ARPHA Proceedings

Proceedings CAUSummit 2026, 0418-0427
doi: 10.3897/ap.12.e0418

11th Anniversary
World Summit: Civil Engineering-Architecture-Urban Planning Congress

GeoICT as a Catalyst for Sustainable Tourism Development and Heritage Interpretation in Post-Industrial Coastal Landscapes

Georgia Cheirchanteri [1, a)], Gregory Tsikos [1]

[1] *University of West Attica, 250thivon & P. Ralli,12241, Egaleo, Attica, Greece*

[a)] Corresponding author: georgiaxeir@uniwa.gr

Abstract. Post-industrial coastal landscapes often embody complex layers of historical memory, industrial transformation, and social change, presenting both challenges and opportunities for heritage-led development. In recent years, Geographic Information and Communication Technologies (GeoICT) have emerged as powerful tools for documenting, interpreting, and communicating cultural heritage through participatory and immersive digital environments. This paper explores the potential of GeoICT to function as a catalyst for sustainable tourism development and heritage interpretation in post-industrial coastal settings, using the case of Drapetsona–Keratsini, Greece. Drapetsona–Keratsini represents a culturally layered territory where traces of antiquity, refugee settlement, and industrial activity coexist within a dynamic urban landscape. Despite its historical significance and strategic geographical position between the port of Piraeus and the island of Salamis, the area remains largely under-recognized as a tourism destination. The coexistence of archaeological remains, industrial monuments, and intangible memories associated with refugee communities creates a unique cultural palimpsest with considerable potential for alternative forms of tourism based on learning, reflection, and community engagement. Drawing upon contemporary discussions on cultural resilience, heritage interpretation, and sustainable tourism, this study proposes a conceptual framework that integrates GeoICT applications—including multimedia Geographic Information Systems, web mapping environments, Esri ArcGIS StoryMaps, three-dimensional visualization, and digital storytelling—to support the reinterpretation of post-industrial heritage landscapes. Rather than presenting a completed implementation, the paper advances a transferable methodological approach through which spatial technologies can facilitate the co-creation of narratives, reveal hidden historical connections, and enhance the accessibility of cultural resources. The proposed framework follows a conceptual–logical–physical structure linking digital infrastructures, narrative mapping processes, heritage interpretation practices, and tourism outcomes. Through interactive spatial narratives, users are encouraged to navigate multiple temporal layers of place, connecting archaeological sites, industrial remains, oral testimonies, and collective memories into coherent interpretive experiences. In this context, GeoICT transforms maps from static representations into dynamic storytelling environments that foster emotional engagement, spatial understanding, and participatory knowledge production. Particular emphasis is placed on the contribution of GeoICT to sustainable tourism development. By promoting low-impact, experience-oriented forms of visitation, digital heritage environments can diversify local tourism offerings while reducing pressures associated with mass tourism. Virtual accessibility, immersive interpretation, and community participation support inclusive tourism models that strengthen local identity and encourage stewardship of cultural resources.

Keywords: GeoICT; sustainable tourism development; heritage interpretation; narrative mapping; post-industrial landscapes; cultural resilience

© 2026 Georgia Cheirchanteri, Gregory Tsikos.
This is an open access article distributed under the terms of the Creative Commons Attribution License (CC BY 4.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.
Published by CAUSummit and peer-reviewed under the responsibility of "World Summit: Civil Engineering-Architecture-Urban Planning Congress - CAUSummit-2026".

INTRODUCTION

Drapetsona occupies a distinctive position within the wider metropolitan landscape of Piraeus, where the urban fabric meets the maritime environment of the Saronic Gulf. Its contemporary identity has been shaped by a combination of industrial activity, population movement, working-class settlement, and the gradual transformation of the former productive waterfront. [1] Rather than representing a homogeneous urban area, Drapetsona is characterised by a diverse range of places, memories, and spatial conditions that reflect different phases of its development (Figure1).

