

اسم المقال: الحفاظ على التراث الثقافي غير المادي: مراجعة أساليب وأدوات التوثيق

اسم الكاتب: آلاء عبابنة

رابط ثابت: <https://political-encyclopedia.org/index.php/library/9451>

تاريخ الاسترداد: 2026/05/12 17:00 +03

الموسوعة السياسية هي مبادرة أكاديمية غير هادفة للربح، تساعد الباحثين والطلاب على الوصول واستخدام وبناء مجموعات أوسع من المحتوى العلمي العربي في مجال علم السياسة واستخدامها في الأرشيف الرقمي الموثوق به لإغناء المحتوى العربي على الإنترنت. لمزيد من المعلومات حول الموسوعة السياسية - Encyclopedia Political، يرجى التواصل على info@political-encyclopedia.org

استخدامكم لأرشيف مكتبة الموسوعة السياسية - Encyclopedia Political يعني موافقتك على شروط وأحكام الاستخدام المتاحة على الموقع <https://political-encyclopedia.org/terms-of-use>



جامعة الشارقة
UNIVERSITY OF SHARJAH

University of Sharjah Journal of Humanities & Social Sciences

A Refereed Scientific journal



Vol. 22, No. 2
Dhul Hijjah 1446 A.H. / June 2025 A.D.

ISSN : 1996-2339

Preserving Intangible Cultural Heritage: Review Approaches and Tools for Documentation

Alaa Ababneh⁽¹⁾

Received on: 2023-12-04

Accepted on: 2024-10-13

Abstract:

Preserving and safeguarding intangible cultural heritage (ICH) is paramount for maintaining cultural diversity, promoting intercultural dialogue, and fostering a sense of identity within communities. This paper explores various approaches and tools for documenting intangible cultural heritage, with a particular focus on leveraging digital technologies such as multimedia platforms, virtual reality, augmented reality, and modern software tools. It examines the significance of ICH, its unique characteristics, and the challenges associated with its preservation. The paper also discusses traditional documentation methods and delves into the innovative approaches that have emerged in recent years. It explores the role of digital technologies in capturing, preserving, and sharing intangible cultural heritage, and highlights the importance of ethical considerations, community engagement, and collaborative efforts in the digital preservation of ICH. By integrating traditional and modern approaches, this paper aims to provide insights into practical strategies for documenting and safeguarding intangible cultural heritage in the digital age.

Keywords: Intangible Cultural Heritage; Ethnographic Research; Participatory Approaches; Audiovisual Recording; Digital Technologies; Community Engagement; Preservation.

(1) Department of Classical Archaeology - Autònoma de Barcelona University (Bellaterra – Spain)
alaaababna5@gmail.com

1. Introduction

Preserving intangible cultural heritage (ICH) has become critical in today's rapidly changing world. ICH, as defined by UNESCO, encompasses various living expressions, including oral traditions, performing arts, social practices, rituals, events, knowledge systems, and traditional craftsmanship (Chen, 2022). It represents the intangible aspects of cultural identity that are important in shaping communities' social fabric and collective memory (Halder & Sarda, 2021).

The significance of ICH lies in its ability to foster cultural diversity, promote intercultural dialogue, and strengthen social cohesion (Kim et al., 2019). It is a repository of traditional knowledge, values, and skills, offering insights into different cultures' history, beliefs, and practices. Preserving ICH is not merely safeguarding cultural artifacts but ensuring the transmission of living traditions that connect past, present, and future generations. However, preserving intangible cultural heritage has challenges (Chatzigrigoriou et al., 2021). Globalization, urbanization, environmental changes, and socio-economic transformations threaten the survival and continuity of traditional practices. Moreover, the inherent nature of intangible heritage, which is often dynamic, context-specific, and deeply rooted in local communities, adds complexity to its documentation and preservation (Qiu et al., 2022).

The Convention to Protect Intangible Cultural Heritage of UNESCO (2003) established the first international convention to conserve intangible cultural heritage (ICH), proving that ICH is a critical component of long-term cultural development. According to Article 14 of the Convention, ICH is improved by specific education and training programs (UNESCO,

2003). Given the importance of ICH protection, UNESCO works to protect ICH in both formal and informal education. Challenges in preserving ICH include the risk of knowledge loss due to the aging of practitioners, the need for more awareness and recognition of intangible heritage, the scarcity of resources and infrastructure for documentation, and the ethical considerations surrounding the representation and ownership of cultural expressions. Additionally, the rapid pace of technological advancements presents opportunities and challenges in capturing, archiving, and disseminating ICH in a digital era (Meng et al., 2022).

Innovative approaches and tools have emerged to solve these issues and assure the long-term viability of intangible cultural heritage. This paper explores these approaches and tools, focusing on leveraging digital technologies to document and preserve ICH. By examining traditional documentation methods and exploring modern software tools, the paper sheds light on effective strategies for safeguarding intangible cultural heritage in the face of contemporary challenges. A comprehensive and inclusive approach combining traditional and modern methods can empower communities, raise awareness, and foster a sense of pride and ownership in preserving intangible cultural heritage. By bridging the gap between the past and the present, we ensure the transmission of invaluable cultural knowledge and practices to future generations, enriching our collective human heritage.

