

Preserving Indigenous Knowledge in Culture Houses in the Digital Era in Masvingo Province, Zimbabwe

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Abstract

The study was conducted in Masvingo Province, Zimbabwe to interrogate the strategies being used to preserve indigenous knowledge, in the face of technological challenges. The researchers sought to ascertain the web presence of such entities and the awareness of indigenous data-governance principles among information professionals. Qualitative research, using multiple case studies, was conducted. Web content analysis was done to identify such spaces, with four culture houses being purposively selected. Interviews were conducted with the participants who were available on the day of the researchers' visit when the latter observed each site. The findings showed that all culture houses did not have a web presence, and some administrators were aware of the principles for preserving indigenous knowledge in the digital era. The

study recommends that in the future, cultural tourism can be better promoted, and indigenous communities empowered, by enhancing their access to related knowledge to achieve sustainable development goals.

Keywords: CARE Principles; Culture Houses; FAIR Principles; Indigenous Data-Governance Principles; Indigenous Knowledge Preservation.

Introduction

The preservation of indigenous knowledge in culture houses has entered a new era with the advent of digital technology. In the digital era, the preservation of indigenous knowledge has become a critical concern worldwide (Milligan, 2022; Mdhluli et al., 2021; Ogbenika and Orisheminone, 2021; Yeh et al., 2021; Ngulube, 2002). Indigenous knowledge is the accumulated knowledge, practices, and beliefs developed over generations by indigenous communities (Jessen et al., 2021; Grey, 2014). It encompasses various aspects such as traditional medicine, agricultural practices, cultural expressions, storytelling, and craftsmanship (United Nations Educational, Scientific and Cultural Organisation [UNESCO], 2022; 2019). Recognising the value of indigenous knowledge and the need to protect it, Zimbabwe has embraced the establishment of culture houses as vital institutions for preserving and promoting this invaluable heritage (Nyambiya et al., 2022). The National Arts Council of Zimbabwe was established to oversee the development of the arts and culture sector. Culture houses fall under the Ministry of Home Affairs and Cultural Heritage, which is tasked with protecting and promoting the

country's cultural heritage and preserving national monuments, museums, historic documents, and artefacts (Government of Zimbabwe, 2022).

The advent of information technology led to the integration of digital tools in culture houses, facilitated the digitisation of indigenous cultural artefacts, oral histories, and traditional practices at the same time. Through multimedia presentations, interactive exhibitions and virtual tours, visitors can engage with indigenous knowledge in innovative ways (Brown and Nicholas, 2012; Kugara and Mokgoatšana, 2022; and Mogajane, 2022). The digital era offers opportunities for indigenous communities to participate actively in the preservation of their knowledge. Through community-driven initiatives, local experts and knowledge holders can contribute to the creation of digital content by sharing their expertise, stories, and practices directly with a global audience (Hayward et al., 2021). This participatory approach empowers indigenous communities, validates their knowledge systems, and allows for self-representation, challenging historical narratives that have often marginalised their contributions. Admittedly, the digital era also brings challenges and considerations that need to be addressed in preserving indigenous knowledge in sites of cultural importance. Issues related to intellectual property rights, privacy, and ethical concerns related to the digitisation and online dissemination of cultural materials, require careful attention (Douglas and Hayes, 2019; Shrayberg and Volkova, 2021; and UNESCO, 2021). This means collaborative efforts with indigenous communities are essential for obtaining informed consent, protecting sacred knowledge, and respecting cultural protocols. This is when the FAIR (findable, accessible, interoperable, and reusable) and CARE (collective benefit, authority to control, responsibility, and ethics) principles of indigenous knowledge data governance come into play, to guarantee the inclusion of these communities when making indigenous knowledge more accessible to all.

Culture Houses Defined

Culture houses are dynamic spaces where indigenous knowledge is safeguarded, shared, and celebrated. These institutions act as repositories of traditional wisdom and provide platforms for intergenerational

