

## **Conceptual Analysis of the High-Touch, High-Tech Trend: The Suitability of Technology for Tourism Transformation in Rural Destinations**

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### **Abstract**

This research aims to evaluate the role of technology in rural tourism development, focusing on the match between technology and the capabilities of local communities. The method used is a quantitative approach, namely data collection through questionnaires distributed to three groups of respondents: local communities, technology providers and tourists. Two main research questions were identified: (1) Is the technology applied by the community service capacity in the tourist village? (2) How can technology be adapted to the needs of local communities and the experiences tourists desire? The research results show that appropriate technology can improve tourist experiences and empower local communities. However, reliance on technological trends without a strong foundation can decrease tourist interest. Therefore, this research concludes that the application of technology must be based on a deep understanding of the local context to avoid inappropriate investments and maintain tourism sustainability. These findings provide important insights for stakeholders in designing appropriate technology strategies for tourist villages.

**Keywords:** rural tourism, technological progress, high technology, emerging markets, tourism services

## A. Introduction

The use of technology in the tourism industry has increased significantly, offering various benefits but posing challenges, especially in the context of tourism development in rural areas. In Indonesia, internet penetration has reached 79.5% (APJII, 2024), which shows great potential for utilizing technology in this sector. However, despite widespread internet access, there needs to be a match between technology and tourist preferences. Research by Laksmi et al. (2024) shows that many tourists prefer more authentic, non-automated experiences, reflecting a desire to interact directly with local culture. This indicates that the application of technology is only sometimes in line with tourists' expectations and needs, especially in community-based tourism.

To understand more about the balance of technology in tourism transformation, this research aims to reveal how technology can be adapted to suit the capabilities of local communities providing services in tourist villages. In this context, it is essential to explore the underlying questions: (1) Are these technological trends in line with local communities' ability to provide services? (2) How can technology be adapted to meet the needs of local communities? (3) Does the experience offered by this technology match the wishes of tourists visiting tourist villages? These questions will guide analyzing the potential and sustainability of technology applications in the tourism sector.

A study by Verselly and Iskandar (2023) emphasizes the importance of a sustainable approach in technology implementation, focusing on efficiency and social and cultural impacts. In addition, Suwandy and Fachrureza (2023) stated that reliance on technology that is not appropriate to the local context can cause negative tourism experiences and has the potential to damage tourist attractions. Therefore, this research focuses on the benefits of technology and the risks associated with poorly planned technology implementation.

Through a quantitative approach involving three main groups of respondents, local communities, technology providers and tourists, this research seeks to obtain a comprehensive picture of the application of technology in managing tourist villages. In this way, this research can reveal gaps in the literature regarding the application of technology in rural tourism, providing a significant theoretical contribution to study in this area. It is hoped that the results obtained can be a reference for other researchers who want to understand more about implementing technology in the tourism sector.

The novelty of this research lies in the holistic analysis of the balance of technology with the local context, as well as the focus on the potential for sustainable tourism development. By understanding the interactions between technology, local communities, and tourists, this research can provide practical recommendations for stakeholders, including local governments and tourism service providers, in designing effective strategies to utilize technology. Through this research, it is hoped that a better understanding will be created regarding the application of technology that is not only profitable from an economic perspective but also maintains cultural values and environmental sustainability.

## **B. Literature Review**

After the tourism industry began to recover from the impact of COVID-19, the digitalization trend in tourism became increasingly widespread and is considered an important innovation for this sector and the creative economy in Indonesia. According to APJII (2024), internet penetration in Indonesia has reached 79.5%, which shows extraordinary potential for developing digital tourism. Digital technology increases access to information and improves people's literacy, enabling them to adapt to rapid changes. However, these changes also challenge understanding how technology influences tourist behaviour. Boto-Garcia and Banos-Pino (2022) emphasize the importance of innovation in tourism services that not just follow trends but also focus on developing sustainable and relevant services to each destination's local characteristics. This suggests that a deep understanding of the interaction between technology and tourists is necessary.