The character of the area is strongly associated with its industrial past. Former production facilities, infrastructure, warehouses, and other remnants of the industrial landscape remain embedded within the contemporary city, providing visible evidence of a period when manufacturing and port-related activities played a central role in the local economy. At the same time, the history of refugee settlement following the population movements of the early twentieth century added another important dimension to the social and cultural identity of Drapetsona. The coexistence of industrial and refugee heritage has created a multilayered cultural environment in which the history of work, displacement, adaptation, and community formation remains particularly significant. [2]

Today, the transformation of the waterfront provides an opportunity to reconsider the role of Drapetsona within the cultural geography of the Piraeus metropolitan area. The rehabilitation of former industrial areas and the increasing accessibility of the coastal zone create conditions for reconnecting the urban community with the sea while preserving elements of the area's historical character. This process can contribute to a new relationship between heritage conservation, public space, recreation, and local economic development.

Drapetsona’s proximity to Piraeus and Salamis places the area within a maritime cultural landscape of exceptional historical significance. Rather than functioning simply as a passage between established destinations, Drapetsona could become a destination in its own right by presenting its industrial, social, and maritime history through an integrated visitor experience.

In this regard, sustainable tourism offers a potential framework for linking heritage protection with the revitalisation of the local economy. The objective would not be to transform Drapetsona into a conventional mass-tourism destination, but to encourage smaller-scale and experience-oriented forms of visitation based on industrial heritage, local history, cultural narratives, coastal recreation, and walking exploration.

The development of sustainable tourism should, however, remain closely connected to the everyday needs of the local population. Improvements in pedestrian accessibility, cycling infrastructure, public open spaces, coastal amenities, and green areas can simultaneously enhance the visitor experience and the quality of life of residents. In this sense, tourism can become part of a broader process of urban regeneration rather than an isolated economic activity. The protection and adaptive reuse of industrial heritage can further reinforce this approach by giving new functions to existing structures while retaining the historical character of the landscape.

Digital technologies can play an important role in supporting this transformation. GeoICT applications, interactive maps, location-based information, and digital storytelling can provide visitors with access to historical narratives that are not always immediately visible in the physical environment. [3] Through digital platforms, individual buildings, industrial sites, refugee neighbourhoods, coastal spaces, and archaeological remains can be connected into a coherent cultural itinerary. Historical photographs, oral histories, archival material, maps, and contemporary visualisations could be incorporated into these experiences, allowing users to explore how Drapetsona has changed over time.[4]

Such an approach would also allow tourism to extend beyond the traditional concentration of visitors in the better-known historic areas of Piraeus and Athens. Drapetsona could become part of a broader network of alternative cultural destinations, encouraging visitors to explore the industrial and social history of the metropolitan region. This diversification could contribute to a more balanced distribution of tourism flows while highlighting forms of heritage that are frequently overlooked in conventional tourism narratives.

The future of Drapetsona therefore lies not simply in preserving individual remnants of its past, but in interpreting the relationships between its different historical, social, environmental, and spatial dimensions. Its industrial heritage, refugee history, coastal setting, and proximity to major maritime heritage sites provide the foundations for a distinctive place identity. When combined with digital interpretation, sustainable mobility, community involvement, and carefully managed tourism development, these assets can support a model of regeneration in which cultural heritage becomes a resource for both local resilience and sustainable visitor experiences. [5]

(a) The archaeological site of the Hētioneia Gate in Drapetsona, with the port of Piraeus visible to the right and, in the background, the urban district hosting the resettlement area of refugee communities

(b) The rehabilitated coastal zone of Drapetsona, featuring the preserved industrial monuments of the former Glassworks ("Gyaladiko") within the broader Fertilizer Factory complex.

FIGURE 1. The archaeological site of the Hētioneia Gate in Drapetsona and the rehabilitated coastal zone.