knowledge transfer (Obiero et al., 2023). They play a crucial role in archiving indigenous practices, ensuring their continuity and accessibility to present and future generations. Such houses also serve as culture hubs where various activities related to arts, crafts, performances, exhibitions, workshops, and educational programmes take place. Cultural preservation is enhanced in culture houses, since indigenous knowledge encompasses a vast array of traditional practices, rituals, languages, arts and crafts, along with ecological wisdom, that has been passed down through generations (UNESCO, 2019). Dedicated spaces are provided for indigenous communities to preserve and safeguard their cultural heritage. These spaces often act as repositories of cultural artefacts, historical documents, traditional knowledge, and other tangible and intangible aspects of a community's heritage, thereby ensuring their continuity (Mazzocchi, 2020; and Turner et al., 2022). These houses play a vital role in maintaining and promoting cultural diversity, social cohesion, and sustainable development within a particular society. They thus serve as physical spaces dedicated to the celebration, documentation, and transmission of the cultural practices, traditions, and knowledge systems of indigenous communities (UNESCO, 2019). Culture houses can vary based on the region, purpose, and focus of cultural activities, and range from community culture houses, culture centres, village centres, art centres, performing arts centres, heritage centres, multicultural centres, and indigenous culture centres, to contemporary art centres. According to the Cultural Policy of Zimbabwe (Zimbabwe, 2007), each province, district, and village was supposed to have its own culture house to promote major cultural events.

Importance of Culture Houses

Knowledge transmission is facilitated through culture houses where elders, cultural practitioners, and community members come together to share their wisdom, skills, and experiences with younger generations. The transfer of knowledge from one generation to the next can be achieved through workshops, mentorship programmes, storytelling sessions, cultural events, and observations, among other conscious (and unconscious) means of effecting indigenous knowledge transfer. Culture houses also enhance community empowerment by

providing spaces where members can reconnect with their cultural roots, strengthen their sense of identity and belonging, and foster collective pride in their heritage (UNESCO, 2023a). By preserving and promoting indigenous knowledge, these spaces contribute to the overall well-being and self-determination of indigenous peoples. Notably, many indigenous languages are endangered or at risk of extinction, but culture houses promote language revitalisation (Ngulube, 2012; and UNESCO, 2022a). These venues serve as platforms for cultural exchange and intergenerational dialogue. They facilitate interactions between indigenous communities and the wider society, promoting understanding, respect, and an appreciation for indigenous cultures. The spaces also encourage collaboration, partnerships, and the sharing of knowledge and practices between indigenous and non-indigenous individuals, fostering mutual learning and cultural enrichment. Culture houses further play a role in advocating indigenous rights, cultural autonomy, and the protection of indigenous knowledge (United Nations, 2014). They provide a platform for raising awareness about the importance of indigenous cultures, addressing issues such as cultural appropriation, and promoting policies that support indigenous communities' self-determination and cultural preservation.

Web Presence of Culture Houses

In the digital era, having a web presence for culture houses is important for ensuring the visibility, accessibility, and impact of any indigenous knowledge that is preserved in the digital realm. A web presence can be achieved through websites, online collections, a social media presence, online resource platforms, virtual events, and live streaming, online collaborations and networks, and digital storytelling and documentation (Dwivedi et al., 2021). Creating a dedicated website is crucial for culture houses to establish their online presence: it can serve as a central hub of information that provides details about the cultural activities, programmes, exhibitions, events, and resources offered by the institution. Multimedia content can be featured, including photos, videos, and audio recordings, to showcase the cultural richness of the community. Culture houses can digitise their collections and make them

accessible to a wider audience through virtual exhibitions, interactive galleries, and searchable databases, to preserve and share indigenous knowledge beyond their physical space.

Such venues can benefit from having a presence on social media platforms such as Facebook, Twitter, Instagram, and YouTube, which will allow them to engage with large audiences (Appel, 2020). They can also share updates, promote upcoming events, and act as a two-way communication channel where followers interact, share their experiences, and ask questions. The web presence of culture houses will facilitate collaborations and establish networks with other cultural institutions, researchers, scholars, and indigenous communities worldwide (Tengo et al., 2021; Chigwada and Chiparousha, 2020). Online platforms provide users with opportunities to connect, share knowledge, collaborate on research projects, and develop partnerships for cultural exchange programmes. These networks will help culture houses to broaden their perspectives, strengthen their impact, and support one another in preserving the country's indigenous knowledge. However, there is a need to protect such indigenous knowledge to ensure that it is not abused by the users, mainly by looking at intellectual property rights and copyright issues (Moalosi et al., 2023; and Chidede, 2022).

Formats and Types of Indigenous Knowledge in Culture Houses

The format of indigenous knowledge in culture houses can vary, depending on the specific cultural context and the resources available. The most common formats and methods used for preserving indigenous knowledge are oral traditions and storytelling, documentation, and archives, artefacts and material culture, language preservation, traditional arts and crafts, ecological knowledge and sustainable practices, and intergenerational knowledge sharing (Hunter, 2005; Obiero et al., UNESCO, 2019, 2022, 2023). Indigenous cultures often rely on oral traditions to pass down knowledge, stories, legends, and cultural practices from one generation to the next. Culture houses may have dedicated spaces or events where elders and other community members share their oral traditions through storytelling, performances, exhibitions, and interactive sessions.

