

## Indigenous voices: Using cultural knowledge for tourism

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### ABSTRACT

This research reports on Indigenous cultural knowledge holders' opportunities and challenges in using their cultural knowledge to develop authentic tourism experiences. The research investigated issues related to sourcing, storing, managing, and authorising local cultural knowledge to create authentic tourism experiences. The key finding is that while Aboriginal parties are interested in using cultural knowledge to develop tourism products, pathways need to be designed to facilitate the related development. The research utilised the Indigenous research yarning method and found this approach to be particularly useful with potential for broader use in qualitative research. The findings can be applied more broadly across the Australian national tourism landscape. The findings advance knowledge management theory through the lens of Indigenous tourism.

We first pay respect to the spirit of Country and the past and present cultural knowledge holders responsible for maintaining and promoting Aboriginal law, customs, and custodianship obligations.

### 1. Introduction

#### 1.1. Indigenous tourism and cultural knowledge management

There is growing interest in authentic First Nations (Indigenous) tourism experiences (Prideaux, Zeng, & Harwood, 2021) in Australia. However, Indigenous groups interested in developing tourism businesses face challenges. This has highlighted the need for a deeper understanding of the role of knowledge management in collecting, assessing, and selecting Indigenous cultural knowledge for use in a tourism setting and the role of key Indigenous stakeholders in authorising the use of this knowledge.

Lodhi and Mikulecky (2010, p. 97) note that the critical steps in developing an Indigenous cultural knowledge management system are 'recognition and identification, validation, recording and documentation, storage in retrievable repositories, transfer and dissemination'. In a discussion on using knowledge management in a tourism setting, Cooper (2018, p. 510) suggested that knowledge management 'is about applying the knowledge assets available to a tourism organisation to create competitive advantage'. However, as Cooper (2018) and Xiao (2006)

observed, the tourism industry has been slow to embrace knowledge management strategies. While Cooper explicitly referred to the knowledge economy and competitiveness, his observation equally applies to Indigenous knowledges, an area that has received relatively little attention from tourism academics and policymakers.

Aspects of Indigenous cultural knowledge that have the potential to be developed as tourism products include: cultural expressions such as dance and design; spiritual knowledge including beliefs systems; technical knowledge including use of flora and fauna; scientific and ecological knowledge (Janke and Michael Frankel and Company, 1998); cultural lifestyles including seasonal foods gastronomy and; the employment of senses other than sight to understand the landscape from Indigenous perspectives. For example, while sound, taste and touch were essential elements of the daily routine of the traditional inhabitants of the study region, these senses are primarily ignored in tourism narratives. Knowledge management tools that can assist in developing authentic Indigenous tourism experiences include knowledge collection, verification, digitalising and databasing, and knowledge (data) management (Adam, 2007; Stevens, 2008).

Until recently, the tourism presentation of Australian Aboriginal knowledges has primarily focused on Western-centric views relating to cultural expression, including performance, art, and artefacts (Ruhanen & Whitford, 2019). This can lead to a loss of authenticity as performances are commodified and staged to appeal to tourism audiences. A

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more comprehensive understanding of strategies to access Indigenous cultural knowledge and how it can be managed will assist Indigenous peoples in developing tourism products (Whitford & Ruhanen, 2009) is required.

Previous research has suggested models such as the Indigenous Tourism Product Design Model (Espeso-Molinero, Carlisle, & Pastor-Alfonso, 2016) and collection of traditional knowledge using information and communication technology (Diamini, 2017) as solutions to using cultural knowledge to develop Indigenous tourism products. Most of this previous work focused on Indigenous groups who have maintained an unbroken connection with their ancestral lands. However, in the study region, government assimilation policies focused on the forceful removal of Aboriginal persons from their ancestral lands and relocation to missions and government institutions disrupted cultural continuity and had an enormous impact on Country-based cultural knowledge (Watson, 2010). Country, in an Indigenous tourism context, refers to “all the values, places, resources, stories associated with (an) area and its features ... it describes the entirety of (the) ancestral domains ... the Country of (the) ancestors (for which the particular Aboriginal group members are) the custodians or caretakers” (Reconciliation Australia cited in Schmider, Cooms, & Mann, 2022).

Reconnecting with cultural knowledge offers an avenue for empowering the region’s rainforest Aboriginal traditional custodians to present their cultural knowledge as tourism products on their own terms, not those that have to now been presented as a Western-centric version of local Indigenous cultures. One measure can be accessing authoritative cultural knowledge within Indigenous groups. Another measure is what this research addresses, regarding secondary information from collecting institutions. Both steps can be supported by developing culturally appropriate knowledge management databases for storing, retrieving, and utilising cultural knowledge as authorised.