THEORITICAL FRAMEWORK

The transformation of former industrial and working-class areas into culturally meaningful urban destinations raises important questions concerning the relationship between heritage, tourism, local identity, and sustainable development. In contemporary urban planning, heritage is increasingly considered not only as a legacy to be protected but also as a resource through which communities can redefine their relationship with place and develop new social and economic opportunities. Tourism can contribute to this process when it is based on the interpretation of local heritage, the involvement of residents, and the careful management of cultural and environmental resources. Within this perspective, the present study approaches Drapetsona–Keratsini as a cultural landscape in which heritage interpretation, sustainable tourism, community participation, and digital spatial technologies can operate together.

Heritage, Place Identity and Adaptive Transformation

The value of urban heritage extends beyond the physical preservation of historic structures. Buildings, industrial facilities, neighbourhoods, landscapes, and public spaces acquire meaning through the memories, experiences, and narratives associated with them. Heritage can therefore be understood as a process through which societies select, interpret, and transmit elements of the past in response to contemporary needs. This perspective is particularly relevant in areas where industrialisation, migration, and social change have profoundly influenced the character of the urban landscape. Resilience in this context is associated with the capacity of places and communities to respond to transformation while maintaining meaningful connections with their cultural identity. Davoudi's interpretation of resilience moves beyond the idea of returning to a previous state and instead emphasises the capacity to learn, adapt, and generate new possibilities in changing circumstances. [3] Applied to cultural landscapes, this approach allows heritage to function as a basis for adaptation rather than as an obstacle to urban change. Jigyasu similarly emphasises the importance of maintaining cultural knowledge, identity, and continuity while strengthening the capacity of communities to respond to changing conditions. [6] This understanding is particularly relevant to post-industrial coastal areas, where former productive landscapes are increasingly exposed to redevelopment, changing economic functions, and new forms of public use.

For tourism development, [7] a destination's attractiveness is not determined exclusively by the presence of monumental heritage; it can also emerge from distinctive local stories, industrial landscapes, everyday architecture, social history, and relationships with the surrounding environment. In this sense, the cultural identity of Drapetsona–Keratsini can provide the basis for an alternative tourism experience centred on the interpretation of place rather than

on conventional sightseeing [8]. Industrial heritage, refugee histories, maritime connections, and the transformation of the coastal landscape can collectively create a distinctive narrative capable of attracting visitors interested in cultural and experiential forms of tourism. Similarly, the UNWTO emphasizes education, awareness, and participation as prerequisites for responsible tourism that contributes to the Sustainable Development Goals. [9]

Digital Geospatial Technologies and Tourism Interpretation

Digital geospatial technologies provide opportunities to connect individual heritage resources within broader spatial and temporal narratives. [10] GeoICT can integrate geographic information, historical documentation, visual material, archival sources, and contemporary data, enabling users to explore relationships between places that may not be immediately apparent from the physical landscape.

Narrative mapping is particularly valuable in this context because it transforms spatial information into an interpretive experience. A visitor exploring Drapetsona–Keratsini could, for example, follow a route linking industrial remains, former workers' areas, refugee settlements, coastal spaces, and sites associated with the maritime history of Piraeus and Salamis. The resulting experience would reveal the area as a connected cultural landscape rather than a collection of unrelated attractions.

From a sustainability perspective, digital interpretation can also help manage visitor movement by distributing attention across a wider range of sites rather than concentrating tourism in a limited number of established attractions. Consequently, GeoICT can function not only as a communication technology but also as an instrument of sustainable destination management and spatial planning.

Drapetsona–Keratsini thus offers an appropriate context for examining how a post-industrial cultural landscape can develop a contemporary tourism identity without abandoning its historical character. The integration of heritage interpretation, community participation, sustainable tourism practices, and digital spatial technologies can support a form of destination development that values local identity while creating opportunities for education, recreation, cultural exchange, and local economic activity.

