Community Based Smart Tourism Village through Digital Transformation of Tourism Villages in Bandung Regency

Ahmad Geohansa[1], Eeng Sumarna[2], Irfan Nabhani[3], Gugun Geusan Akbar[4], Mulyaningsih[5], Aceng Ulumudin[6], Farah Aida Ahmad Nadzri [7], Teddy Hikmat Fauzi[8]

[1,2,3,4,5,6]University of Garut, Jawa Barat, Indonesia.

[7]Accounting Research Institute, Universiti Teknologi MARA, Malaysia

[8]Faculty of Social Science and Politics, Pasundan University, Bandung, Indonesia

DOI: https://dx.doi.org/10.47772/IJRISS.2025.908000312

Received: 08 August 2025; Accepted: 14 August 2025; Published: 09 September 2025

ABSTRACT

This study aims to explore the implementation of Smart Tourism Village within the framework of public policy through digital technology at the local level. The research focuses on evaluating community digital readiness, the application of smart tourism practices, and the extent of community participation in tourism village governance, specifically in Pangalengan District, Bandung Regency. Employing a qualitative approach, data were gathered through in-depth interviews with six key informants, strategically selected for their roles in village governance, community-based digital initiatives, and tourism development. The findings indicate that although the majority of the community possesses digital devices and internet access, the use of digital technology in the tourism sector remains partial. Digital activities are mainly concentrated on promotion via social media, with minimal adoption of online reservation systems or integrated tourism data management platforms. The primary barriers include unstable digital infrastructure and low levels of digital literacy. Youth play a pivotal role as drivers of digital innovation, yet they lack adequate institutional support. These findings reveal that smart tourism initiatives remain fragmented and have not been fully integrated into the village governance system. The study recommends strengthening community-based digital literacy programs, developing locally integrated digital platforms, and establishing cross-sector partnerships to foster an inclusive and sustainable tourism village ecosystem.

Keywords: tourism village, smart tourism, digital transformation, community participation, village governance

INTRODUCTION

In recent years, the development of local-based tourism has undergone a significant transformation, from a resource exploitative approach to a model that is more inclusive, sustainable, and participatory. The concept of a smart tourism village has emerged as a response to the need to integrate local wisdom with digital technology to improve the quality of life in rural communities while enhancing the competitiveness of rural tourism destinations.

Conceptually, a smart tourism destination is supported by four main pillars: digital infrastructure, community engagement, data-based governance, and socio-environmental sustainability. In this framework, the tourism village is not merely positioned as an object of development, but as a subject of innovation with autonomy to design management strategies based on technology, culture, and social participation. The use of information technology in this context is not only seen as a tool of modernization but also as a bridge to strengthen local identity within the framework of a creative and participatory economy.

ISSN No. 2454-6186 | DOI: 10.47772/IJRISS | Volume IX Issue VIII August 2025

However, in reality, many rural areas in Indonesia still face significant challenges in their digital transformation efforts, especially in the governance of tourism villages. Many digital initiatives remain fragmented and rely heavily on volunteers, lacking systematic institutional and policy support. Although promotional activities via social media are increasingly visible at the community level, they are often limited to individual or small-group initiatives and are not integrated into a comprehensive governance structure. The lack of optimal collaboration among stakeholders also presents a major obstacle to building a sustainable digital tourism ecosystem at the village level.

Numerous studies have shown that the success of tourism digitalization is strongly influenced by the synergy between digital literacy, local institutional capacity, and collaborative networks involving the public sector, community, and private actors. In terms of collaboration, smart tourism villages should not be perceived merely as technological projects but as social processes requiring community organization, regulatory support, and policy alignment that empowers local actors as key drivers of digital innovation in villages.

This study aims to explore in depth the dynamics of digital transformation in the governance of tourism villages based on community participation. The focus of the research centers on two main aspects. First, it seeks to identify the current conditions of digital technology utilization by village communities in tourism-related activities. Second, it analyzes the level of social and cultural readiness of village communities to respond to the smart tourism agenda, considering factors such as technological understanding, collective capacity, and stakeholder relationships.