2. Methodology

The objective of this review is to explore and evaluate various approaches and tools used for the documentation of intangible cultural heritage (ICH). The review aims to identify effective methodologies,

highlight best practices, and address gaps in current documentation efforts.

- Eligibility Criteria

- Inclusion Criteria:

Peer-reviewed articles, grey literature, and case studies focusing on documentation methodologies for ICH. Studies published in English from 2000 to the present. Research that includes participatory approaches, multimedia documentation, or digital archiving.

- Exclusion Criteria:

Articles not specifically addressing documentation methodologies. Studies focused solely on tangible cultural heritage without reference to ICH.

- Information Sources

The following databases were searched: JSTOR, Scopus, Web of Science, Google Scholar, and Relevant grey literature sources (e.g., reports from UNESCO, and cultural heritage organizations).

- Search Strategy

The search strategy includes a combination of keywords and phrases such as “intangible cultural heritage,” “documentation methodologies,” “participatory documentation,” “digital archiving,” and “cultural preservation.” Boolean operators utilized (e.g., “intangible cultural heritage AND documentation” OR “digital archiving”). Filters will be applied to limit results to the specified time frame and language.

- Study Selection Process

The selection process involves a systematic review of titles and abstracts to identify relevant studies. Duplicate entries are removed using reference management software (e.g., EndNote or Zotero). Full-text articles are reviewed to confirm eligibility based on the established criteria. A team of reviewers independently assesses the studies, with discrepancies resolved through discussion.

- Data Extraction

Data extracted using standardized form includes information such as: Documentation methodologies employed and tools used. One reviewer will conduct the extraction, with the second reviewer verifying the accuracy of the data.

- Data Analysis and Synthesis

The extracted data was analyzed qualitatively to identify themes and trends in documentation approaches and tools. A narrative synthesis was employed to summarize findings and highlight best practices, challenges, and gaps in the current literature.

- Limitations

Potential limitations include publication bias, as only English-language studies are included, and the possibility of missing relevant grey literature.

3. Traditional Documentation Methods

Preserving intangible cultural heritage (ICH) has traditionally relied on various documentation methods that have served as the bedrock for capturing and transmitting cultural knowledge and practices (High et al.,

2012). These time-honored methods encompass a range of techniques, such as oral history and storytelling (Liu et al., 2022), written documentation and archival practices (Khan, 2018), ethnographic fieldwork (Halder & Sarda, 2021), and anthropological approaches (Brujić & Milenković, 2014) (Fig 1). These strategies have been beneficial in documenting ICH, allowing for the preservation of invaluable cultural traditions, rituals, and narratives. This part explores the significance of these traditional documentation methods, recognizing their historical importance and continued relevance in the contemporary context of ICH preservation.

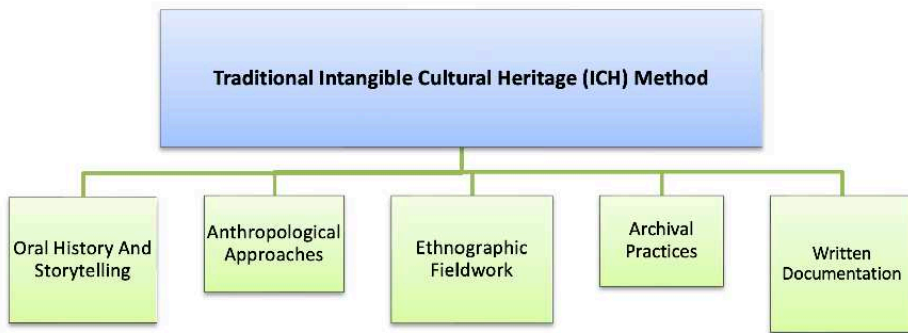


Figure 1: Traditional Intangible Cultural Heritage (ICH) Method

Oral history and storytelling have been fundamental in preserving ICH, particularly in cultures where traditions are predominantly passed down through spoken narratives (Liu et al., 2022). Through interviews with knowledgeable community members, oral histories capture personal experiences, memories, and the cultural significance associated with specific practices (Galla, 2018; Chen, 2022). These narratives provide valuable insights into intangible heritage’s historical, social, and cultural contexts. Storytelling, as a performativity art form, not only conveys

cultural values and beliefs but also engages audiences in a captivating and immersive manner, ensuring the transmission of intangible heritage across generations (Mathioudakis et al., 2022; Skublewska-Paszkowska et al., 2022). Written documentation and archival practices play a crucial role in preserving ICH by capturing and organizing information in written form (Galla, 2018). This includes recording rituals, songs, dances, recipes, medicinal preparations, and other cultural expressions (Khan, 2018; Mukurtu Archive). Written documentation ensures that important details are recorded, allowing for a more comprehensive understanding of intangible heritage. Archival practices involve establishing repositories, such as libraries, museums, and cultural institutions, where written records and other artifacts related to ICH are collected, cataloged, and preserved (Ziku, 2020). These archives are valuable resources for researchers, scholars, and community members, facilitating access to ICH materials. Ethnographic fieldwork and anthropological approaches involve immersive engagement with communities and cultures to document and analyze intangible heritage (Brujić et al., 2014). Ethnographers and anthropologists observe and participate in cultural practices, conduct interviews, and document social interactions, beliefs, and traditions (Galla, 2018). This strategy thoroughly comprehends the cultural context and the multifaceted aspects of intangible heritage. Fieldwork often involves long-term engagement, establishing trust and rapport with community members, and respecting cultural protocols (Esfehani & Albrecht, 2018). This approach enables the collection of rich and nuanced data that contributes to the preservation and interpretation of ICH.