GeoICT, Narrative Mapping and Digital Tourism Experiences

The increasing availability of spatial data and digital communication platforms has created new possibilities for presenting cultural heritage beyond the conventional boundaries of museums, monuments, and physical information panels. Geographic Information and Communication Technologies (GeoICT) can combine cartographic information with photographs, archival material, audiovisual content, historical documents, and location-based narratives, creating multidimensional environments through which cultural places can be explored and interpreted.

In the context of tourism, the significance of GeoICT lies not simply in providing digital access to information, but in its capacity to organise dispersed cultural resources into meaningful spatial experiences. Conventional tourist representations tend to prioritise clearly identifiable attractions, whereas digital spatial platforms can reveal connections between less visible elements of a landscape. Industrial buildings, former workers' settlements, refugee neighbourhoods, archaeological remains, waterfront spaces, and contemporary cultural facilities can consequently be presented as components of a broader territorial story.

Caquard and Cartwright demonstrate how cartographic representation and storytelling can operate reciprocally, with maps providing the spatial structure for narratives and narratives giving maps cultural and experiential meaning. [2] Likewise, Hawkins and Straughan highlight the role of digital storytelling in shaping emotional geographies and cultural understanding.[11] This approach is particularly relevant to heritage destinations in which significance is distributed across several locations and historical periods. Chronis's work on tourism and heritage interpretation similarly highlights the importance of narrative in the production of visitor experiences and meanings of place. [12] From this perspective, the visitor is not merely a recipient of information but an active participant in constructing an interpretation of the destination.

For Drapetsona–Keratsini, such an approach could support the creation of a connected digital cultural tourism network. Instead of promoting individual attractions independently, GeoICT could establish thematic relationships among industrial heritage, refugee memory, maritime history, archaeological remains, coastal landscapes, and contemporary urban spaces. The same digital infrastructure could also contribute to sustainable tourism management. In this way, digital interpretation becomes connected with spatial planning and destination management rather than functioning solely as a communication device. GeoICT can therefore be understood as an interface between heritage resources and contemporary tourism experiences.

Spatiotemporal Identity and The Experience of Place

The identity of a cultural landscape is continuously produced through the interaction between physical space, historical events, human activity, and collective perceptions. Places are consequently experienced not only through their visible structures but also through the meanings attached to them over time. In areas characterised by successive waves of settlement and economic transformation, the contemporary landscape can be understood as the outcome of multiple historical processes that remain partially visible in the present.

Drapetsona provides a particularly relevant example of this condition. Its relationship with the maritime environment, its proximity to the historic port of Piraeus and Salamis, its industrial development, and the establishment of refugee communities have contributed to the formation of a complex local identity. Different periods have left different physical and cultural traces, but these traces do not exist independently. Their coexistence creates a landscape in which earlier uses and experiences continue to influence the perception of the contemporary city. [13]

This creates the possibility of developing a form of temporal tourism experience in which movement through space is simultaneously a movement through history. A walking route, for instance, can become a chronological journey connecting different stages of the area's development. Digital maps can reinforce this experience by allowing visitors to compare historical and contemporary landscapes, view archival photographs at their original locations, or reconstruct disappeared structures through digital representations.

In this framework, the spatiotemporal character of Drapetsona–Keratsini becomes a potential tourism asset. The integration of temporal information into spatial interpretation consequently provides a bridge between heritage, tourism, and place-making. It can strengthen local identity while offering visitors a deeper understanding of the area and encouraging forms of tourism based on exploration, learning, and cultural engagement. [14]