The shift towards digital tourism is changing the way tour packages are promoted and shaping the experiences that tourists expect. Research by Supina & Banse (2023) reveals that although slow tourism is increasingly being discussed, its understanding and implementation in Indonesia are minimal. This concept is essential to appreciating every moment and enjoying the travel process without rushing (Singh & Supina, 2023). In this context, expanding technology use must align with the values used by slow tourism. Therefore, this research focuses on technology's suitability in supporting tourism transformation in tourist villages by considering whether the technology applied is to the needs and desires of local communities and tourists.

In understanding this gap, it is essential to identify the technology's suitability to the capabilities of local communities. Sunday (2023) argues that

technological progress must reflect the social civilization of the 21st century. However, many questions still need to be answered: Does the technology match the local capacity to provide services? And can applying this technology fulfil tourists' expectations when visiting tourist villages? This research seeks to answer these questions and fill the gap in the current literature on the application of technology in sustainable tourism.

Buhalis (2019) underlines that technology significantly impacts the tourism sector, shaping destination strategies and competitiveness. Understanding the complex interactions between humans and technology, as well as the interests and values of stakeholders, is critical to creating successful systems. This research explores how technology can be involved in the tourism context and identifies the challenges faced in its implementation. With a more in-depth analysis of the suitability of technology, it is hoped that this research can provide practical guidance for stakeholders in managing appropriate investments and ensuring the sustainability of tourism in tourist villages.

Overall, this literature review shows the importance of a deep understanding of the application of technology in tourism and the need to avoid simply following trends that may not positively impact the development of rural tourism. By finding gaps in the literature and offering new perspectives, this research will not only make a significant contribution to the existing literature but also provide relevant practical recommendations for sustainable tourism development in Indonesia.

### **C. Research Methods**

This research uses mixed methods to understand the process of implementing technology in tourist villages. Research design includes systematic steps such as problem identification, data collection, and analysis. Initially, researchers identified gaps in knowledge and application of technology in tourist villages, collecting data through questionnaires and in-depth interviews with stakeholders, namely local communities, technology providers, regional leaders, and tourists.

The research population consists of four categories representing various perspectives regarding the application of technology. This research used purposive sampling to select 100 respondents from each category to be representative. Data was collected through a questionnaire that included closed and open questions and semi-structured interviews with 20 selected

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respondents. The data collection process lasted for two months in strategic locations in tourist villages.

Data collection was carried out in stages, starting with the preparation of research instruments. Enumerators distributed questionnaires in person and online and conducted face-to-face interviews. The data collected is then processed to ensure accuracy and results. A systematic approach is applied to process quantitative and qualitative data in data analysis. Descriptive and inferential statistical analysis was used for quantitative data, while thematic analysis with coding techniques was used for qualitative data. Analyze this process using statistical software such as SPSS and ensure that the results obtained can provide a clear picture of the application of technology in tourist villages.

### D. Result and Discussion

#### Gaps in Understanding and Application of Technology

The research results show significant gaps in the understanding and application of technology in tourist villages. Through the analysis, several factors influencing the application of technology were identified and put into main categories. Table 1 below presents these factors: readiness infrastructure, technology adaptation, and community engagement.

Table 1. Factors influencing the application of technology in tourist villages

Category	Description
Infrastructure Readiness	Availability of reliable internet and accessible technology
Technology Adaptation	Adaptation of technology to local needs and characteristics
Engagement Community	Active community participation in the application of technology

Source: Researcher (2024)

In addition, technological adaptation emphasizes the importance of adapting technological tools and systems to local needs and characteristics so that the technology applied is relevant and appropriate to the social and cultural context of the local community. Technology adapted to local culture increases acceptance among society and maximizes its effectiveness. Finally, community engagement refers to the active participation of society in the implementation

of technology, which is considered essential to ensure technology initiatives are widely accepted and supported.

According to Li (2022), involving the public in the decision-making process can create a sense of ownership and responsibility, thereby increasing the success and desirability of the implemented technology. These third factors interact with each other and contribute to the successful application of technology in developing tourist villages, creating synergies that encourage economic growth and the welfare of tourists. Papastathopoulos et al. (2019) and Sun et al. (2023) support this, emphasizing the importance of integrating technology and local culture.

### Infrastructure Readiness Analysis

In this research, infrastructure readiness is measured based on several indicators, including the availability of internet access, network permits, and other supporting infrastructure. Data shows that villages with stable and fast internet access can implement complex technological solutions better. Table 2 shows the analysis of infrastructure readiness results among respondents.