While these traditional documentation methods have been essential in capturing intangible cultural heritage, they also face challenges. The

reliance on human memory and the subjective nature of interpretations lead to variations and potential loss of accuracy over time (Yan & Li, 2023). Furthermore, the limited resources and accessibility of archival materials pose barriers to widespread knowledge dissemination (Liu et al., 2022). In response to these challenges, modern software tools and digital technologies have emerged, offering innovative approaches to ICH documentation. The following section explores these tools and their contributions to preserving and disseminating intangible cultural heritage in the digital age.

4. Approaches for Documentation of ICH

The rapid advancements in digital technology have revolutionized how we document and preserve intangible cultural heritage (ICH). These technologies offer new possibilities and opportunities for capturing, safeguarding, and sharing ICH with a broader audience. This section delves into the various approaches that leverage digital technologies, exploring innovative methods such as digital storytelling (storycenter website), interactive multimedia platforms (Chatzigrigoriou et al., 2021), virtual reality, and augmented reality (Kim et al., 2019) (Fig 2).

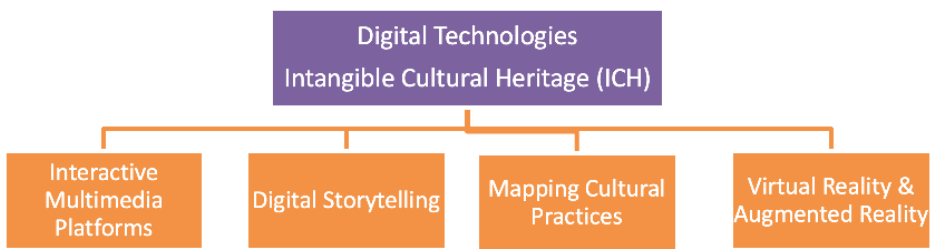


Figure 2: digital technologies intangible cultural heritage (ICH)

By harnessing these approaches, we can ensure the adequate documentation and transmission of ICH, thereby contributing to its long-term preservation and fostering cultural appreciation in the digital era. Multimedia platforms and online archives provide digital spaces for the storage, organization, and dissemination of diverse forms of ICH (Skublewska-Paszowska et al., 2022). These platforms allow for audio, video, images, and text integration, creating interactive and immersive user experiences. Online archives provide a centralized repository for ICH materials, facilitating access and exploration by researchers, scholars, and the general public (Kim et al., 2019). These platforms enable the preservation of audiovisual recordings of performances, rituals, and oral traditions, ensuring their availability for future generations. Virtual reality (VR) and augmented reality (AR) applications offer innovative ways to engage with intangible cultural heritage (Boboc et al., 2022). VR allows users to experience simulations of cultural practices and environments, providing a sense of immersion and presence (Liu et al., 2022). AR overlays virtual content onto the real world, enhancing the understanding and appreciation of cultural artifacts and sites; these technologies enable virtual tours of heritage sites, interactive storytelling, and the recreation of historical events and using community videos and podcasts, making ICH more accessible and engaging to a broader audience (Skublewska-Paszowska et al., 2022; Boboc et al., 2022). Crowd-sourcing and participatory approaches involve engaging communities and individuals in the documentation and interpretation of ICH. Through digital platforms and mobile applications, community members contribute their knowledge, stories, and memories, enriching the collective understanding of intangible heritage (Yan & Li, 2023). This approach fosters a sense of community ownership and empowerment, promoting dialogue and collaboration in

the preservation process (Ziku, 2020). Digital mapping and geolocation technologies enable the spatial representation of ICH; by mapping cultural practices, traditional knowledge, and heritage sites, these tools visually represent the geographic distribution and diversity of intangible heritage (Nebot-Gomez de Salazar et al., 2023). Geolocation technologies also facilitate virtual tours and location-based storytelling, connecting physical spaces with their cultural significance (High et al., 2012; Esfehiani & Albrecht, 2018). Social media platforms and online communities serve as dynamic spaces for the sharing and exchanging of ICH. Communities create dedicated groups, pages, and hashtags to showcase their cultural practices and engage with a global audience (Benzidia et al., 2022). Social media platforms offer opportunities for dialogue, knowledge sharing, and the promotion of ICH initiatives. Online communities foster connections between practitioners, researchers, and enthusiasts, encouraging the collaborative documentation and preservation of intangible heritage. Big data analytics and artificial intelligence (AI) technologies provide powerful tools for analyzing and interpreting large-scale datasets related to ICH (Xie, 2022). These technologies uncover patterns, trends, and correlations in cultural practices, facilitating a deeper understanding of intangible heritage. AI algorithms assist in transcribing and translating oral traditions, identifying cultural patterns, and recommending relevant ICH resources to users (Benzidia et al., 2022). These innovative approaches and tools for ICH documentation demonstrate the transformative potential of digital technologies in preserving, disseminating, and engaging with intangible cultural heritage. By combining traditional and modern methods, stakeholders collaboratively ensure the safeguarding and continuity of ICH in the digital age.