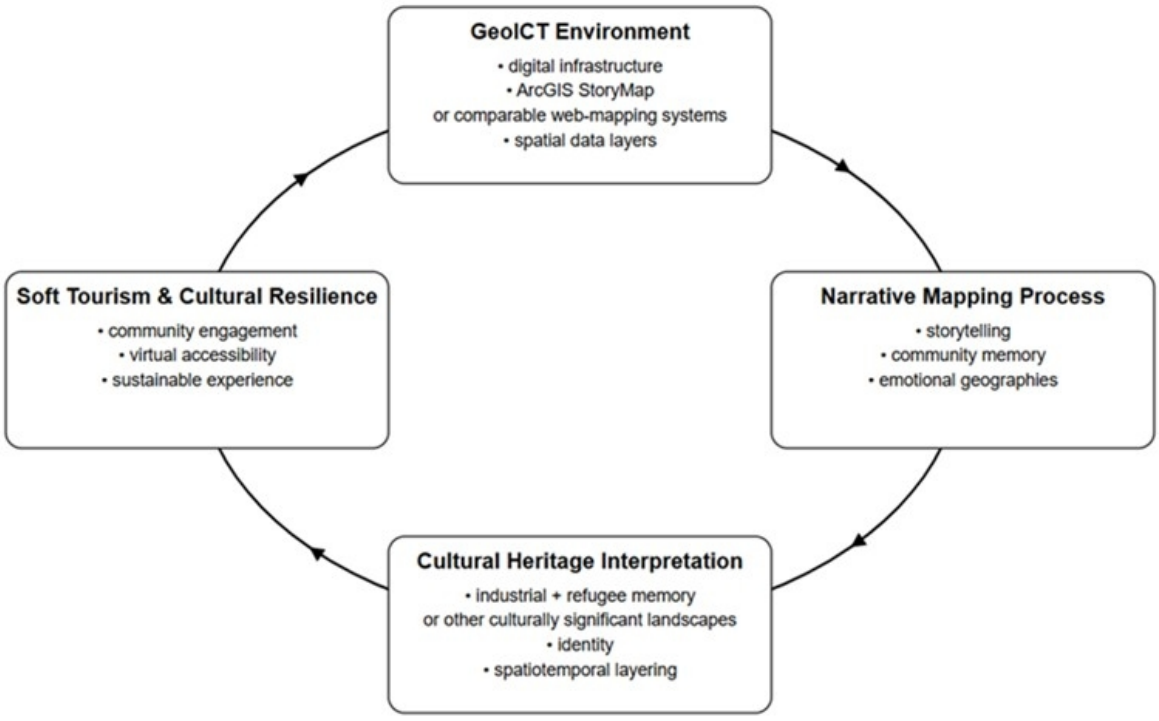

FIGURE 2. Conceptual–logical–physical framework of the GeoICT-based narrative mapping approach. The diagram outlines the cyclical relationship between digital infrastructures, narrative processes, heritage interpretation, and soft tourism strategies, designed to support transferable applications in diverse cultural contexts.

METHODOLOGY — GEOICT-BASED NARRATIVE MAPPING FOR CULTURAL HERITAGE INTERPRETATION

The methodological approach developed in this study is designed to examine how digital spatial technologies can support the interpretation, organisation, and communication of cultural resources within a transforming urban landscape. The proposed methodology does not seek to reproduce the entire complexity of Drapetsona–Keratsini through a single digital platform. Instead, it establishes a structured process for identifying heritage resources, connecting them spatially and thematically, and transforming them into coherent cultural and tourism experiences.

The methodology is organised as a sequence of interconnected stages, moving from the identification of cultural resources to their spatial organisation, narrative construction, digital representation, and evaluation of their potential contribution to sustainable tourism and local development (Figure 2). This process combines geographical information, historical documentation, visual material, and interpretive content in order to create a digital representation of the area that can be explored by both local communities and visitors.

The proposed workflow consists of four principal stages: **(1) GeoICT Environment, (2) Narrative Mapping Process, (3) Cultural Hritage Interpretation, and (4) Toward Soft Tourism and Cultural Resilience**. The stages are not strictly linear; information generated during one stage may lead to the revision or enrichment of another. The methodology therefore operates as an iterative process in which spatial analysis and cultural interpretation continuously inform one another.