Preserving and displaying artefacts in culture houses allows visitors to experience and learn about indigenous cultures and the craftsmanship of the community.

Indigenous Data Governance Principles

The emergence of digital technologies in the preservation of indigenous knowledge has raised awareness of indigenous data-governance principles among information professionals as regards the digitisation of such knowledge (Robinson et al., 2021; Carroll et al., 2020; Oguamanam, 2020). The FAIR and CARE principles provide important frameworks that can be applied to various contexts, and are influenced by factors such as education, exposure, and the specific context in which information professionals operate (Carroll et al., 2020 and Carroll et al., 2021). While some information professionals may be familiar with indigenous data-governance principles, others may have limited knowledge thereof. There is not only a growing recognition of the need to incorporate indigenous data governance principles into information management practices, but also sustained efforts are also being made in this regard (Gupta et al., 2020).

The CARE principles are a set of guidelines developed by the digital preservation community to ensure the ethical and responsible handling of cultural heritage materials (Carroll et al., 2021). These principles emphasise the importance of considering the needs and rights of communities and individuals connected to the materials being preserved or presented. CARE principles could involve community engagement, cultural sensitivity, access and inclusion, and the ethical use of cultural heritage. Community engagement means involving local and indigenous communities in the decision-making processes, programming, and activities of the culture houses, to ensure that their perspectives, needs, and concerns are taken into account. Cultural sensitivity means respecting and representing the diversity of cultural practices, beliefs, and identities within the community, including being mindful of cultural appropriation, and avoiding misrepresentation. Access and inclusion deal with providing equitable access to cultural resources; ensuring that the culture houses are accessible physically, socially, and digitally; and removing barriers, for instance by

providing wheelchair access and offering language interpretation services. The ethical use of cultural heritage involves respecting intellectual property rights, copyrights, and any cultural protocols associated with the materials being displayed or preserved, such as obtaining appropriate permissions and ensuring that the cultural heritage is not exploited or commodified (Carroll et al., 2021).

The FAIR principles are guidelines designed to enhance the discoverability, accessibility, and usability of research data (Carroll et al., 2021). Applying FAIR principles in culture houses would involve metadata and cataloguing, digital preservation, open access and collaboration, and data management and curation (Carballo-Garcia and Bote-Vericad, 2022). Information professionals in culture houses should ensure that cultural artefacts, artworks, and other resources are appropriately described and catalogued with standardised metadata, to facilitate their discoverability and accessibility for researchers, artists, and the general public. Open access and collaboration entail promoting open access policies, where possible, to facilitate the sharing of cultural resources, while collaborating with other cultural institutions, universities, and research organisations to enhance the interoperability and reusability of cultural data. Data management and curation look at establishing best practices for managing cultural data, including data storage and documentation, as well as ensuring data integrity to improve the overall quality and reliability of the data maintained in culture houses (Hahnel and Valen, 2020; Jeffery, 2020 and CESSDA Training Team, 2022).

Integrating CARE and FAIR principles into the operations of culture houses can work towards creating inclusive and accessible spaces, promoting cultural diversity, and enhancing the preservation and availability of cultural heritage for future generations (UNESCO, 2022b). Indigenous data-governance principles emphasise the rights of indigenous communities to exercise control over their data and information, including decisions about how indigenous knowledge is collected, stored, accessed, used, and shared. While some information professionals are aware of these principles and support the concept of indigenous data sovereignty, there is still work to be done in terms of practical implementation (Leonard et al., 2023). This includes involving indigenous communities in decision-making and data

management and defining appropriate access and use protocols (Carroll et al., 2021). Information professionals who are aware of these principles are more likely to adopt collaborative approaches and engage with indigenous communities as partners, rather than passive subjects.

Contextual Setting

A qualitative multiple case study was conducted to examine the preservation of indigenous knowledge

in culture houses in the digital era in Zimbabwe, by looking at their web presence and the format and types of indigenous knowledge preserved in such places. The web search did not yield the desired results. However, during a visit to Masvingo Province in Zimbabwe, four culture houses were found and selected for this study.

Details concerning the culture houses that participated in the study are shown in Table 1.