This paper will continue with literature review section to discuss prior studies and relevant theory. Next, methodology section will describe research design and instrument used that using a qualitative approach through in depth interviews with key actors and field observations, this research seeks to construct an empirical picture that can guide policy formulation for sustainable and community-based smart tourism village development. After that, finding and discussions section will elaborate the result. Finally, the last section conclude the overall study.

LITERATURE REVIEW

The Concept of Smart Tourism and Smart Destinations

The development of the smart tourism and smart destination concepts reflects the ongoing digital transformation within the tourism sector, shifting from an administrative model toward a data-driven, collaborative, and adaptive experience. The Socio-Technical Systems (STS) approach, originally introduced by (Trist et al., 1951), emphasizes the interaction between social systems (communities, institutions) and technical systems (ICT infrastructure, data) as the foundation for innovation in public service delivery, further reinforced by (Baxter & Sommerville, 2011). This perspective aligns with the view of (Gretzel et al., 2015) and more recently (Buhalis & Yang, 2024), who assert that a destination is no longer merely a physical location but has evolved into a smart ecosystem that integrates people, technology, and information In rural contexts, this approach is embodied in the concept of the smart tourism village, a form of governance based on technological adaptation while grounded in local cultural values.

(Vecchio et al., 2018) urther argue that success in implementing smart tourism is not solely determined by the degree of digitalization, but by the community's ability to articulate and express its identity within the digital space. This view is supported by the co-creation system concept (Buhalis & Yang, 2024), while tourism experiences are shaped through interactive processes in both physical and digital (phygital) environments, such as the use of augmented reality, community-based mobile apps, and digital heritage maps.

In the post-pandemic context, (Ionescu & Aurelian, 2024) emphasize the increasing need for adaptive strategies, highlighting the importance of rapid responses to shifts in tourist behavior through the use of big data, his corresponds with the Adaptive Governance framework proposed by (Folke et al., 2005) and (Chaffin

et al., 2014). Furthermore, the Open Innovation paradigm introduced by (Chesbrough, 2003), underscores the necessity of stakeholder collaboration to foster the exchange of ideas and promote continuous innovation. Thus, the smart tourism village should be understood as a space for collaborative transformation that integrates technology, local culture, and participatory governance to build a sustainable tourism ecosystem.

Digital Transformation and Village Digital Literacy

Digital transformation in the development of tourism villages should not be understood solely as the procurement of technology, but rather as a structural change involving social, cultural, and institutional dimensions. Digital literacy emerges as a key factor to ensure that villagers are not merely technology users but active participants in the village's digital ecosystem. This literacy includes understanding how to operate digital devices, cybersecurity awareness, information ethics, and the ability to leverage technology for economic development.

According to (Rogers, 2003) Diffusion of Innovation framework, most rural communities currently fall into the early majority category. This group requires both social support and institutional incentives to progress toward full adoption of digital technologies. Therefore, digital literacy should not be treated as a short term training project but as a long term social investment. This view is in line with (Vecchio et al., 2018), who argue that the meaning and impact of technology must be rooted in local understanding in order for digital innovations to be socially accepted and sustainable.

Village leadership also plays a crucial role in building an inclusive digital vision. (Au & Tsang, 2022) emphasize that bottom-up approaches, such as community based training and cross sector collaboration, are generally more effective than top down strategies. The principles of Community Based Innovation, as outlined by (Franz, H. W., Hochgerner, J., & Howaldt, 2012), can serve as a foundation for designing digital literacy programs tailored to the specific needs and capacities of local communities.

(Kochuma et al., 2024) add that inclusive and user friendly technology design is essential, particularly in peripheral areas where educational backgrounds and infrastructure availability are highly heterogeneous.