GeoICT Environment

The first methodological stage involves the systematic identification of the cultural and spatial resources that constitute the basis of the digital heritage environment. These resources are not limited to officially designated monuments. The inventory may include archaeological remains, industrial structures, former production facilities, workers' housing, refugee settlements, historic routes, waterfront spaces, public areas, and locations associated with significant events or community memories (Figure3).

FIGURE 3. Indicative interactive narrative map of Drapetsona–Keratsini illustrating the integration of spatial layers and storytelling components to support place-based interpretation and cultural resilience. The proposed tour route connects archaeological industrial and refugee heritage sites through geo-referenced multimedia content, aerial visualizations, and 3D models, highlighting the spatiotemporal dynamics of the area. This approach reflects the potential of GeoICT environments to enhance community participation and soft tourism strategies.

At the conceptual stage, the proposed framework is based on the development of an integrated geo-information environment where geographic data, digital media, and community-generated narratives are brought together. A

GeoICT platform can provide the technological infrastructure required to manage and connect these different forms of information. Web-based mapping applications, such as Esri ArcGIS StoryMaps or similar platforms, enable the combination of multiple datasets within a unified spatial interface, including information related to urban structure, archaeological and industrial heritage, refugee settlements, and oral or community-based accounts. The purpose is not to reproduce an existing digital application, but rather to establish a flexible technological framework through which spatial information can be connected with cultural narratives and interpreted within their geographical context.

Narrative Mapping Process

The second stage focuses on the construction of narratives that give spatial information social, cultural, and experiential meaning. Informed by the concepts of narrative cartography[17] and digital storytelling[18], this approach views maps not merely as tools for displaying geographic information, but as interactive environments through which users can explore and interpret stories associated with particular places. Different forms of digital content, including written narratives, photographs, audio material, and other multimedia resources, can be combined to create immersive pathways across heritage landscapes. These pathways can reveal the connections between migration, industrial activity, everyday life, and processes of urban change within a shared spatial setting. Mapping thus becomes more than a technical method of representation; it can function as an inclusive and participatory process through which local communities contribute their experiences, memories, and interpretations to the understanding of heritage.

This approach is particularly relevant to sustainable tourism because it avoids concentrating the visitor experience around a small number of conventional attractions. By connecting multiple sites through thematic routes, the digital system can encourage visitors to explore a broader area and discover less-known elements of local heritage.

Cultural Heritage Interpretation

The third component of the methodology focuses on the digital interpretation and visualization of cultural heritage. In this stage, technologies such as three-dimensional modelling and virtual reconstruction are employed to make historical environments and their material remains more accessible and comprehensible to users. By digitally reconstructing elements that have been altered, partially preserved, or no longer exist, it becomes possible to communicate aspects of the past that cannot be fully understood through the contemporary landscape alone.

FIGURE 4. 3D model of the Hētioneia Gate archaeological site.

The application of these techniques to Drapetsona allows heritage elements belonging to different historical periods to be presented within a common digital environment. Archaeological remains such as the Hētioneia Gate can be considered alongside the industrial heritage of the Drapetsona complex and the spatial traces associated with refugee settlement (Figure 4). Their digital representation makes it possible to establish visual and spatial connections between otherwise distinct historical phases and to demonstrate how successive transformations have contributed to the character of the area.

Beyond the accurate representation of physical structures, digital visualization can contribute to the reconstruction of the atmosphere and identity of a place (Figure 5). Combining three-dimensional models with historical photographs, archival sources, sound, and narrative content can create a richer understanding of how these spaces were used and experienced by different communities. The resulting digital environment therefore functions not simply as a virtual reproduction of heritage assets, but as an interpretive space where material evidence, historical memory, and contemporary perceptions of place can be brought together.

FIGURE 5. 3D model of the Drapetsona Glassworks within the former Fertilizer Factory complex.

