



The Influence of Social Capital on Sustainable Tourism Through Digital Literacy in Kebonagung Tourism Village

Medi Trilaksono Dwi Abadi*, Virginia Ayu Sagita, Yenni Sri Utami
Universitas Pembangunan Nasional "Veteran" Yogyakarta, Indonesia

Received : September 11, 2026

Revised : September 25, 2026

Accepted : September 25, 2026

Online : October 7, 2026

Abstract

Tourism is one of the sectors that plays a vital role in economic growth and regional development. Tourism not only generates economic revenue but also drives the growth of supporting industries, such as lodging, transportation, food and beverage, the creative economy, retail, and local businesses in the areas surrounding tourist destinations. This growth demonstrates that tourism is closely intertwined with the economic and social activities of the community. The research purpose is to test the conceptual model to see whether social capital improves the ability of digital literacy and sustainable tourism. This study examines the effect of digital literacy on sustainable tourism village development. A quantitative approach with a causal design was conducted with 44 sample of rural tourism entrepreneur in Kebonagung Tourism Village, and the data were analyzed using PLS. Social capital was assessed through digital literacy was assessed affecting sustainable tourism was evaluated across economic, social, cultural, and environmental. The research findings shows that digital literacy has a positive and significant value the influence on sustainable tourism village development. The results suggest that strengthening community digital capabilities enhances the sustainable tourism. This study highlights digital literacy as a strategic capability for strengthening the competitiveness and long-term sustainability of tourism village development.

Keywords: *Social Capital, Digital Literacy, Sustainable Tourism, Kebonagung*

INTRODUCTION

Tourism is a strategic sector that significantly enriches the regional economy, including in the Kebonagung Tourism Village. In order to develop this sector, the Indonesian government is promoting the development of tourism villages as a strategy to enhance the appeal of local destinations and strengthen community involvement (Fachrezy et al., 2025). Tourism has evolved into a promising industry for countries or regions that open up tourist destinations for visits by both local and international tourists. The tourism industry encompasses the entire range of businesses that sell the goods and services needed by tourists, from the start of their trip until their return to their place of origin (Tiara & Marnelly, 2026). This is because the availability of goods or services on offer can attract more tourists to visit, thereby generating revenue that supports economic development and improves the standard of living for the community (Fachrezy et al., 2025).

The complexity of economic and social development challenges in rural areas underscores the need for innovative strategies that involve all segments of society (Harrison et al., 2010). One approach that has proven effective is the development of sustainable, community-based tourism villages, where social capital serves as the primary driving force in addressing resource constraints and improving residents' well-being (Naumov & Lovell, 2025). Social capital, comprising trust, mutual aid, collaboration, and social networks, has become a vital foundation for creating inclusive and sustainable governance in tourism villages, as well as opening opportunities for income diversification through the tourism sector, the creative economy, and local products (Häuberer,

Copyright Holder:

© Abadi, Sagita & Utami. (2026)

Corresponding author's email: meditrilaksono@upnyk.ac.id

This Article is Licensed Under:



2011).

Sustainable tourism comprehensively takes into account their current and development of economics, social, and environmental impacts, whilst meeting the needs of guest visitors, the industry, the ecology and local communities. Tourism plays a crucial role in achieving three parts of the Sustainable Development Goals. SDG 8 focuses on creating the conditions for decent work and promoting local culture and products, with sustainable tourism acting as a driving force for the achievement of these goals (Herawati et al., 2025). Sustainable tourism emphasizes the need to create an equilibrium of economic viability, ecological preservation, and social responsibility. It has gained notable attention in recent decades largely due to the growth of tourism and its associated negative implications for the environment and society (Woolcock, 1998). This research objective is to describe and predict the determinant factor of sustainable tourism using social capital as independent latent variable and digital literacy as mediation effect latent variable.

LITERATURE REVIEW

Sustainable tourism is highlighted as a transformative strategy to shift the tourism sector from a potential agent of dilution to a stimulant for positive change. This entry delves into the relationship between tourism development and sustainability, discussing challenges and barriers hindering the transition to sustainable development (Naumov & Lovell, 2025). Tourism is a sector of hope. With its manifold socio-economic benefits and broad influence on a diverse range of sectors, tourism is a valuable part of global solutions to these global challenges and can be even more so (UNWTO, 2017).