Table 1: Summary of the Culture Houses

	Culture House 1 – The Shona Village	Culture House 2 – Zimbabwe Cultural Village	Culture House 3 – Chesvingo Cultural Village	Culture House 4 – Kambako Cultural Village
Purpose	Portrays Shona culture	Portrays the life of the Moyo clan	Centre for the preservation of the Karanga culture	Portrays the Shangani culture
Method	Ethnographic depiction of continuing traditional lifestyles	Established under the guidance of a chief	Community-based tourism project	Founded by local members
Authority	Managed by National Museums and Monuments of Zimbabwe	Managed by an administrator through community participation	Run by a community-based tourism management committee	Run by a man and his extended family
Participants	Members of the local community	Members of the local community	Members of the local community	Members of the local community
Functioning	Participants are selected by the site management committee	Activities are not scheduled, since there are no permanent participants	Operations stalled for 20 years due to a misunderstanding	The family had a rich cultural background

Statement of the Problem

In the digital era, culture houses have adapted to new technologies and incorporated digital tools to enhance the preservation and dissemination of indigenous knowledge (UNESCO, 2023). Digital

platforms offer unique opportunities for wider outreach, amplifying the voices of indigenous communities and fostering cross-cultural understanding. By harnessing the power of digital technology, these institutions can bridge the gap between traditional knowledge and the modern world,

empowering indigenous communities while fostering cultural diversity and social cohesion (Kaya and Seleti, 2013; and Rice et al., 2016). Culture houses serve as crucial guardians of indigenous wisdom and cultural heritage. However, preserving indigenous knowledge in these spaces has become a pressing problem in the digital era (Mdhluli et al., 2021). Rapid advances in digital technologies threaten the ability of culture houses to effectively document and transmit knowledge to future generations, despite being crucial repositories of traditional knowledge. The absence of a comprehensive framework for integrating digital tools and platforms into the preservation and dissemination of indigenous knowledge poses a risk by allowing the erosion of Zimbabwe's cultural heritage.

Objectives of the Study

The broad objective of this study was to document how culture houses are preserving indigenous knowledge and to develop strategies and systems that will ensure the preservation and continuity of indigenous knowledge, while embracing the benefits of the digital era. It is against this background that the study was undertaken to:

1. Determine the importance of culture houses in the preservation of indigenous knowledge.
2. Ascertain the web presence of Zimbabwe's culture houses, in the digital era.
3. Consider the format of the indigenous knowledge being preserved in culture houses in Zimbabwe.
4. Assess the level of awareness of the indigenous data-governance principles among information professionals, in the digitisation of indigenous knowledge.

Data Collection Methods and Data Analysis

The population of the study was composed of the administrators who were responsible for the day-to-day running of the four culture houses, and the people who performed various indigenous knowledge activities within the culture houses. A census of the available participants was done since it was difficult

to ascertain the number of people who were involved in the indigenous activities taking place in the culture houses. Therefore, the participants were 27 keepers of indigenous knowledge (6 from Culture House 1, 8 from Culture House 2, 5 from Culture House 3, and 8 from Culture House 4) i.e., those who perform and entertain tourists, and four administrators of the culture houses.

Separate interviews were conducted with the participants and the administrators of the selected culture houses who were available on the day of the visit. The administrators were supposed to provide data concerning how they were taking into consideration the CARE and FAIR principles when preserving indigenous knowledge. There was a need to assess the level of awareness of the indigenous data-governance principles among the information professionals working in those venues, as regards the digitisation of indigenous knowledge. The researchers also wanted to note their web presence on websites and social media platforms and the format of the indigenous knowledge being preserved. Web content analysis was done to get the data on the web presence of the culture houses. Personal observation was also done by visiting these four culture houses to note how they preserve indigenous knowledge, mainly, how they acquired it, how they stored it, and how they disseminated it in the digital era. Content analysis was used to analyse the data, which are presented here, according to the themes drawn from the research objectives. The results from the interviews, observation, and web content analysis were grouped to facilitate the data presentation and analysis. It was difficult to identify culture houses in Zimbabwe using web content analysis, since only a few names were available on some sites, and phone numbers tended not to be in use, which made it difficult to get in touch with the information professionals working at such culture houses. As a result, the researchers paid a visit to one of the provinces which is home to the heritage site that attracts the most tourists in the country, and thereafter selected four culture houses.