Toward Soft Tourism and Cultural Resilience

At the spatial and community levels, the proposed framework can contribute to the development of softer forms of tourism that are compatible with the preservation of cultural heritage and the strengthening of local resilience. Through GeoICT-supported narrative platforms, heritage resources can be accessed, explored, and interpreted digitally, reducing the need for intensive physical visitation while offering visitors meaningful forms of engagement with the history and identity of the area. Digital experiences of this kind can complement on-site tourism and encourage more responsible patterns of visitation, particularly those based on cultural exploration, walking, learning, and place-based experiences rather than mass consumption.

From a sustainability perspective, this model promotes tourism practices that place greater emphasis on environmental sensitivity, social inclusiveness, and respect for local cultural values. At the same time, the active involvement of communities in the production and communication of narratives can reinforce collective memory and strengthen residents' connection with their cultural landscape. In this sense, tourism becomes not only a mechanism for attracting visitors but also a means of supporting local identity and cultural continuity.

The framework is therefore conceived as an iterative process rather than a fixed technological system. As illustrated in Figure 3, newly identified heritage resources, historical information, community contributions, and visitor-generated content can be progressively incorporated into the GeoICT environment. This continuous exchange

allows the digital platform and its narratives to evolve over time, creating a dynamic cultural ecosystem in which heritage, technology, tourism, and collective memory interact and mutually reinforce one another.

RESULTS

This study developed and examined a GeoICT-enabled narrative mapping approach for the interpretation of the cultural landscape of Drapetsona–Keratsini. The proposed model brings together geospatial technologies, historical narratives, digital visualization, heritage interpretation, and community-oriented practices within an integrated framework. Its principal contribution lies in demonstrating that digital spatial environments can function not merely as repositories of heritage information, but as platforms through which cultural meanings, memories, and relationships with place can be communicated and continuously reconstructed.

The Drapetsona–Keratsini area provides a particularly appropriate setting for such an approach because its identity has been shaped by successive and interconnected historical processes. Archaeological remains associated with Classical Piraeus, the industrial heritage of the twentieth century—including the Glassworks and Fertilizer Factory—and the spatial and cultural legacy of the Asia Minor refugee settlements constitute distinct yet interconnected layers of the same landscape. Their coexistence illustrates the character of urban heritage as a palimpsest, in which different historical periods, communities, activities, and memories contribute simultaneously to contemporary perceptions of place. A GeoICT-based narrative environment offers the possibility of bringing these heterogeneous heritage dimensions into a common interpretive framework.

An important characteristic of the proposed model is its capacity for continuous development. Instead of producing a definitive digital map that represents heritage at a single point in time, the framework establishes an expandable environment in which spatial information, historical documentation, oral accounts, visual material, and community-generated content can be progressively incorporated. This time-sensitive and iterative character allows the system to respond to changing interpretations of heritage and to accommodate new knowledge as it emerges. The resulting digital infrastructure can therefore be understood as an evolving repository of collective memory rather than a conventional cartographic product.

The findings also indicate the potential of this approach to contribute to more balanced forms of cultural tourism. By combining digital interpretation with opportunities for physical exploration, the framework can encourage forms of visitation based on learning, discovery, walking, thematic routes, and deeper engagement with local history. Such an approach is consistent with the principles of soft tourism, in which the quality and meaning of the visitor experience are prioritized over visitor volume and intensive use of space. Virtual and augmented environments can further extend access to heritage resources, allowing users to explore historical landscapes and reconstructed environments without placing additional pressure on fragile sites or sensitive urban areas. In this respect, GeoICT can support tourism development while maintaining greater consideration for environmental conditions, local communities, and the

The proposed methodology is not limited to the specific characteristics of Drapetsona–Keratsini. Its conceptual, logical, and physical organization allows it to be transferred and adapted to other urban environments where archaeological, industrial, social, and intangible heritage coexist. This makes the framework particularly relevant to post-industrial cities, historically layered urban districts, and areas undergoing heritage-led regeneration. Depending on local conditions, the same methodological principles can be applied to construct thematic narratives, develop cultural routes, integrate community knowledge, and create digital environments that connect heritage interpretation with sustainable visitor experiences.