Table 2. Results of Infrastructure Readiness Analysis

Indicator	Average Score	Percentage of Respondents (%)
Availability of Internet Access	4.3	75
Network Reliability	3.8	60
Infrastructure Support	4.0	70

Source: Researcher (2024)

Table 2 presents an analysis of the results of infrastructure readiness, which is an important factor in implementing technology in tourist villages. It displays key indicators along with the average score and percentage of respondents who expressed satisfaction with each of these indicators. From this analysis, the availability of internet access shows the highest average score, namely 4.3, with 75% of respondents assessing that internet access in the tourist village is adequate.

This is in line with the findings of Supina et al. (2023), who emphasize that good internet accessibility is the basis for technology development in tourism because it allows better interaction between visitors and service

providers. Meanwhile, the network clarity indicator scored 3.8, with 60% of respondents feeling satisfied, indicating that even though there is access, stability, and consistency in internet services, it is still a challenge that needs to be overcome to support optimal technology implementation. Then Suwandy & Facrureza (2023) stated that supporting infrastructure, which includes facilities such as public Wi-Fi and technological devices, received an average score of 4.0, with 70% of respondents admitting its existence. This shows that despite efforts to provide additional infrastructure, there is room for improvement, especially in improving network performance. Overall, the results of this analysis illustrate that the condition of the infrastructure is quite good but requires further attention to the fitness and support of the infrastructure to promote more practical application of technology in the rural tourism sector, thereby creating a better experience for tourists and local communities.

### **High-Touch and High-Tech Integration**

The discussion of the results of this research highlights the importance of integration between high-tech components and personal interactions in rural tourism. Research by Wunderlich et al. (2013) shows that tourism development efforts can be at risk without a balance between authentic local experiences and technological innovation. Puja et al. (2021) show that the personal involvement of technology and people is critical in maintaining rural locations' unique appeal. Without these interactions, tourists' experiences will feel less immersive and memorable, reducing the overall value of their visit.

Therefore, it is important to combine technological elements with authentic local experiences. Technological innovations, such as mobile applications and digital platforms, should not only serve as tools to increase efficiency but should also be designed to enrich social interactions and emotional connections between tourists and local communities (Viana et al., 2023). With this approach, rural tourism can create a more holistic experience where technology and human interaction work to generate greater value for visitors and local communities.

### **Impact of Technology Implementation**

On the other hand, the application of technological components, such as digital platforms and advanced communication tools, can increase operational efficiency and deepen visitor engagement. This research confirms that harmonizing these two approaches is critical to successful tourism

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transformation. Table 3 provides an overview of how technology can interact with the tourist experience.

Table 3. Integration of high-touch and high-tech in rural tourism

Component	Description	Impact on Tourist Experience
High-Touch	Direct interaction with local communities	Increases sense of connectedness
High-Tech	Use of digital applications and platforms	Improve efficiency and accessibility
Combination	The synergy between local experience and technology	Creating a more immersive experience

Source: Researcher (2024)

Table 3 illustrates the importance of integrating high-touch and high-tech components in rural tourism, critical to creating more prosperous and meaningful tourist experiences. The high-touch component includes direct interaction with local communities, significantly increasing tourists' connection with local culture and traditions. These interactions provide a sense of warmth and closeness and allow tourists to gain deeper insight into the daily lives of local people, thereby strengthening emotional ties and increasing their satisfaction.

On the other hand, the high-tech component includes using applications and digital platforms designed to increase efficiency and accessibility in tourism services. With the convenience of technology, tourists can access information, make reservations and explore destinations more comfortably and quickly, reducing stress and increasing comfort during travel. However, combining these two elements, namely the synergy between authentic local experiences and technological innovation, has created a more immersive experience, where tourists not only enjoy the convenience of technology but also feel a strong connection with the community and the surrounding environment. Thus, integrating high-touch and high-tech becomes a crucial factor in rural tourism's sustainable development, offering visitors a more holistic and memorable experience.

Kumar & Asthana (2020) conducted systematic observations on how technology and innovation are changing the concept of rural tourism. They found that by leveraging technology, tourist destinations can improve visitor experiences through applications facilitating interactions with local



communities. This research emphasizes that technology is a tool for efficiency and enhances the tourist experience by providing better access to information and strengthening connectedness with local culture.