5. Modern Software Tools for ICH Documentation

As we navigate the digital age, many software tools have emerged to facilitate the documentation and preservation of intangible cultural heritage (ICH). These tools harness the power of technological advancements to improve the management, analysis, and accessibility of ICH materials. This part sheds light on a range of modern software tools that are extensively employed in the documentation of ICH, as shown in figure 3.

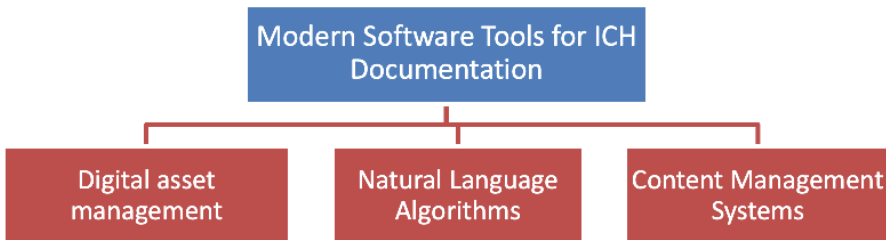


Figure 3: Modern Software Tools for ICH Documentation

From sophisticated database systems to specialized digitization software and interactive platforms, these tools are crucial in empowering cultural heritage professionals and researchers to effectively capture, organize, and disseminate ICH knowledge, ensuring its longevity in the digital realm. Digital asset management systems provide comprehensive platforms for organizing, storing, and retrieving digital assets related to ICH (Lim et al., 2019). These systems enable the efficient management of diverse media types, including audio, video, images, and documents; DAM systems support metadata tagging, version control, and access controls, ensuring the preservation, organization, and secure sharing of ICH materials (Dou et al., 2018). Content management systems, including websites, blogs, and

online archives, are widely used for creating and managing digital content; CMS platforms offer user-friendly interfaces for organizing and presenting ICH materials to a broader audience (Mathioudakis et al., 2022). They provide features such as content categorization, search functionalities, and multimedia integration, facilitating the dissemination and discovery of ICH resources (Halder & Sarda, 2021). Digital preservation systems address digital assets' long-term preservation and integrity (Lim et al., 2019). These systems employ migration, emulation, and metadata preservation strategies to ensure the ongoing accessibility and authenticity of ICH materials. Digital preservation systems help mitigate the risks of format obsolescence, data loss, and technological dependencies, safeguarding ICH for future generations (Ziku, 2020). Natural language processing tools utilize computational techniques to analyze and process human language. These tools assist in transcribing, translating, and analyzing textual and spoken ICH materials (Nebot-Gomez de Salazar et al., 2023). NLP algorithms automatically extract critical information, identify patterns, and perform sentiment analysis, enabling researchers and practitioners to gain insights from large volumes of textual data (Dou et al., 2018). Digital collaboration platforms facilitate remote collaboration and knowledge sharing among individuals and communities involved in ICH documentation. These platforms offer real-time communication, file sharing, and task management, enabling collaborative workflows and decentralized documentation efforts. Digital collaboration platforms enhance stakeholder coordination and engagement, fostering a collective approach to ICH preservation (Ziku, 2020; Mathioudaki et al., 2022). Data visualization tools enable the representation of complex data sets in visual formats, such as charts, graphs, and interactive maps (Qiu et al., 2022). These tools help present and interpret quantitative and qualitative

data related to ICH. Data visualization enhances the accessibility and understanding of ICH information, allowing users to explore patterns, trends, and relationships within the data (Lim et al., 2019). By leveraging these modern software tools, stakeholders involved in ICH documentation streamline their workflows, enhance data management and analysis, and improve the accessibility and dissemination of intangible cultural heritage. These tools empower communities, researchers, and organizations to collaborate effectively and ensure ICH's long-term preservation and appreciation in the digital era.

6. Ethical Considerations and Community Engagement

Documenting intangible cultural heritage (ICH) necessitates a deep understanding of ethical considerations and active engagement with the communities involved. It is imperative to approach ICH documentation with respect for the rights, values, and protocols of the communities, ensuring that the process is conducted ethically and responsibly (Blake, 2018). By highlighting the importance of involving communities in decision-making, promoting cultural autonomy, and seeking informed consent, we foster a collaborative and inclusive approach to ICH documentation, preserving its authenticity and safeguarding the rights and interests of the communities involved (Kim et al., 2021). Intellectual property rights and copyright issues play a significant role in ICH documentation. It is essential to comprehend and respect persons' rights and communities who hold ownership or custodianship over specific cultural expressions; prior consent and collaboration should be sought when using or sharing ICH materials to ensure that appropriate permissions, attributions, and licensing agreements are in place (Lin & Lian, 2018). Respecting intellectual property rights safeguards the cultural heritage and the rights of the communities

involved; obtaining informed consent from community members is crucial when documenting ICH; this involves transparent communication and providing clear explanations about the documentation's purpose, scope, and potential use (Deacon & Smeets, 2018). Consent should be obtained from individuals, communities, or relevant authorities, ensuring that participants fully understand their rights and the implications of their involvement.

