenship in Schools. *An Excerpt from Digital Citizenship in Schools 2nd Edition*, 3777, 1–32. https://doi.org/10.1111/j.1467-8535.2012.01378_9.x
- Robinson, L. (2009). A TASTE FOR THE NECESSARY. *Information, Communication & Society*, 12(4), 488–507. https://doi.org/10.1080/13691180902857678
- Samsuddin, J., Hasan, H., & Ching, L. C. (2016). Digital Engagement, Political and Civic Participation. *Journal of Business and Social Review in Emerging Economies*, 2(1), 31–40. https://doi.org/10.26710/jbsee.v2i1.16
- Saraswati, M. S. (2018). Social Media and the Political Campaign Industry in Indonesia. *Jurnal Komunikasi Ikatan Sarjana Komunikasi Indonesia*, 3(1). https://doi.org/10.25008/jkiski.v3i1.124
- Spector, J. M. (2015). Media Literacies. *The SAGE Encyclopedia of Educational Technology*, *March*. https://doi.org/10.4135/9781483346397.n208
- Strauss, A., & Corbin, J. (2008). Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory. In *SAGE Publications (UK)* (3rd ed., Vol. 31, Issue 4). Sage Publication. https://doi.org/10.1177/1350507600314007
- Theocharis, Y. (2015). Is digitally networked participation a form of political participation? *Citizenship and Democracy in an Era of Crisis: Essays in Honour of Jan W. van Deth, September*, 189–205. https://doi.org/10.4324/9781315750248
- Turner, R. J. (2007). Book review. *Journal of Minimally Invasive Gynecology*, 14(6), 776. https://doi.org/10.1016/j.jmig.2007.07.001
- Vaccari, C., Valeriani, A., Barberá, P., Bonneau, R., Jost, J. T., Nagler, J., & Tucker, J. A. (2015). Political Expression and Action on Social Media: Exploring the Relationship Between Lower-and Higher-Threshold Political Activities Among Twitter Users in Italy. *Journal of Computer-*

- Mediated Communication, 20(2), 221–239. https://doi.org/10.1111/jcc4.12108
- Verba, S., Schlozman, K. L., & Brady, H. E. (1995). *Voice and Equality*. Harvard University Press. https://doi.org/10.2307/j.ctv1pnc1k7
- Wang, J., Yin, Z., & Jiang, J. (2023). The effect of the digital divide on household consumption in China. *International Review of Financial Analysis*, 87, 102593. https://doi.org/10.1016/j.irfa.2023.102593
- Yamamoto, M., Nah, S., & Bae, S. Y. (2020). Social media prosumption and online political participation: An examination of online communication processes. *New Media & Society*, 22(10), 1885–1902. https://doi.org/10.1177/1461444819886295
- Yeşilyurt, E., & Vezne, R. (2023). Digital literacy, technological literacy, and internet literacy as predictors of attitude toward applying computer-supported education. *Education and Information Technologies*. https://doi.org/10.1007/s10639-022-11311-1