Meanwhile, Neuhofer et al. (2013) examined the relationship between high-tech and high-touch experiences in the hospitality industry, highlighting the importance of technology in creating more personalized and memorable experiences for guests. They state that technology can enhance personal interactions, not replace them. In the context of tourism, these findings show that the use of technology can improve service quality and build deeper relationships between tourists and local communities.

Pinia et al. (2024) research focuses on prototype design for education and heritage tourism through rapid application development. They show how these apps can educate tourists about cultural heritage while facilitating interactions with residents. This research highlights the potential of technology integration in creating educational and engaging experiences where tourists are not only observers but also participate in preserving and appreciating local culture.

### Community Involvement in Technology Implementation

One key factor in this research is the importance of community involvement in the technology implementation process. Active participation of local communities in creating and implementing technological solutions can increase the acceptance and effectiveness of these technologies. This involvement covers various aspects, from planning to implementation and evaluation. Table 4 below summarizes the role of the community in implementing technology in tourist villages.

Table 4. The role of society in implementing technology

Engagement Aspects	Description	Positive impact
Planning	The community is involved in designing technology needs	Increase the relevance of the solution
Implementation	The community participates in the implementation of technology projects	Increase the taste you have
Evaluation	Feedback from the	Increase

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Engagement Aspects	Description	Positive impact
	community is used to evaluate the effectiveness	accountability

Source: Researcher (2024)

Table 4 outlines society's role in technology implementation, which consists of three essential aspects of involvement: planning, implementation, and evaluation. In planning, the community is involved in formulating technology needs appropriate to the local context so that the resulting solutions are more relevant and practical. This involvement helps ensure that the technology implemented meets people's needs and can significantly improve their quality of life.

At the implementation stage, community participation in implementing a technology project increases their sense of ownership of the initiative and strengthens their commitment to supporting the project's success. By being directly involved, people feel more responsible and motivated to continue using the technology that has been implemented. Finally, in the evaluation aspect, feedback provided by the community is used to assess the effectiveness of the technology that has been implemented. This increases accountability for project implementation and provides opportunities for continuous improvement, which can strengthen relationships between communities and technology developers. Overall, the active involvement of the community in all aspects of technology implementation contributes to the success and desirability of the initiatives taken.

Hanandini (2024) examines the social transformation that occurs in modern society due to the influence of technology. In the literature described, the authors highlight how technology facilitates social interactions and increases people's involvement in various aspects of life. This research shows that when communities are involved in developing and implementing technology, it increases the relevance of the technology itself and strengthens social networks and a sense of community. The interactions generated through technology can strengthen bonds between individuals and groups, creating a more inclusive and collaborative environment.

On the other hand, Naikoo et al. (2020) discuss the development of society under the influence of modern technology. They noted that community

involvement in technology development is essential to ensure that the technology introduced meets community needs and aspirations. This research shows that when people have an active role in this process, they not only become passive users but also contribute to formulating appropriate solutions, thereby increasing their sense of ownership and responsibility for the technology being implemented. Thus, community participation is critical in creating a society that is more adaptive and responsive to technological change.

Tegegn (2024) explores the role of science and technology in shaping human social history. In his analysis, Tegegn shows that technological changes affect technical aspects and have significant social impacts. Community involvement in the application of technology allows them to adapt and reshape existing social norms and values. This research emphasizes that society's active participation in every stage of the technology implementation process is essential to creating positive and sustainable social impacts and ensuring that technology functions as a tool to empower society.

### Long-Term Impact on Rural Tourism

The results of this research also show that the application of appropriate technology can have a significant long-term impact on rural tourism. With adequate technological infrastructure and active community involvement, tourist villages can more easily adapt to global tourism trends. This can increase their competitiveness and expand their accessibility to tourists. Table 5 illustrates the potential long-term impacts of technology implementation.