Sustainable tourism development that takes into account management, potential, and the role of the community can serve as the foundation for the long-term success of sustainable tourism management (Wang et al., 2021). The success of tourism development is also affected by social condition within the community. One such important factor is social capital. Social capital encompasses elements of trust, social networks, and norms that can foster cooperation, participation, and effective coordination in achieving common goals (Wilkins et al., 2014). Strong social capital will make it easier for communities to manage and develop tourism potential in a sustainable manner (Tiara & Marnelly, 2026). To optimize the tourism potential of a tourism village, participation of the local community through community empowerment initiatives is absolutely essential. Community-based tourism is a part of tourism development achieved by empowering local communities. Community participation is the most important component in fostering self-reliance and the empowerment process (Gede & Nugraha, 2021).

One of the increasingly important capabilities in supporting the development of sustainable tourism villages is digital literacy. Digital literacy enables communities to utilize technology to obtain information, promote destinations, build collaborative networks, and improve the quality of decision-making in tourism management. A number of studies have also shown that digital literacy contributes to increased innovation, technology adoption, and the success of digital transformation in the tourism sector. Thus, digital literacy has the potential to be a strategic factor that strengthens both the competitiveness and sustainability of tourism villages in the era of digital transformation.

Digital literacy is an individual's ability to use digital devices and facilities appropriately; to identify, access, manage, integrate, evaluate, analyze, and synthesize digital resources; to build new knowledge; to create media expressions; and to communicate with others all within the context of specific life situations to enable constructive social action; and to reflect on this process. The success of tourism is significant for the community, as it inevitably generates a multiplier effect for the surrounding environment. Community-based tourism is a type of tourism developed by the local community by taking into account social, cultural, and environmental factors to attract tourists.

The development of tourism cannot be separated from the influence of digital literacy (Sampaio & Sebastião, 2024). Through the use of digital literacy, visitors can easily access a wide range of digital information, so tourism stakeholders are required to keep pace with technological developments (Lai et al., 2014). This is because a Tourism Village's ability to adapt to technology will also impact the community's opportunities to create new business ventures.

RESEARCH METHOD

This research employs a quantitative approach by administering surveys that systematically gather and analyse numerical data to obtain insights into a certain issue (Becker et al., 2023). A survey, generally a systematic questionnaire, is conducted with a selected group of individuals intended to reflect a broader community. The research focuses on persons with prior expertise in the regional tourist sector. The sample consists of 44 individuals to ensure a sufficiently representative group for meaningful analysis, while also considering the feasibility of data collection within the study's parameters. Subsequent to data cleansing, a total of 44 replies were assessed. Responses that were incomplete and prejudiced were excluded from the data analysis. The sampling technique in this research was simple random sampling.

The operationalization of variables and the selection of measurement instruments in this study were meticulously planned to ensure accurate and dependable data collection (Sarstedt et al., 2024). The research employed Likert scale-based questionnaires to operationalize the independent variables (social capital), mediating variable (digital literacy), and also dependent variable (sustainability tourism), using respondents rating scale 1 to 5. The analysis was conducted using SEM-PLS software, which, similar to SmartPLS, incorporated validation tests that enhanced the overall assurance of data quality (Hair et al., 2022).

The construct variables were measured using multi-item Likert-type scales adapted from earlier research. Social Capital (SC; X) comprised 4 items spanning three indicators: trust, network, and collaboration (four items per indicator). Digital Literacy (DL; Z) was captured with five adapted items. Sustainability Tourism (ST; Y) used six items. Items were culturally adapted for the Tourism Village of Kebongagung, Bantul context, with less modification item questionnaire refinements following pre-testing to ensure content and clarity relevance.

FINDINGS AND DISCUSSION

The measurement model in this study is a reflective measurement model, with the variables measured being social capital, digital literacy, and sustainable tourism. The evaluation of the reflective measurement model includes: CA > 0.50; FL > 0.70; CR > 0.70; AVE > 0.50; and DV < 0.90.