Community Participation

Community participation is the backbone of the successful implementation of smart tourism village initiatives. Without the active involvement of local residents as holders of indigenous knowledge and primary users of the system, technology risks losing its social relevance (Perkins et al., 2022). Various forms of digital participation are now emerging, such as online forums, citizen feedback platforms, and collaborative design in tourism related systems. However, according to (Bramwell & Lane, 2000) the effectiveness of these initiatives depends on three key factors: digital literacy, infrastructure availability, and the legitimacy of governing institutions.

In theoretical terms, Arnstein's Ladder of Citizen Participation (Arnstein, 1969) remains a relevant framework, as many forms of participation in rural tourism villages still operate at a symbolic level. For citizens to gain actual power in decision-making, participatory designs must be deliberative, grounded in local data, and structured as two-way interactions. The Participatory Technology Development (PTD) model proposed by (Schot, 2001) offers a strategic approach to enable citizen engagement from the early stages of technology planning through to implementation.

Practical initiatives such as co-designed tourism apps, collaborative digital mapping, and training based on local capacities have proven effective in strengthening community ownership and program sustainability. (Vasios et al., 2024) Emphasize that meaningful participation enhances the community's adaptive capacity in the face of social, economic, and climate-related disruptions. Therefore, technology should not be viewed merely as a tool for efficiency but rather as a medium of empowerment that reinforces social capital.

ISSN No. 2454-6186 | DOI: 10.47772/IJRISS | Volume IX Issue VIII August 2025

Digital Governance in Tourism Villages

Digital governance refers to the structural mechanisms through which technology is integrated into village-level decision-making processes and public service delivery. This, according to (Purnomo & Purwandari, 2025) extends beyond technical functions and serves as a platform for inclusive information management and power distribution. In the context of tourism villages, collaborative governance involving village authorities, local enterprises (BUMDes), tourism actors, academic institutions, and technology partners is essential.

The Silih Simbeuh concept introduced by (Mulyaningsih, 2019) provides a conceptual framework for cross-stakeholder synergy. However, (Kurniawan, 2020) notes that many rural digitalization projects have yet to be rooted in sustainable institutional structures. As a result, digital systems often overlap, lack interoperability, and remain disconnected from national governance infrastructures.

One proposed solution is the adoption of a data governance approach that emphasizes transparency, standardization, and community participation in managing information systems (Choenni et al., 2022). The establishment of Village Data Centers, managed by BUMDes with oversight from local residents, could serve as a strategic step toward achieving digital sovereignty at the village level.

(Hall et al., 2017) further advocate for the development of local digital charters or ethical guidelines to prevent data misuse and ensure accountability. Within the framework of smart governance by (Nam & Pardo, 2011), technology is applied to improve transparency, responsiveness, and the efficiency of village services. This includes systems such as online booking platforms, digital community forums, and mobile-based reporting mechanisms.

In summary, digital governance in tourism villages should not be treated merely as a technology deployment project but as a long-term investment in sociopolitical infrastructure. Such governance must ensure that digital transformation efforts are both sustainable and socially relevant, rooted in the needs and capacities of the local community.

RESEARCH METHODOLOGY

This study employs a descriptive qualitative approach aimed at gaining an in-depth understanding of the dynamics surrounding the implementation of the Smart Tourism Village at the village level, specifically in the Pangalengan District of Bandung Regency. This approach was selected because it enables the researcher to uncover the meanings, perceptions, and social interactions that underpin the digitalization processes of tourism villages in a contextual and participatory manner.

The research site was purposively selected in Pangalengan District, as the area presents an interesting dynamic in tourism village development. It features distinct rural characteristics and varying levels of digital technology adoption. The location was also chosen based on the presence of grassroots digital initiatives emerging from within the community, although these have not yet been fully integrated into the village's governance system.