Table 5. Long-term impact of technology application on rural tourism

Impact Aspect	Description	Success Indicators
Increased Competitiveness	Tourist villages that have good technological infrastructure	Increased number of visitors
Product Diversification	Creation of various technology-based tourism products	Product variants offered
Local Economic Engagement	Increased community participation in the tourism economy	Increased local income

Source: Researcher (2024)

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Based on the research results and discussions described, several recommendations can be submitted to stakeholders in developing technology-based tourism. First, local governments must provide the necessary support in the form of infrastructure and training for communities. Second, collaboration between technology providers and local communities must be improved to make proposed solutions relevant and acceptable. Third, sustainability monitoring and evaluation must be carried out to ensure that the technology implemented continues to benefit society.

Research by Ilieva et al. (2023) discusses the long-term impact of technology implementation on rural tourism, focusing on how technological innovation can change the tourism industry ecosystem. In this study, the authors explain that the application of technology in rural tourism not only serves to increase operational efficiency but also has great potential to transform tourist experiences and strengthen local community involvement. Technology, such as mobile applications, digital platforms and information management systems, can increase the accessibility of information for tourists, making it easier for them to plan and travel. This positively impacts tourists, allowing them to explore more attractions and gain relevant information about local culture and traditions. In this way, technology attracts more visitors and helps introduce and preserve the area's rich culture.

### **D. Conclusion**

This research provides in-depth insight into the application of technology in tourist villages and the importance of interaction between human interaction and technology. Infrastructure readiness, technology adaptation, and community involvement are essential factors that can influence the success of technology implementation. With the right approach, tourist villages can improve the visitor experience and encourage sustainable local economic growth. Hopefully, this research can become a reference for researchers and practitioners in developing more innovative and responsive rural tourism.

This research contributes to academic understanding of the application of tourism technology in rural areas and has significant practical effectiveness. From a theoretical perspective, this research enriches the literature on the interaction between technology and tourist experiences, especially in the context of tourist villages. This research shows that understanding these dynamics can help researchers and developers understand how technologies can be integrated to benefit all stakeholders. The results of this research can help

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policymakers and tourism village managers identify and overcome existing challenges. By understanding the prevailing atmosphere, they can design more effective strategies for implementing technology, ensuring that the solutions meet local needs and increase tourist attraction.

Although this study provides many insights, several limitations need to be noted. First, this research focuses on a specific tourist village, so the results may only be generalizable to some rural tourism contexts. Second, the methodology used, especially in data collection, may only cover some existing perspectives, considering that community participation can vary. Therefore, further research with a broader scope and diverse approaches is needed to expand understanding of the application of technology in tourist villages.

### REFERENCES

- Ahmad, A. bin, Othman, Z. bin, Abdullah Arshah, Dr. R., & Kamaludin, Dr. A. (2021). The suitability of technology, Organization and Environment (TOE) and Socio Technical System (STS) for assessing it hardware support services (ITHS) model. *Journal of Physics: Conference Series*, 1874(1), 012040. <https://doi.org/10.1088/1742-6596/1874/1/012040>
- APJII. (2024, February 7). Asosiasi penyelenggara Jasa internet Indonesia. Jumlah Pengguna Internet Indonesia Tembus 221 Juta Orang <https://apjii.or.id/berita/d/apjii-jumlah-pengguna-internet-indonesia-tembus-221-juta-orang>.
- Boto-García, D., & Baños-Pino, J. F. (2022). Social influence and bandwagon effects in Tourism Travel. *Annals of Tourism Research*, 93, 103366. <https://doi.org/10.1016/j.annals.2022.103366>
- Buhalis, D. (2019). Technology in tourism-from information communication technologies to Etourism and smart tourism towards Ambient Intelligence Tourism: A perspective article. *Tourism Review*, 75(1), 267–272. <https://doi.org/10.1108/tr-06-2019-0258>
- Hanandini, D. (2024). Social Transformation in Modern Society: A Literature Review on the Role of Technology in Social Interaction. *JIEE: Jurnal Ilmiah Ekotrans & Erudisi*, 4(1), 82-95. <https://doi.org/10.69989/j0m6cg84>