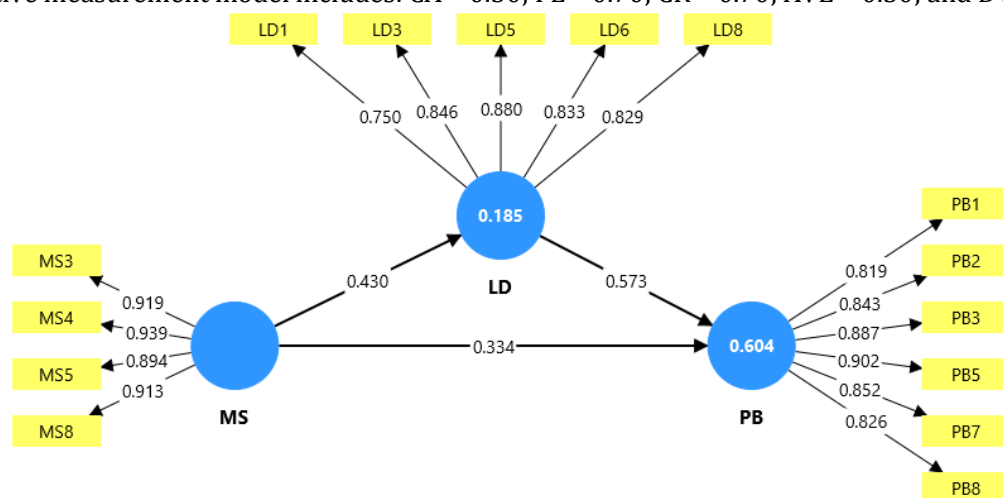


Figure 1 PLS SEM algorithm result

The social capital variable was measured contains four items questionnaire with with value of outer loadings ranging 0.894 to 0.939, indicating that these four measurement items are valid reflecting social capital condition in Kebonagung Tourism Village. The reliability measurement is acceptable, as shows by a CA value 0.937 and a CR value 0.955; since these values are > 0.70 , the indicator is considered reliable for the entire social capital latent variable. The value of convergent validity, as indicated by AVE score is 0.840 (which is > 0.50), means that category for good score of convergent validity have been met. To conclude, variance explained by the social capital measurement items reached 84%. Among the four measurement items for the social capital variable, the SC4 item is the highest outer loading score 0.939, indicating that SC4 item which measures social capital fostering greater digital literacy performed exceptionally well among tourism business entrepreneurs.