CONCLUSION

More broadly, the study demonstrates the value of combining spatial technologies with narrative and participatory approaches to heritage management. GeoICT can provide the technological infrastructure required to connect geographically dispersed resources, while storytelling and digital visualization give these resources historical context and experiential meaning. Their integration creates opportunities not only for documenting and preserving heritage but also for reinterpreting it in ways that are accessible to residents, visitors, educators, and cultural practitioners.

Ultimately, the proposed framework positions GeoICT as a tool for connecting heritage, memory, community, and sustainable tourism within a common digital environment. Its ability to incorporate new information, accommodate different forms of storytelling, and support immersive forms of interpretation provides a basis for developing resilient cultural infrastructures. By facilitating the co-production of heritage narratives and encouraging low-impact, place-

sensitive tourism experiences, the framework offers a transferable pathway through which digital technologies can contribute simultaneously to cultural resilience, inclusive heritage interpretation, and sustainable urban development.

ACKNOWLEDGMENTS

The author wishes to express sincere gratitude to the University of West Attica, Athens, for its financial support, which made this research possible. Appreciation is also extended to colleagues whose insights and expertise contributed significantly to the development of this work.

REFERENCES

1. G. Böhme, *Atmospheric Architectures: The Aesthetics of Felt Spaces.* (Bloomsbury Academic, London, 2013).
2. S. Caquard and W. Cartwright, "Narrative cartography: From mapping stories to the narrative of maps and mapping," *The Cartographic Journal* 51, 101–106 (2014).
3. S. Davoudi, "Resilience: A bridging concept or a dead end?," in *Reframing Resilience: Challenges for Planning Theory and Practice,* edited by S. Davoudi and L. Porter (Routledge, London, 2012).
4. T. Edensor, *Industrial Ruins: Spaces, Aesthetics, and Materiality* (Berg, Oxford, 2005).
5. S. Espiner et al., "Resilience and sustainability: A complementary relationship? Towards a practical conceptual model for the sustainability–resilience nexus in tourism," Journal of Sustainable Tourism 25, 1385–1400 (2017).
6. R. Jigyasu, "Heritage and resilience: Issues and opportunities for reducing disaster risks," paper presented at the ICCROM Forum on Cultural Heritage and Disaster Resilience, Rome, ICCROM (2013).
7. R. W. Butler, "Sustainable tourism: A state-of-the-art review," *Tourism Geographies* **1**, 7–25 (1999).
8. G.Cheirchanteri, "Industrial Cultural Heritage as an Alternative Tourism Model: Case study of the Wider Lavreotiki area in Southeastern Attica", IOP Conf. Ser.: Mater. Sci. Eng. 603 022001, (2019).
9. World Tourism Organization (UNWTO) and United Nations Development Programme (UNDP), *Tourism and* the Sustainable Development Goals – Journey to 2030 (World Tourism Organization (UNWTO), Madrid, 2017).
10. M. F. Goodchild, "GIS and the future of geographic information science," *Annals of the American Association of Geographers* 110, 1309–1320 (2020).
11. H. Hawkins and E. Straughan, "Geographical imaginations and storytelling in digital heritage," *Cultural Geographies* 27, 233–249 (2020).
12. A. Chronis, "Tourists as story-builders: Narrative construction at a heritage museum," *Journal of Travel & Tourism Marketing 29*, 444–459 (2012).
13. N. Kourou, "The fortifications of the Piraeus and the Hētioneia Gate," in *Proceedings of the International Conference on Ancient Greek Harbours* (Hellenic Ministry of Culture, Athens, 2002).
14. G.Cheirchanteri,G. Tsikos, "The Industrial Cultural Heritage of Elefsina Area As a Tourist Destination in Western Attica Development", ARPHA Proceedings, (2025), pp. 273-282.