Primary data in this research were collected through in-depth interviews with six key informants, selected based on the relevance of their roles and involvement in tourism village management and digital transformation processes. The informants included:

1. The village head,
2. The head of the tourism awareness group (Pokdarwis),
3. A digital-based MSME entrepreneur,
4. A local youth leader,
5. A digital community mobilizer, and
6. An official from the tourism or village empowerment agency.

The interviews were conducted in a semi structured format to allow exploration of the informants' subjective experiences, perceived obstacles, and aspirations concerning the development of the Smart Tourism Village.

In addition to interviews, this study also employed field observation techniques to capture digital activities at strategic tourism village points and to observe citizen interaction in technology-based programs. Supporting documents such as the Village Medium-Term Development Plan (RPJMDes), digitalization project proposals, village deliberation reports, and village social media content were also analyzed to complement the data and contextualize the surrounding policy and institutional dynamics.

The data were analyzed using thematic analysis, beginning with initial coding, followed by categorization, and the construction of key themes that reflect digital transformation, community participation, and governance challenges in tourism villages. The validity of findings was strengthened through source and method triangulation by cross-referencing data obtained from interviews, field observations, and document analysis.

This approach enables the researcher to gain a grounded understanding of real world conditions and to formulate policy recommendations based on local actors' experiences, principles of information equity, and participatory models of digital village governance.

RESULTS AND DISCUSSION

The findings of this study indicate that the implementation of the Smart Tourism Village initiative in Pangalengan District remains in the early stages of digital transformation and is not yet fully integrated into the village governance system. Several interrelated factors such as infrastructure conditions, digital literacy capacity, community participation, and fragmented governance dynamics have influenced the overall implementation process. Although there have been notable community-led initiatives, particularly among youth groups and local MSMEs (Micro, Small, and Medium Enterprises), these efforts have yet to evolve into a functional and sustainable digital ecosystem.

The most fundamental barrier repeatedly highlighted by respondents was the poor quality of digital infrastructure. The village head of Pangalengan stated, "The internet signal here is still unstable. At night or during rain, we often cannot access the internet at all". This was corroborated by a local entrepreneur who noted, "I often struggle to upload products. Sometimes I have to wait until midnight when the connection improves". These statements reveal that the development of digital infrastructure in the village has not been carried out in a strategic or participatory manner. A representative from the Department of Village Empowerment further confirmed, "Internet infrastructure is often deployed without coordination with the village, resulting in mismatched needs". This lack of synergy between district and village-level policies weakens the foundation for digital development. Technical issues such as unstable connections reduce digital accessibility and subsequently limit citizens' engagement in digital programs.

Table 1. Interviewed Data

No.	Code	Position/Role	Age	Gender	Relevant Experience	Reason for Selection	Involvement in Smart Tourism Village
1	KDS	Village Head	47	M	8 years as village head	Top village leader, key policymaker	Determines strategic direction and allocation for digital tourism programs
2	POK	Head of Tourism Awareness Group (Pokdarwis)	41	F	7 years in community-based tourism	Local tourism figure, village event facilitator	Manages community-based tourism destinations and promotion

3	UMK	Digital MSME Entrepreneur	35	M	5 years managing online culinary business	Technology adopter among local business actors	Uses marketplaces and social media to promote local products
4	PMD	Youth Digital Leader	26	M	3 years as creative content volunteer	Youth active in cultural and digital transformation	Creates tourism content, manages social media, educates local residents
5	KMD	Community Digital Facilitator	38	F	6 years as community-based digital training volunteer	Digital training facilitator in the local community	Promotes ICT literacy and basic technology education among residents
6	DSP	Head of Community Empowerment, Regional Office for Community and Village Empowerment (DPMD) Bandung Regency	51	M	15 years in rural development	Policy official for Smart Village initiatives at district level	Designs programs, provides guidance, and evaluates village digitalization initiatives

Source: Researcher interview, 2025

The situation is exacerbated by low levels of digital literacy among residents, which in the long term may hinder the comprehensive adoption of technology. A digital community facilitator explained, “Many residents do not even know how to open a Google Form. We have to assist them one by one”. The head of the local tourism group (Pokdarwis) added, “We rely heavily on the youth. They create the content, upload event photos, and respond to tourist messages”. However, as one youth leader expressed, “We are doing this because we want to see our village progress, not because of any incentives or official programs. It gets tiring when everything is left to us alone”. These insights highlight the social disparities in digital competence and the absence of institutional support systems that could empower youth as key agents of digital transformation.