Additionally, it is essential to respect cultural protocols, including privacy concerns, sacred knowledge, and sensitive information; sensitivity and cultural sensitivity are crucial when engaging with communities, ensuring their practices, beliefs, and traditions are treated with respect and dignity (Ubertazzi, 2022). Community participation and empowerment are critical principles in ethical ICH documentation; Communities should be involved throughout the documentation process, from planning to dissemination. Inclusive and participatory approaches give communities a say in how their heritage is represented, shared, and preserved (Maldonado-Erazo et al., 2021). Collaborative decision-making, co-creation of documentation strategies, and capacity-building initiatives empower communities to actively participate in safeguarding their intangible heritage (Blake, 2018). Engaging with community members as active partners fosters a sense of ownership, pride, and cultural continuity. Community engagement also involves sharing the benefits of ICH documentation with the communities themselves; this includes providing access to documented materials, facilitating educational programs, supporting the transmission of knowledge to younger generations, and promoting cultural tourism initiatives that provide economic opportunities for communities (Ubertazzi, 2022). Ensuring that communities benefit from the documentation process enhances the sustainability of intangible cultural heritage (Lim et al.,

2019). Ethical considerations and community engagement are integral to responsible and sustainable ICH documentation. By upholding intellectual property rights, obtaining informed consent, respecting cultural protocols, and actively involving communities, documentation efforts are conducted respectfully and inclusively, which benefits all involved parties.

7. Case Studies and Best Practices

Implementing digital tools for intangible cultural heritage (ICH), documentation has yielded numerous successful case studies and best practices. Several notable examples highlight the effective utilization of these tools, offering valuable lessons for future efforts in ICH documentation. One successful implementation is Mukurtu CMS (Fig 4), a digital content management system designed specifically for Indigenous communities. Mukurtu CMS incorporates Indigenous protocols and provides customizable access controls, ensuring community ownership and control over the documentation process (Mukurtu Archive).

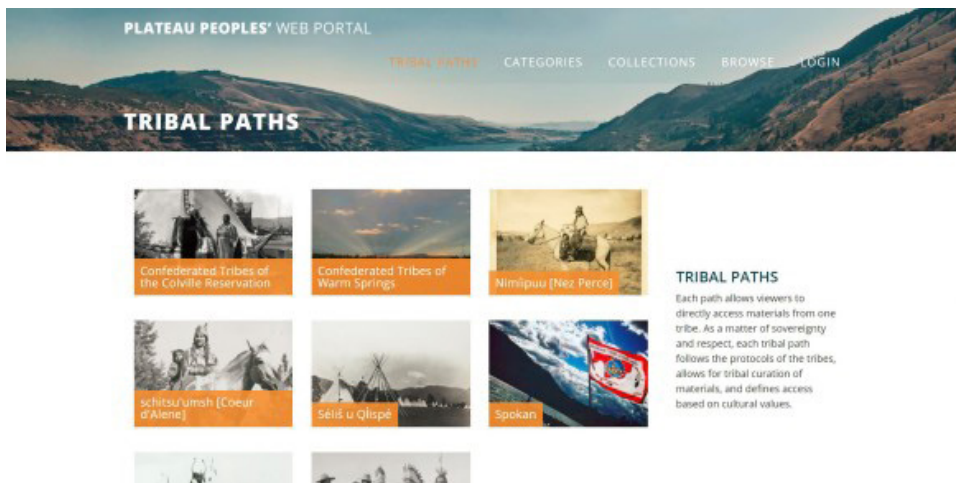


Figure 4: Mukurtu CMS website

This approach respects cultural sensitivities and fosters meaningful engagement. The Living Archive of Aboriginal Languages is another noteworthy case study. This online archive utilizes multimedia platforms to document and revitalize endangered Aboriginal languages in the United States and Canada (Galla, 2018). The archive preserves and shares language knowledge by incorporating audio, video, and text resources, engaging community members and linguists in the documentation efforts. Virtual museum projects, such as the British Museum's Virtual Museum of the Pacific, have leveraged Virtual and augmented reality technology to create immersive experiences of cultural artifacts and practices. These projects offer broader access to ICH and serve as engaging educational resources. Digital storytelling platforms, like the StoryCorps and StoryCenter initiatives in the USA, have provided spaces for individuals and communities to share personal narratives and oral histories. These platforms employ multimedia tools to capture and preserve diverse voices, promoting inclusivity and intergenerational knowledge transmission. Drawing from these successful implementations, several lessons and recommendations for future ICH documentation efforts emerge. Community involvement is crucial, as active participation, respect for protocols, and community ownership contribute to meaningful and sustainable outcomes. Ethical considerations, including intellectual property rights, informed consent, and privacy, must be prioritized to protect and preserve cultural heritage while respecting community rights (Blake, 2018). Capacity building plays a vital role, as training in digital tools, archival practices, and cultural protocols empowers communities to participate and lead documentation initiatives actively. Collaborative partnerships between communities, researchers, heritage professionals, and technology experts foster a holistic and inclusive approach to documentation. Sustainability and long-term planning are

essential, encompassing strategies for digital preservation, ongoing community engagement, and funding sustainability. Embracing open access principles and promoting knowledge sharing enable wider dissemination and impact of ICH documentation, supporting educational initiatives research, and revitalizing intangible cultural heritage. By embracing these lessons and recommendations, future efforts in ICH documentation can build upon successful practices, ensuring the preservation, appreciation, and accessibility of intangible cultural heritage in the digital era.