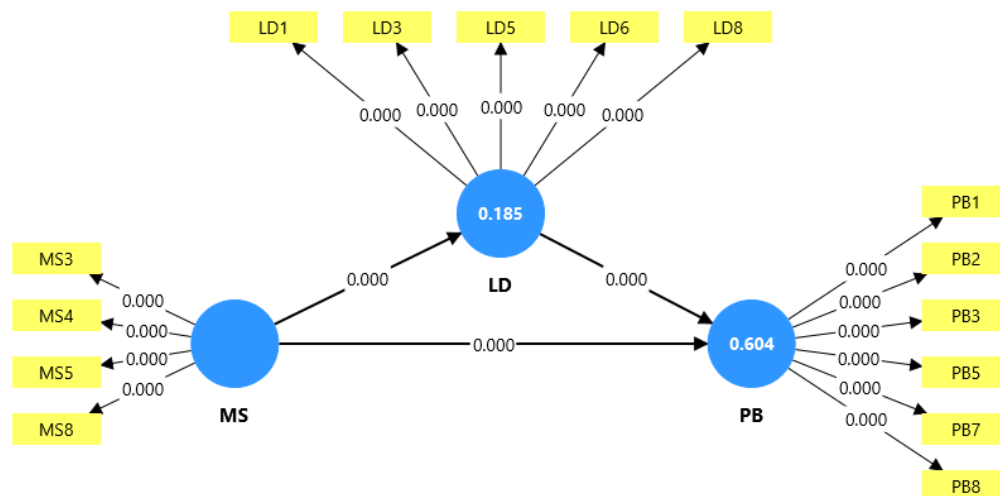


Figure 2. PLS bootstrapping result

The digital literacy variable was measured using five items resulting outer loadings value 0.750 to 0.880, indicating the five measurement items are valid reflecting digital literacy. The reliability of variable is acceptable, as indicated by a CA value 0.885 and CR value 0.916; since these values are greater than 0.70, the indicator is considered reliable. The value of convergent validity, as indicated by an AVE value of 0.687 (which is greater than 0.50), meets the criteria for good convergent validity. Overall, the construct model explained by digital literacy measurement reached 68.7%. Among the five measurement items for the digital literacy variable, measurement item DL5 had the highest outer loading value of 0.880, indicating that item DL5 which pertains to the responsibility of safeguarding business partners' personal data performed exceptionally well among tourism business operators.

The sustainable tourism variance was measured contains six items with outer loadings value 0.819 to 0.902, indicates that these four measurement items are valid reflecting sustainable tourism. The reliability of the variance is acceptable, as indicated by CA value 0.927 and a composite reliability value of 0.942; since these values are greater than 0.70, the indicators are considered reliable. The value of convergent validity, as indicated by AVE value of 0.731 (which is greater than 0.50), meets the criteria for good convergent validity. Overall, the variance explained by the social capital measurement items reached 73.1%. Among the six measurement items for the sustainable tourism variable, measurement item PB5 had the highest outer loading value of 0.902, indicating that item PB5 which involves working while empowering unemployed peers is functioning very well among tourism business operators.

An evaluation of discriminant validity must be conducted by examining the statistical analysis results in the Fornell-Lacker criteria table. The evaluation of discriminant validity using the Fornell-Lacker criteria aims to ensure that the variables are theoretically distinct and empirically validated through statistical analysis. The Fornell-Lacker criteria are determined by ensuring that the square root of a variable's AVE is greater than the correlations between that variable and others. The digital literacy variable has a square root of AVE of 0.829, which is greater than its correlation with social capital (0.430) and greater than its correlation with sustainable tourism (0.717). These AVE calculations indicate that the discriminant validity of the digital literacy variable has been met.

CONCLUSION AND FURTHER RESEARCH

Based on the overall results of the PLS-SEM analysis, the measurement model met the criteria for convergent validity and reliability, as indicated by outer loadings that were all greater than 0.70 and AVE values greater than 0.50. Furthermore, the bootstrapping results showed that $SC \rightarrow DL$, $DL \rightarrow ST$, and $SC \rightarrow ST$ were all positively and significantly correlated, with $p < 0.001$. The R^2 value of 0.185 for DL indicates that SC explains 18.5 per cent of the variation in DL, whilst the R^2 value of 0.604 for ST indicates that SC and DL together explain 60.4 per cent of the variation in ST. Thus, the model has greater explanatory power for the ST construct.

Overall, these results indicate that SC has a positive relationship with both DL and ST, whilst DL has a positive relationship with ST. In addition to the direct effect of SC on ST, there is also an indirect pathway via DL with an estimated effect size of 0.246. This indicates that 81.5 per cent of the variation in LD still stems from factors outside the research model. Although the R^2 value for PB of 0.604 indicates a relatively strong explanatory power, 39.6 per cent of the variation in PB remains unexplained by the constructs within the model. The phenomenon of sustainable tourism essentially has more complex determinants than the variables used in this study. Sustainable tourism is a multidimensional concept that relates not only to the aspects reflected in the research model but may also encompass economic, socio-cultural, environmental, governance and community participation dimensions. This study has not explicitly incorporated all of these dimensions. Consequently, the research findings cannot yet fully capture the overall complexity of sustainable tourism implementation.