Although community participation in village digital initiatives is high, it tends to be sporadic and lacks sufficient facilitation. A local MSME owner shared, “At first, I promoted through WhatsApp to my contacts. Eventually, I tried Instagram and TikTok and got a good response. But I learned everything on my own”. A youth representative echoed this sentiment, “Our tourism content work is entirely our initiative. If we waited for a village program, nothing would happen”. The village head admitted, “We have not allocated specific funding for digital community activities. Perhaps it can be proposed in the next planning meeting if there's a formal suggestion”. This mismatch between community initiative and structural support reveals that local social capital has not been effectively incorporated into a broader digital development strategy. These narratives suggest that community engagement has emerged from cultural values and concern for their surroundings rather than formal government programs.

Governance issues also emerged, particularly in the misalignment between stakeholders involved in digital tourism development. A government official stated, “Sometimes programs from the province or ministry are directly introduced to the village without prior consultation. As a result, village officials are confused about how to implement them”. The head of Pokdarwis added, “There was once digital promotional equipment sent to the village, but it has never been used. There was no training, and no one knows who is responsible”. The village head further noted, “We don’t yet have a permanent forum for tourism actors in the village, even though coordination is crucial”. These interviews underscore weak collaborative governance and a lack of integration between village planning and cross sector initiatives.

This fragmented governance not only hampers program implementation but also shapes community perceptions about the sustainability of digital initiatives. As the digital community facilitator noted, “Residents become skeptical because many programs just come and go without follow-up”. This contributes to low trust and weak ownership of digital programs at the grassroots level. Fragmented approaches also hinder potential synergies between vertical and horizontal stakeholders.

Technology utilization in villages within Pangalengan District remains mostly limited to promotional activities via social media, with no development of more strategic public service or tourism systems. The Pokdarwis leader explained, “We routinely post tourism activities on social media, but we have yet to implement online reservations. Visitors still contact us via chat”. A local entrepreneur confirmed, “I have never used a special app for selling. It is all through Instagram and WhatsApp”. A youth leader added, “The village once had a tourism website, but it has since been neglected because no one manages it”. These findings reinforce the conclusion that technology use remains fragmented and has not yet reached integrated service delivery or data-driven management function.

While social media promotion has indeed yielded positive outcomes for some local tourism actors, the absence of an integrated backend system limits its full potential. As one MSME owner said, “Many tourists inquire via Instagram DMs, but we often respond late because no one is managing the account continuously. If there were an automated booking system, it would be much more professional”. This highlights that digitalization without supportive systems and structures tends to remain a supplementary activity rather than a sustainable solution.

Another issue identified was unequal access to technology, especially among vulnerable groups. A digital facilitator noted, “Elderly residents often struggle even to open their phone camera. Without assistance, they cannot participate in online programs”. The Pokdarwis leader added, “Only the younger people attend digital training. Those who actually need it often do not own smartphones or feel embarrassed to participate”. A local business owner remarked, “Many of my neighbors borrow their children’s phones when they need to fill out aid forms or register for vaccinations”. This suggests that digital transformation may reinforce social inequality if not accompanied by affirmative policies and inclusive strategies.

The fact that many residents rely on devices owned by other family members highlights the persistent digital divide in ownership and usage. With limited digital literacy and infrastructure, the gap between active and inactive users will likely widen, hindering efforts to create an inclusive smart tourism village.