8. Conclusion

The investigation encompassed a wide range of methodologies and software solutions for the documentation of intangible cultural heritage (ICH) through the utilization of modern software, with an emphasis on the significance of employing digital asset management systems, content management systems, digital preservation systems, natural language processing tools, digital collaboration platforms, and data visualization tools to record and safeguard ICH materials effectively. These tools enhance the organization, analysis, and availability of ICH, thereby empowering communities and researchers to protect and disseminate their cultural heritage in the era of digitalization.

Nevertheless, while modern tools offer substantial advantages, it is imperative to integrate traditional approaches and demonstrate respect for cultural protocols. Traditional knowledge holders, communities, and cultural practitioners play a pivotal role in the documentation process, and their expertise, values, and perspectives must be duly recognized and assimilated. A more comprehensive and culturally sensitive approach to ICH documentation can be achieved by merging contemporary tools

with traditional knowledge systems. Looking towards the future, the field of ICH documentation presents both prospects and challenges. Technological advancements, such as artificial intelligence, virtual reality, and machine learning, hold promise for the domain. However, ethical considerations must be primed to ensure responsible and sustainable documentation practices, including intellectual property rights, informed consent, and privacy. Addressing the digital divide and ensuring equitable access to technology and digital platforms persist as ongoing challenges. Collaborative efforts involving communities, researchers, technology experts, and policymakers are crucial in surmounting these obstacles and formulating inclusive approaches to ICH documentation. By embracing modern software tools, integrating traditional methodologies, respecting ethical considerations, and engaging with communities, we can assure the preservation, transmission, and appreciation of diverse cultural expressions for future generations. As technology continues to evolve, it is essential to adapt and embrace novel tools while upholding the values and principles that underlie the safeguarding of intangible cultural heritage. By exploring diverse methodologies and tools for ICH documentation, this paper aims to contribute to the ongoing discourse concerning the conservation of cultural diversity and the promotion of intercultural understanding. By emphasizing the necessity of a comprehensive and inclusive approach that harnesses digital technologies while respecting the values, protocols, and active involvement of communities, we can ensure the perpetuity and accessibility of ICH for future generations. This endeavor fosters a sense of pride, belonging, and appreciation for our shared human heritage.

9. Discussion

Preserving intangible cultural heritage (ICH) involves various methods and tools, yet significant challenges and shortcomings persist. While advanced digital technologies offer innovative documentation strategies, they also introduce issues related to cultural authenticity and accessibility (Idris et al., 2016). Integrating diverse information sources complicates the documentation process, necessitating a holistic approach that can adapt to various cultural contexts (Balén, 2017). While digitization enhances accessibility, it may lead to cultural homogenization, risking the loss of unique cultural expressions (Idris et al., 2016; Pappa & Makropoulos, 2021). Adequate documentation requires the involvement of multiple stakeholders, which can complicate ownership and co-creation processes (Balén, 2017). Continuous updates are essential for adequate documentation, yet many tools lack the infrastructure for sustained monitoring (Balén, 2017). Some technologies may not adequately respect the cultural significance of ICH, leading to potential misrepresentation (Alivizatou-Barakou et al., 2017).

Method	Pros	Cons
Traditional Methods	Deep cultural understanding and context	Limited reach and accessibility
	Community involvement fosters ownership	Time-consuming and resource-intensive
	Rich, qualitative data capturing nuances	Risk of bias in interpretation
	Preservation of oral traditions and practices	Can be vulnerable to loss if not documented

Modern Methods	Enhanced accessibility through digital platforms	Potential loss of cultural context and meaning
	Ability to reach wider audiences	Technical skills required; may alienate some communities
	Efficient data collection and storage	Dependence on technology and risk of obsolescence
	Multimedia capabilities (audio, video, interactive)	Initial costs for technology and training

Table 1: comparison table highlighting the pros and cons of traditional and modern methods for preserving intangible cultural heritage (ICH)

The preservation of intangible cultural heritage (ICH) through digital tools presents several challenges that must be addressed to ensure effective safeguarding. These challenges encompass technology, intellectual property, and community engagement. The digitization of ICH raises concerns about data security and copyright complexities, which can hinder the sharing and preservation of cultural knowledge (Prasad et al., 2024; Wagner & Clippele, 2023). Finding suitable methods to document the transient nature of ICH, such as oral traditions and performances, remains significant barrier (Yan & Li, 2023). The decline in traditional knowledge bearers poses a risk to the transmission of ICH, making it crucial to engage younger audiences through innovative digital experiences (Pan, 2024). There is need for culturally sensitive approaches that respect the communities involved, avoid commodification, and ensure that digital representations are authentic (Tang & Zhang, 2023). Despite these challenges, integrating new technologies remains crucial for preserving ICH, highlighting the need for

ongoing research and adaptation to address these shortcomings effectively. While digital tools offer innovative opportunities for ICH preservation, they also necessitate careful consideration of ethical and practical implications to foster sustainable practices.

Creating a digital tool for preserving intangible cultural heritage (ICH) involves addressing several key gaps, including the lack of standardized documentation methods, limited accessibility for communities and researchers, and insufficient preservation techniques for digital content. To overcome these challenges, the tool feature standardized templates for recording practices, an interactive platform for community engagement, and robust archiving solutions to ensure long-term accessibility. It must prioritize cultural sensitivity by involving local communities in content creation and establishing ethical guidelines to prevent misrepresentation. Collaboration between disciplines and stakeholders is essential, along with a sustainable funding strategy to support ongoing ICH projects, ultimately fostering cultural pride and ensuring heritage preservation for future generations.