Findings and Discussion

The first objective of the study sought to determine the importance of culture houses in the preservation of indigenous knowledge. The findings of the study

indicate that Culture House 1 was constructed as a model of a nineteenth-century traditional Shona village, as a way of providing entertainment and educating visitors to the site on how the Shona people lived. This was also stated by Ndoro and Pwiti (1997) who stated that the Shona village aims to depict the way of life of a nineteenth-century Shona family unit. Constructed in 1986, it symbolises a wealthy man's homestead – someone with several wives – and shows day-to-day activities such as grain being pounded, as well as ritual and religious ceremonies. Culture House 2 is close to the main tourist attraction site, and some cultural practices are still taking place there. Trees around the area are not cut, and no cultivation is done around the sacred shrine. A special beer, used in ceremonies to invoke the rains, is brewed by elderly women who can no longer conceive. Culture House 3 was initially established in 1992 with support from the CAMPFIRE programme, to improve the livelihoods of the community. It was revamped in 2014 after conflicts between members of the management committee, which affected the operations of the culture village for 20 years. Culture House 4, which was started by local community members with a grant from the Malilangwe Trust, showcases Shangani culture.

The Web Presence of Culture Houses

The second objective of the study sought to ascertain the web presence of Zimbabwe's culture houses, in the digital era. The findings of the study indicate that none of the culture houses under study had a strong web presence, as they did not have their own websites. Their online information was available on the site of the Zimbabwe Tourism Authority. Culture Houses 1 and 2 were advertised on the social media platforms of the Zimbabwe Tourism Authority, with very minimal information about the culture villages being provided. Culture House 3, which brought the Karanga culture to life, was also the centre dedicated to its preservation. It had no website but was advertised on the Zimbabwe Tourism Authority site. Not much information was provided online – merely a summary of what was offered, and a map to reach the site. Culture House 4 was also featured on social media sites where tourist attractions were advertised. Notably, none of these culture villages had standalone websites to showcase their activities.

They were marketed by tourist institutions under the domestic tourism campaign pages on Facebook, Twitter, and Instagram. This shows that the culture villages did not enjoy the benefits of having a strong web presence, as pointed out by Dwivedi et al. (2021), Tengo et al. (2021), Appel (2020) and Chigwada and Chiparausha (2020), thus visitors are not yet able to interact with these culture villages in innovative ways, as stated by Kugara and Mokgoatšana (2022), Mojagane (2022), and Brown and Nicholas (2012).

Format of Indigenous Knowledge Preserved in Culture Houses

None of the culture houses had digitised data. The main formats for displaying indigenous knowledge in Culture House 1 were static displays, and demonstrations were given by contracted staff from local communities around the site. The major attractions included polygamous families, traditional dancers, arts and crafts, traditional healers, traditional games, Shona folk music, pottery making, basketry, stone sculpture, metal working through smelting and blacksmithing, ponding, grinding, cooking, and rituals. This is in line with what was reported by (Hunter 2005); UNESCO, 2019, 2022; and Obiero et al. (2023). The bedrooms displayed mats and headrests, which also exhibited the finest Shona woodcarvings. In the homes, there were displays of traditional materials associated with kitchen activities such as cooking and storage, and they featured wooden objects and utensils. A traditional dance group with members of all ages performed Shona folk songs.

Culture House 3 had rondavels that were used for accommodation and administrative work. The activities offered here included the tangible and intangible heritage base of Zimbabwean culture, traditional music, dances, games, and diverse traditional food such as *sadza* prepared from small grain crops such as *rapoko* and sorghum. There were also ancient granaries, caves, and rock paintings depicting the past. Culture House 4 showcased the traditional lifestyle of the Shangani people, who were hunter-gatherers, through demonstrations of practical skills that visitors can see in action and then try out for themselves. These included making fire using friction, identifying tubers, water divining, bow-and-arrow making and shooting, making snares for trapping small game, smelting and forging iron,

basketry production, and cooking as a way of transferring the skills to others (UNESCO, 2019). Traditional meals were also prepared in the presence of visitors, and sold to them as a way of generating funds.

FAIR and CARE Principles

Houses 1, 2, and 3 did not have permanent staff performing at the site. This made it difficult to ascertain the knowledge of FAIR and CARE principles, as the participants were there to entertain tourists and performing their dances and showcasing their talents in their cultures. Different groups were present for various sessions/offerings at the culture houses, depending on their work schedules at home. In most cases, they came to the culture village when they had time on their hands. There was no evidence of documentation of their activities. Ideally such administrative arrangements would allow office staff to enjoy the benefits of the technologies made available by the digital era, as stated by the CESSDA Training Team (2022), Jeffery (2020), and Hahnel and Valen (2020). The local communities were, however, involved in decision-making, since the management committees running the culture houses consisted of people from the surrounding areas, including chiefs and community members, which aligns with the CARE and FAIR principles as stated by Carroll et al. (2021).