Overall, the narratives of the informants reflect a complex on-the-ground reality where technological enhancement does not automatically generate institutional innovation or social capacity building. Digital transformation in tourism villages requires more than technological solutions. It must be rooted in community-based, participatory, and governance-integrated frameworks that are both adaptive and sustainable. As a local elder noted, “If everyone is involved from the start, including traditional leaders, it is easier to implement and sustain. But if only a few people are involved, the program feels elitist and quickly gets abandoned”.

The findings of this study affirm that the success of the Smart Tourism Village concept is highly dependent on the presence of a holistic and structured local digital ecosystem. This ecosystem should be built on four key components: increased digital literacy, strengthened infrastructure and connectivity, synergistic multi-actor collaboration, and open, data-based governance. Without these components, smart tourism risks becoming an empty label rather than a meaningful pillar of rural development..

Thus, the study offers a comprehensive view that digital transformation in tourism villages is not solely about technology. It also involves issues of information justice, collaborative governance, and sustainable social learning strategies. Digital development strategies must be grounded in community strengths and local dynamics to genuinely reinforce the identity and economy of rural areas over the long term.

ISSN No. 2454-6186 | DOI: 10.47772/IJRISS | Volume IX Issue VIII August 2025

Table 2. Thematic Coding Matrix

Code	Main Theme	Subtheme	Informant Source	Excerpt & Key Interpretation
T1	Digital Infrastructure	Limited internet access	KDS, UMK, DSP	"The signal is often unstable, especially when it rains." → technical barrier to digital transformation
		Low device quality	PMD, POK	"Many residents still use old phones, so app features don't work properly."
T2	Digital Literacy	Low operational skills	KMD, POK	"They still need assistance to fill out online forms, especially the elderly."
		Youth as digital educators	PMD, KMD	"Many young people help residents learn how to use the apps."
T3	Community Participation	Bottom-up initiatives	UMK, PMD	"I started selling online on my own initiative."
		Limited institutional support	PMD, KMD	"Unfortunately, there's no specific budget yet for youth digital activities."
T4	Governance Fragmentation	Lack of stakeholder coordination	DSP, KDS, POK	"Sometimes programs from the district don't align with the village's needs."
		Not included in RPJMDes	KDS	"It hasn't been included in the RPJMDes because it wasn't prioritized before."
T5	Technology Utilization	Focus on visual promotion	POK, UMK, PMD	"We mostly use Instagram to upload tourism-related photos."
		No integrated service system	DSP, KDS	"We haven't reached the stage of reservation systems or visitor databases yet."
T6	Digital Access Equity	Elderly and vulnerable groups left behind	KMD, POK	"If there's no assistance, older residents often get confused using the apps."

Source: Researcher interview, 2025

CONCLUSION AND IMPLICATIONS

Conclusion

This study concludes that the implementation of the Smart Tourism Village initiative in Pangalengan Subdistrict remains in the early stage of digital transformation. The process is still partial and has yet to be fully integrated into the village governance system. Although most residents already own digital devices and have access to the internet, technology utilization remains limited to promotional activities on social media, without broader development of comprehensive digital tourism systems such as online reservations or destination data management. This indicates that the majority of the community is still in the early majority stage of digital innovation adoption.

The primary challenges lie in the suboptimal condition of digital infrastructure, low levels of digital literacy, and the lack of institutional support for key actors such as youth. Additionally, fragmentation among digital programs across stakeholders reflects weak vertical and horizontal coordination, which may hinder the formation of a sustainable village-level digital ecosystem. As highlighted in the literature, the success of smart tourism significantly depends on the synergy between social, technological, and institutional components.

Therefore, the digital transformation of tourist villages should not be understood solely as a technocratic agenda but must be positioned within the framework of public policy that emphasizes community participation, collaborative governance, and the strengthening of social capacity.