10. Reference

- Benzidia, S., Makaoui, N., & Bentahar, O. (2021). The impact of big data analytics and artificial intelligence on green supply chain process integration and hospital environmental performance. *Technological forecasting and social change*, 165, 120557.
- Blake, J. (2018). Further reflections on community involvement in safeguarding intangible cultural heritage. In *Safeguarding intangible heritage* (pp. 17-35). Routledge.
- Boboc, R. G., Băutu, E., Gîrbacia, F., Popovici, N., & Popovici, D. M. (2022). Augmented Reality in Cultural Heritage: An Overview of the Last Decade of Applications. *Applied Sciences*, 12(19), 9859.
- Brujić, M., & Milenković, M. (2014). Prospective Perspective: Visual Anthropology and/as Intangible Cultural Heritage in Serbia. *Narodna umjetnost: hrvatski časopis za etnologiju i folkloristiku*, 51(1), 55-69.
- Chatzigrigoriou, P., Nikolakopoulou, V., Vakkas, T., Vosinakis, S., & Koutsabasis, P. (2021). Is architecture connected with intangible cultural heritage? reflections from architectural digital documentation and interactive application design in three aegean islands. *Heritage*, 4(2), 664-689.
- Chen, Z. (2022). Visualizing experiencescape—from the art of intangible cultural heritage. *Current Issues in Tourism*, 25(4), 559-578.
- Dou, J., Qin, J., Jin, Z., & Li, Z. (2018). Knowledge graph based on domain ontology and natural language processing technology for Chinese intangible cultural heritage. *Journal of Visual Languages & Computing*, 48, 19-28.
- Eichler, J. (2021). Intangible cultural heritage, inequalities and participation: who decides on heritage?. *The International Journal of Human Rights*, 25(5), 793-814.
- Eklund, P., Goodall, P., Wray, T., Bunt, B., Lawson, A., Christidis, L., ... & Van Olffen, M. (2009, June). Designing the digital ecosystem of the virtual museum of the pacific. In *2009 3rd IEEE International Conference on Digital Ecosystems and Technologies* (pp. 377-383). IEEE.
- Esfehani, M. H., & Albrecht, J. N. (2018). Roles of intangible cultural heritage in tourism in natural protected areas. *Journal of heritage tourism*, 13(1), 15-29.
- Galla, C. K. (2018). Digital realities of Indigenous language revitalization: A look at Hawaiian language technology in the modern world. *Language and Literacy*, 20(3), 100-120.
- Grammatikopoulou, A., Laraba, S., Sahbenderoglu, O., Dimitropoulos, K., Douka, S., & Grammalidis, N. (2019). An adaptive framework for the creation of exergames for intangible cultural heritage (ICH) education. *Journal of Computers in Education*, 6(3), 417-450.
- Halder, S., & Sarda, R. (2021). Promoting intangible cultural heritage (ICH) tourism:

- Strategy for socioeconomic development of snake charmers (India) through geoeducation, geotourism and geoconservation. *International Journal of Geoheritage and Parks*, 9(2), 212-232.
- High, S., Mills, J., & Zembrzycki, S. (2012). Telling our stories/animating our past: A status report on oral history and digital media.
- Idris, M. Z., Mustaffa, N. B., & Yusoff, S. O. S. (2016). Preservation of intangible cultural heritage using advance digital technology: Issues and challenges. *Harmonia: Journal of Arts Research and Education*, 16(1), 1-13.
- Khan, M. (2018). Traditional Knowledge and Creative Commons-White Paper. Available at SSRN 3550362.
- Kim, S., Im, D. U., Lee, J., & Choi, H. (2019). Utility of digital technologies for the sustainability of intangible cultural heritage (ICH) in Korea. *Sustainability*, 11(21), 6117.
- Lim, C. K., Tan, K. L., & Hambira, N. (2019). A basis of cultural education: safeguarding intangible heritage through a web-based digital photographic collection. *Comput. Sci. Inf. Technol.*
- Lin, Q., & Lian, Z. (2018). On protection of intangible cultural heritage in China from the intellectual property rights perspective. *Sustainability*, 10(12), 4369.
- Liu, Z., Yan, S., Lu, Y., & Zhao, Y. (2022, April). Generating Embodied Storytelling and Interactive Experience of China Intangible Cultural Heritage “Hua’er” in Virtual Reality. In CHI Conference on Human Factors in Computing Systems Extended Abstracts (pp. 1-7).
- Maldonado-Erazo, C. P., Tierra-Tierra, N. P., del Río-Rama, M. D. L. C., & Álvarez-García, J. (2021). Safeguarding intangible cultural heritage: the Amazonian Kichwa people. *Land*, 10(12), 1395.
- Mathioudakis, G., Klironomos, I., Partarakis, N., Papadaki, E., Volakakis, K., Anifantis, N., ... & Stephanidis, C. (2022). InCulture: A Collaborative Platform for Intangible Cultural Heritage Narratives. *Heritage*, 5(4), 2881-2903.
- Meng, L., Zhu, C., Pu, J., Wen, B., & Si, W. (2022). Study on the Influence Mechanism of Intangible Cultural Heritage Distribution from Man–Land Relationship Perspective: A Case Study in Shandong Province. *Land*, 11(8), 1225.
- Mukurtu Archive, Mukurtu CMS (2023), <http://mukurtu.org/> (last visited Sep 7, 2023)
- Nebot-Gomez de Salazar, N., Chamizo-Nieto, F. J., Conejo-Arrabal, F., & Rosa-Jiménez, C. (2023). Intangible cultural heritage as a tool for urban and social regeneration in neighbourhoods. Participatory process to identify and safeguard ICH in the city of Malaga, Spain. *International Journal of Heritage Studies*, 29(6), 524-546.
- Ng, H. (2023). Digitalized intangible cultural heritage preservation–reinventing the design practice of Hong Kong men’s cheongsam.