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- Ilieva, L., Petrova, M., & Todorova, L. (2023). Application of technological innovations in the tourism industry. *E3S Web of Conferences* 408, 1003, 1-13. <https://doi.org/10.1051/e3sconf/202340801003>
- Kumar, S., & Asthana, S. (2020). Technology and innovation: Changing concept of rural tourism – A systematic review. *Open Geosciences*, 12(1), 737-752. DOI:10.1515/geo-2020-0183
- Laksmi, G., Dewi, T., Tarigan, E., Oktadiana, H., & Ingkadijaya, R. (2024). Studi Bibliometrik Eksplorasi Tren Glamping 2019-2024. *Jurnal Ilmiah Pariwisata*, 29(2), 169-185. doi:10.30647/jip.v29i2.1787
- Li, X. (2022). Suitability evaluation method of urban and rural spatial planning based on Artificial Intelligence. *Journal of Intelligent Systems*, 31(1), 245–259. <https://doi.org/10.1515/jisys-2022-0010>
- Naikoo, A. A., Research, N., Shashank, G., & Thakur, S. (2020). Development of society under the modern technology Introduction. *Journal of Critical Reviews*, 07(01), 4738. DOI:10.31838/jcr.07.11.635
- Neuhofer, B., Buhalis, D., & Ladkin, A. (2013). High tech for high touch experiences: A case study from the hospitality industry. *Conference Information and Communication Technologies in Tourism*. DOI:10.1007/978-3-642-36309-2\_25.
- Papastathopoulos, A., Ahmad, S. Z., Al Sabri, N., & Kaminakis, K. (2019). Demographic analysis of residents' support for tourism development in the UAE: A Bayesian structural equation modeling multigroup approach. *Journal of Travel Research*, 59(6), 1119–1139. <https://doi.org/10.1177/0047287519874131>
- Pinia, N. A. P., Gintu, A. R., Wabiser, Y. D., & Singgalen, Y. A. (2024). Prototype Design for Education and Heritage Tourism through Rapid Application Development. *Journal of Computer System and Informatic*, 5(4), 1001-1013. DOI: <https://doi.org/10.47065/josyc.v5i4.5776>
- Puja, I. B. P., Aryasih, P. A., & Widyanthi, D. G. C. (2021). Balancing the high tech and high touch in education: the implementation of humanistic approach on edu-recreation concept in Politeknik Pariwisata Bali. *Journal of Business on Hospitality and Tourism*, 7(3), 244. DOI:10.22334/jbhost.v7i3.327
- Singh, A., & Supina, S. (2023). Community's attitude towards the development of cultural and heritage tourism: An exploratory study. In *Exploring Culture and Heritage Through Experience Tourism* (pp. 76-83). IGI Global.

Conceptual Analysis of the High-Touch, High-Tech Trend: The Suitability of  
Technology for Tourism Transformation in Rural Destinations

- Sun, B., Jiang, Y., Liu, Y., Wu, X., & Liu, Q. (2023). Rural Environmental Landscape Construction based on virtual reality technology. *Sustainability*, *15*(23), 16377. <https://doi.org/10.3390/su152316377>
- Supina, S., Banse, J.M.I. (2023). Review and trend analysis of slow tourism as an emerging trend in the Indonesian tourism industry: A study of why there is lack of extensive discussion on this topic. *Journal of Indonesian Tourism, Hospitality and Recreation*, *6*(2), 187-196
- Suwandy, S., & Facrureza, D. (2023). Analisis Implementasi Menu Engineering dalam Upaya Meningkatkan Volume Penjualan Pada Sally Bakery. *Jurnal Ilmiah Parwisata*, *28*(3), 330-344. doi:10.30647/jip.v28i3.1753
- Tegegn, D. A. (2024). The role of science and technology in reconstructing human social history: effect of technology change on society. *Cogent Social Sciences*, *10*(1). <https://doi.org/10.1080/23311886.2024.2356916>
- Wünderlich, N., Wangenheim, F., & Bitner, M. J. (2013). High Tech and High Touch. *Journal of Service Research*, *16*(1), 3-20. DOI:10.1177/1094670512448413
- Viana, J. N., Pilbeam, C., Howard, M., Scholz, B., Ge, Z., Fisser, C., Mitchell, I., Raman, S., & Leach, J. (2023). Maintaining high-touch in high-tech digital health monitoring and multi-omics prognostication: Ethical, equity, and societal considerations in precision health for palliative care. *OMICS: A Journal of Integrative Biology*, *27*(10). <https://doi.org/10.1089/omi.2023.0120>