Implications

This research contributes significantly to the theoretical and practical understanding of digital transformation in rural tourism within the scope of public policy. Theoretically, the findings extend the application of the Diffusion of Innovation theory by highlighting that digital technology adoption at the village level is influenced not only by perceived technological benefits but also by structural factors such as institutional capacity, the level of digital literacy among residents, and the dynamics of stakeholder interactions. These findings affirm that technological innovation requires a supportive social and cultural context to be adopted sustainably.

Furthermore, the integration of the Asset-Based Community Development approach with the principles of smart governance contributes to the conceptual development of a community-driven digital tourism village model. This study also reinforces the relevance of the Community-Based Smart Village model, in which the integration of technology, participation, and social autonomy is a critical prerequisite for successful grassroots-level digitalization.

The practical implications of these findings point to the need for digital transformation policies that are more contextualized, non-technocratic, and rooted in local needs and capacities. Village governments and related agencies can use the results of this study as a foundation for designing policy interventions, such as community-based digital literacy training, the development of inclusive communication infrastructure, and the establishment of structured and multisectoral village digital task forces. Emphasizing the role of youth as key drivers of digital innovation also underscores the need for affirmative policy support to ensure the sustainability of bottom-up initiatives.

Moreover, this study opens pathways for further research that can explore the effectiveness of various community-based digital platforms in rural areas, as well as the role of non-governmental actors such as creative communities, local startups, or academics in building rural digital ecosystems. Comparative studies across regions or longitudinal analyses of the social and economic impacts of rural digitalization are also recommended to strengthen the generalizability of findings and inform evidence-based policy development more broadly.

ACKNOWLEDGMENTS

The authors appreciate the support and facilities of the UNIGA Doctoral Program, Citengah Village contribution to this research. Authors also acknowledge the aid offered by the Accounting Research Institute of Universiti Teknologi MARA, Malaysia and the Ministry of Higher Education.

REFERENCE

1. Arnstein, S. R. (1969). A ladder of citizen participation. Journal of the American Institute of Planners, 35(4), 216–224.
2. Au, W. C. W., & Tsang, N. K. F. (2022). What makes a destination smart? an intelligence-oriented approach to conceptualizing destination smartness. Journal of Travel & Tourism Marketing, 39(4), 448–464. https://doi.org/10.1080/10548408.2022.2116627
3. Baxter, G., & Sommerville, I. (2011). Socio-technical systems: From design methods to systems engineering. Interacting with Computers, 23(1), 4–17. https://doi.org/10.1016/j.intcom.2010.07.003
4. Bramwell, B., & Lane, B. (2000). Tourism, collaboration, and partnerships : politics, practice, and sustainability. In Aspects of tourism; 2 TA - TT -. Channel View Publications. https://doi.org/LK - https://worldcat.org/title/43050203
5. Buhalis, D., & Yang, J. (2024). Smart Tourism BT - Encyclopedia of Tourism (J. Jafari & H. Xiao (eds.); pp. 957–958). Springer Nature Switzerland. https://doi.org/10.1007/978-3-030-74923-1_175
6. Chaffin, B. C., Gosnell, H., & Cosens, B. A. (2014). A decade of adaptive governance scholarship. Ecology and Society, 19(3), 1–13. http://www.jstor.org/stable/26269646