- Pan, Y. (2022). *Intangible Cultural Heritage Through Interactive Digital Experiences* (Doctoral dissertation, Toronto Metropolitan University).
- Pappa, D., & Makropoulos, C. (2021). Novel ways of discovering, capturing and experiencing cultural heritage: A review of current state-of-the-art, challenges and future directions. *Heritage—New Paradigm*.
- Qiu, Q., Zuo, Y., & Zhang, M. (2022). Intangible cultural heritage in tourism: Research review and investigation of future agenda. *Land*, 11(1), 139.
- Ranjan, A., & Chaturvedi, P. (2023). Digitally sustaining: the rural intangible cultural heritage. In *Embracing business sustainability through innovation and creativity in the service sector* (pp. 14-30). IGI Global.
- Skublewska-Paszowska, M., Milosz, M., Powroznik, P., & Lukasik, E. (2022). 3D technologies for intangible cultural heritage preservation—literature review for selected databases. *Heritage Science*, 10(1), 1-24.
- Storycenter, (2023) , <https://www.storycenter.org/> (last visited Sep 7, 2023)
- Tang, T., & Zhang, H. (2023). An Interactive Holographic Multimedia Technology and Its Application in the Preservation and Dissemination of Intangible Cultural Heritage. *International Journal of Digital Multimedia Broadcasting*, 2023(1), 6527345.
- Ubertazzi, B. (2022). The Relationship between Intangible Cultural Heritage, Sustainable Development and Intellectual Property Rights. In *Intangible Cultural Heritage, Sustainable Development and Intellectual Property: International and European Perspectives* (pp. 265-355). Cham: Springer International Publishing.
- Xie, J. (2022). Innovative Design of Artificial Intelligence in Intangible Cultural Heritage. *Scientific Programming*, 2022, 1-8.
- Yan, K., & Li, S. (2023). Research on digital protection of intangible cultural heritage based on digital implantation. In *SHS Web of Conferences* (Vol. 158, p. 01021). EDP Sciences.
- Yan, W. J., & Li, K. R. (2023). Sustainable Cultural Innovation Practice: Heritage Education in Universities and Creative Inheritance of Intangible Cultural Heritage Craft. *Sustainability*, 15(2), 1194.
- Ziku, M. (2020). Digital Cultural Heritage and Linked Data: Semantically-informed conceptualisations and practices with a focus on intangible cultural heritage. *LIBER Quarterly: The Journal of the Association of European Research Libraries*, 30(1), 1-16.

الحفاظ على التراث الثقافي غير المادي: مراجعة أساليب وأدوات التوثيق

آلاء عبابنة⁽¹⁾

ملخص البحث:

يعد الحفاظ على التراث الثقافي غير المادي وصونه أمراً بالغ الأهمية للحفاظ على التنوع الثقافي، وتعزيز الحوار بين الثقافات، وتعزيز الشعور بالهوية داخل المجتمعات. تستكشف هذه الورقة مختلف الأساليب والأدوات اللازمة لتوثيق التراث الثقافي غير المادي، مع التركيز على الاستفادة من التقنيات الرقمية؛ فهو يدرس أهمية التراث الثقافي غير المادي، وخصائصه الفريدة، والتحديات المرتبطة بالحفاظ عليه. تناقش الورقة طرق التوثيق التقليدية وتعمق في الأساليب المبتكرة والأدوات البرمجية الحديثة التي ظهرت في السنوات الأخيرة؛ ويستكشف دور منصات الوسائط المتعددة، والواقع الافتراضي، والواقع المعزز، والاستعانة بمصادر خارجية، والمنهجيات التشاركية في التقاط التراث الثقافي غير المادي والحفاظ عليه ومشاركته. وتسلط الورقة الضوء أيضاً على أهمية الاعتبارات الأخلاقية، ومشاركة المجتمع، والجهود التعاونية في مجال الحفاظ الرقمي على التراث الثقافي غير المادي. ومن خلال دمج الأساليب التقليدية والحديثة، تهدف هذه الورقة إلى تقديم رؤى حول الإستراتيجيات العملية لتوثيق وحماية التراث الثقافي غير المادي في العصر الرقمي.

الكلمات الدالة: التراث الثقافي غير المادي؛ النهج التشاركي؛ التسجيل السمعي البصري. التقنيات الرقمية؛ المشاركة المجتمعية؛ الحفظ

(1) قسم الآثار الكلاسيكية - جامعة أوتونوما دي برشلونة (بيلاتيرا - إسبانيا)

alaaababna5@gmail.com