REFERENCES

- Becker, J. M., Cheah, J.-H., Gholamzade, R., Ringle, C. M., & Sarstedt, M. (2023). PLS-SEM's most wanted guidance. *International Journal of Contemporary Hospitality Management*, 35(1), 321–346. <https://doi.org/10.1108/IJCHM-04-2022-0474>
- Fachrezy, M. A., Evendi, A., & Nasrullah, A. (2025). Pengaruh modal sosial dalam pengembangan desa wisata menuju destinasi mandiri di Kabupaten Lombok Tengah. *Prosiding Seminar Nasional Mahasiswa Sosiologi*, 3(1), 267–282. <https://proceeding.unram.ac.id/index.php/Senmasosio/article/view/3460>
- Gede, I., & Nugraha, P. (2021). Peran modal sosial dalam pengembangan Desa Wisata Serangan Denpasar Bali. *Media Wisata*, 19(2), 179–185. <https://doi.org/10.36276/MWS.V19I2.8>
- Hair, J. F., Jr., Singh, S., Kaur, R., & Dana, L. P. (2022). *A primer on partial least squares structural equation modeling (PLS-SEM)*. SAGE Publications. <https://uk.sagepub.com/en-gb/asi/a-primer-on-partial-least-squares-structural-equation-modeling-pls-sem/book270548>
- Harrison, J. S., Bosse, D. A., & Phillips, R. A. (2010). Managing for stakeholders, stakeholder utility functions, and competitive advantage. *Strategic Management Journal*, 31(1), 58–74. <https://doi.org/10.1002/smj.801>
- Häuberer, J. (2011). Introducing the civic perspective on social capital: Robert D. Putnam's concept of social capital. In *Social capital theory* (pp. 53–86). Springer. <https://doi.org/10.1007/978->

3-531-92646-9_3

- Herawati, A. R., Widowati, N. W., & Afrizal, T. (2025). Investigating sustainable tourism in Indonesia: A way forward for the tourism industry. In *Technological innovation in global cultural tourism* (pp. 107–142). IGI Global. <https://doi.org/10.4018/979-8-3693-3196-5.ch006>
- Lai, Y. L., Hsu, M. S., Lin, F. J., Chen, Y. M., & Lin, Y. H. (2014). The effects of industry cluster knowledge management on innovation performance. *Journal of Business Research*, 67(5), 734–739. <https://doi.org/10.1016/j.jbusres.2013.11.036>
- Naumov, N., & Lovell, A. (2025). Sustainable tourism. In *International encyclopedia of business management* (pp. 412–415). Elsevier. <https://doi.org/10.1016/B978-0-443-13701-3.00238-3>
- Sampaio, C., & Sebastião, J. R. (2024). Social innovation and social entrepreneurship: Uncovering themes, trends, and discourse. *Administrative Sciences*, 14(3), Article 53. <https://doi.org/10.3390/admsci14030053>
- Sarstedt, M., Richter, N. F., Hauff, S., & Ringle, C. M. (2024). Combined importance–performance map analysis (cIPMA) in partial least squares structural equation modeling (PLS-SEM): A SmartPLS 4 tutorial. *Journal of Marketing Analytics*, 12(4), 746–760. <https://doi.org/10.1057/s41270-024-00325-y>
- Tiara, T., & Marnelly, T. R. (2026). Modal sosial dalam pengembangan Wisata Siantan Park di Desa Kuntu Darussalam Kecamatan Kampar Kiri. *Nusantara: Jurnal Ilmu Pengetahuan Sosial*, 13(5), 1132–1136. <https://doi.org/10.31604/jips.v13i5.2026>
- UNWTO. (2017). *UNWTO annual report 2016*. <https://doi.org/10.18111/9789284418725>
- Wang, H., Zhao, Y., Gao, X., & Gao, B. (2021). Collaborative decision-making for urban regeneration: A literature review and bibliometric analysis. *Land Use Policy*, 107, Article 105479. <https://doi.org/10.1016/j.landusepol.2021.105479>
- Wilkins, K. G., Tufte, T., & Obregon, R. (Eds.). (2014). *The handbook of development communication and social change*. Wiley. <https://doi.org/10.1002/9781118505328>
- Woolcock, M. (1998). Social capital and economic development: Toward a theoretical synthesis and policy framework. *Theory and Society*, 27(2), 151–208. <https://doi.org/10.1023/A:1006884930135>