7. Chesbrough, H. (2003). Open Innovation - Open Innovation. Harvard Business School Press, 2016(193), 1–9. http://www.openinnovation.eu/openinnovatie.php
8. Choenni, S., Bargh, M. S., Busker, T., & Netten, N. (2022). Data governance in smart cities: Challenges and solution directions. Journal of Smart Cities and Society, 1(1), 31–51. https://doi.org/10.3233/scs-210119
9. Folke, C., Hahn, T., Olsson, P., & Norberg, J. (2005). ADAPTIVE GOVERNANCE OF SOCIAL-ECOLOGICAL SYSTEMS. Annual Review of Environment and Resources, 30(Volume 30, 2005), 441–473. https://doi.org/https://doi.org/10.1146/annurev.energy.30.050504.144511
10. Franz, H. W., Hochgerner, J., & Howaldt, J. (2012). Challenge Social Innovation. Challenge Social Innovation. https://doi.org/10.1007/978-3-642-32879-4
11. Gretzel, U., Sigala, M., Xiang, Z., & Koo, C. (2015). Smart tourism: foundations and developments. Electronic Markets, 25(3), 179–188. https://doi.org/10.1007/s12525-015-0196-8
12. Hall, P. C. M., Prayag, G., & Amore, A. T. A.-T. T.-. (2017). Tourism and Resilience : Individual, Organisational and Destination Perspectives (1st NV-). Channel View Publications. https://doi.org/LK - https://worldcat.org/title/1004974060
13. Ionescu, A., & Aurelian, F. (2024). Exploring the Impact of Smart Technologies on the Tourism Industry.
14. Kochuma, I., Hranovska, V., Demko, V., Dzhumurat, V., & Horiashchenko, M. (2024). Digital Inclusion of Tourism Business in the Conditions of Global Smartization: Potential, Mechanisms and Strategic Tools. Polish Journal of Sport and Tourism, 31(4), 33–45. https://doi.org/10.2478/pjst-2024-0025
15. Kurniawan, A. R. (2020). Tantangan pengembangan pariwisata berbasis masyarakat pada era digital di Indonesia (Studi Kasus Pengembangan Pariwisata Berbasis Masyarakat di Pangalengan). Tornare: Journal of Sustainable and Research, 2(2), 10.
16. Mulyaningsih, M. (2019). the Implementation of Characteristics of Organizational Culture "Sharing" Based on Local Wisdom in Increasing Hr Competence in Indonesia (Facing Asian Future Shock 2020). Journal Of Educational Experts (JEE), 2(1), 39. https://doi.org/10.30740/jee.v2i1p39-46
17. Nam, T., & Pardo, T. A. (2011). Conceptualizing smart city with dimensions of technology, people, and institutions. Proceedings of the 12th Annual International Digital Government Research Conference: Digital Government Innovation in Challenging Times, 282–291. https://doi.org/10.1145/2037556.2037602
18. Perkins, R., Khoo, C., & Arcodia, C. (2022). Stakeholder contribution to tourism collaboration: Exploring stakeholder typologies, networks and actions in the cluster formation process. Journal of Hospitality and Tourism Management, 52, 304–315. https://doi.org/https://doi.org/10.1016/j.jhtm.2022.07.011
19. Purnomo, S., & Purwandari, S. (2025). A Comprehensive Micro, Small, and Medium Enterprise Empowerment Model for Developing Sustainable Tourism Villages in Rural Communities: A Perspective. Sustainability (Switzerland), 17(4). https://doi.org/10.3390/su17041368
20. Rogers, E. M. (2003). Diffusion of Innovations. Free Press of Glencoe. https://books.google.co.id/books?id=zw0-AAAAIAAJ
21. Schot, J. (2001). Towards New Forms of Participatory Technology Development. Technology Analysis & Strategic Management, 13(1), 39–52. https://doi.org/10.1080/09537320120040437
22. Trist, E., Bamforth, K., & Emery, F. (1951). Socio-Technical Theory. 1981.
23. Vasios, G. K., Gialeli, M., Antoniadis, I., & Troumbis, A. Y. (2024). Sustainability Through Local Gastronomy: The Case of Wild Rabbit's Consumption in Lemnos Island, Greece. In Springer Proceedings in Business and Economics. https://doi.org/10.1007/978-3-031-51038-0_95
24. Vecchio, P. Del, Mele, G., Ndou, V., & Secundo, G. (2018). Creating value from Social Big Data: Implications for Smart Tourism Destinations. Information Processing & Management, 54(5), 847–860. https://doi.org/https://doi.org/10.1016/j.ipm.2017.10.006