At Culture House 4, the participants started by stating the rules and regulations of the village to the tourists, before training on how to make a fire, and introducing them to traditional foods foraged from the bush. Tourists were then taken to the arts and crafts area, where basketry, weaving, pottery, bead-making, traditional cooking, and salt-making processes were demonstrated. The guests were invited to try their hands at basket-making, pottery, and bead-making, which aligns with the collective benefit, ethics, and responsibility under the CARE principles, as stated by Carroll et al. (2020) and Carroll et al. (2021).

Strategies to Preserve Indigenous Knowledge in the Digital Era

The fifth objective was to recommend the best strategies to preserve indigenous knowledge in the

digital era considering the CARE and FAIR principles. From the findings of the study, it is important to have a web presence as a way of marketing the culture house. Currently, all the four culture houses do not have a web presence and it makes it difficult to have international visibility. In this digital era, being available on the web through websites and other social media platforms enhances the marketing strategy of the culture house. The culture houses can develop websites and mobile applications that provide access to interactive experiences with indigenous knowledge. Users can explore cultural sites, participate in traditional practices, and learn about indigenous cultures of these areas interactively. The culture houses can also record their oral histories, traditional music, dances, and ceremonies in high-quality digital formats and sell the audio and video recordings to the tourists as a way of fundraising and benefiting from the indigenous knowledge held by the community in line with the CARE principles. They can also use the recorded materials to create digital repositories that are secure to store and organise the captured indigenous knowledge and make it accessible to a broader audience. There is a need for partnerships and collaborations to be able to preserve indigenous knowledge in the digital era. This was evident in the findings of the study where these culture houses had been working with the Zimbabwe Tourism Authority and other donors to get funding and support for preservation initiatives. However, there is a need to ensure that digital preservation efforts respect and protect the intellectual property rights of indigenous communities according to the CARE principles. The four culture houses can effectively preserve and share indigenous knowledge in their communities ensuring its survival and continued relevance in the digital era if they can integrate these strategies.

Conclusion and Recommendations

The study concluded that the culture houses in question did not have a good web presence, as they did not have their own websites but relied on the social media platforms of the Zimbabwe Tourism Authority. The formats of the indigenous knowledge kept at those culture houses varied from static traditional items to demonstrations conducted by inhabitants of the surrounding villages. Knowledge

of FAIR and CARE principles among the participants was in evidence at some culture houses, since they had rules and regulations for tourists to follow. In some instances, however, the participants were not aware of these indigenous data-governance principles, since they only had to provide a service to the tourists. Keeping the visitors happy would, in their view, ensure that tourists kept coming to their site.

Based on the above findings, the study recommends that Zimbabwean culture houses should embrace the opportunities afforded by advances in technology, and address the challenges presented by the digital era, as a means of contributing to the preservation and revitalisation of indigenous knowledge, fostering cultural pride, and ensuring its enduring legacy for generations to come. This can be done by the government and other stakeholders providing funds for the smooth running of these culture houses, to ensure consistency in terms of service provision, to keep attracting tourists, and preserving the indigenous knowledge within villages. Professional guides should be available, and the sites should be marketed online, through websites, and on social media platforms, to enhance their visibility. The availability of funds would also ensure that various indigenous items are always available in these culture houses, to allow tourists and researchers alike to better understand the culture of the villagers.

The study further recommends that training information professionals in indigenous data-governance principles is essential for creating awareness of FAIR and CARE principles. Indigenous data-governance principles should be incorporated into Information Science and Library and Archival Studies curricula. This will help to raise awareness among information professionals and provide them with the knowledge and skills necessary to navigate the complexities of digitising indigenous knowledge in a culturally sensitive and respectful manner. Indigenous communities and organisations should take the lead in developing guidelines, protocols, and frameworks for the digitisation of indigenous knowledge. Such initiatives would ensure that information professionals who work with indigenous knowledge are aware of, and adhere to, related data-governance principles. In the process, indigenous-led initiatives would provide

resources, training, and support for information professionals to engage in culturally appropriate and responsible digitisation practices. Importantly, raising awareness of indigenous data-governance principles is a never-ending process that requires on-going learning and dialogue. Information professionals should thus actively seek out opportunities for engagement, education, and collaboration with indigenous communities and experts, as this will help not only to enhance their understanding of indigenous data-governance principles, but also improve their practices in dealing with indigenous knowledge in the digital era.

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