## 1.2. Theoretical framework

In this research, we adopted stakeholder and knowledge management theories to inform our theoretical framework. Wondirad and Ewnetu (2019, p. 104155) stated that in a tourism context, stakeholder theory is a helpful tool for understanding ‘the diverse relationships amongst all relevant parties who have a stake in tourism development and their respective interest on the stake at hand’. This guided our research direction by focusing on the cultural imperative that Indigenous cultural knowledge is owned collectively by respective Indigenous groups (Janke, 2022). In this research, we empowered Indigenous stakeholders to voice their traditional custodian opinions, a position endorsed by stakeholder theory on the need for local stakeholders to participate in tourism development planning and decision-making (Baral & Heinen, 2007; Baral, Heinen, & Stern, 2022; Wondirad & Ewnetu, 2019). Understanding the views of Indigenous stakeholders also provides a platform for expanding future research to include a broader range of tourism stakeholders, including commercial operators.

According to Rubenstein-Montano et al. (2001), the key role of knowledge management is to provide a systematic approach to identifying and using knowledge in an organisation. Rubenstein-Montano et al. (2001) identified three types of knowledge management frameworks: prescriptive frameworks that provide direction but do not provide the mechanics of how this can be achieved; descriptive frameworks that identify key attributes and how they influence success or failure; and hybrid frameworks that combine the previous two types and advocated a practical “how things are done” approach. The hybrid approach (Heisig, 2009) offers considerable scope to identify, store and manage the cultural knowledge management tasks required in this research.

## 1.3. Research aim and research objectives

This research aimed to identify opportunities for Aboriginal groups

in the Wet Tropics region of north-east Australia to use Indigenous cultural knowledges to develop authentic Indigenous tourism experiences within a destination setting where Western perspectives of nature-based tourism have dominated. The need for this research stems from Indigenous stakeholders’ long-standing (over 30 years), but to now unsuccessful, aspiration to become involved in the tourism industry (Aboriginal Steering Committee, 1992; RAPA, 2016). Further, this research supports the Rainforest Aboriginal peoples’ “Managing knowledges relating to rainforest Country, culture and people” agenda (RAPA, 2016).

The research has three Indigenous cultural knowledge management objectives to investigate traditional custodian/Indigenous knowledge custodians’ views about

- RO1. Identifying the cultural knowledge supply and sharing of this knowledge;
- RO2. Converting and utilising cultural knowledge for tourism products; and
- RO3. Identifying opportunities for traditional custodians to implement strategies to participate in the tourism industry.

The three Research Objectives collectively suggest a staged identification process, the ability to develop cultural experiences, and implementation, as illustrated in Fig. 3.

To address RO1, the paper first investigated how knowledge repatriation of secondary information could be used as a tool for accessing knowledge that may be used in Indigenous tourism product development. Knowledge repatriation refers to identifying and collecting Indigenous cultural knowledge held in repositories such as museums and libraries.

The lead author’s status as a traditional custodian elder in the study region provided a high degree of insider knowledge (te Hau, 2016) and an Indigenous standpoint (Bodkin-Andrews, Bodkin, Andrews, & Whittaker, 2016) on the issues under investigation. The senior Indigenous researcher status of the third author and the tourism knowledge of the second author complemented the lead author’s understanding of Indigenous cultural knowledge issues.

## 1.4. Background to the research needs

Challenges faced by the current generation of custodians of Indigenous cultural knowledge include recovering and revitalising cultural knowledge (Tang & Gavin, 2016), assessing which elements should be available (Kimball, 2016) for incorporation into tourism products, and managing this knowledge (Janke, 2005). The need to recover cultural knowledge in the Australian context is the result of government assimilation policies that sanctioned the forceful removal of many traditional custodians from traditional lands and cultural practices (Haebich, 2014). As a consequence, the handing down of oral cultural knowledge from generation to generation was disrupted (Nakata, 1998) and, in some areas, discontinued (Langton & Rhea, 2005). Although much of the information contained in Indigenous knowledge systems has been lost, some information about rainforest Aboriginal Country, culture and people was recorded and is retrievable as secondary information from diverse public and academic repositories (Anderson, 2005). This availability of knowledge is irrespective of the archives themselves being Westernised establishments with records often reflecting a colonial view of history (Sentance, 2019). Substantial knowledge management strategies have yet to be capitalised on to facilitate this process.

## 2. The study area

### 2.1. The biocultural study region

Fig. 1 outlines the extent of the Wet Tropics biocultural study region, including major urban centres, the Wet Tropics of Queensland World



Fig. 1. The Wet Tropics biocultural study region with traditional custodian groups (Terrain et al., 2021).

Heritage Area (WTQWHA), the Great Barrier Reef World Heritage Area, and the region’s 24 rainforest Aboriginal traditional custodian groups. Before the COVID-19 pandemic, the study region generated an estimated 2.2 million domestic and international tourist visits per year (TTNQ, 2020) and AU\$ 2.6 billion in direct and indirect income (WTMA, 2015).

The study region is within the traditional estates of Rainforest Aboriginal groups who have Native Title legal rights or ongoing claims over 87.5% of the WTQWHA (RAP, W. f, 2018) as a result of the 1992 Mabo High Court Case (Rubinich & Keller, 2020) which inserted native title doctrine into Australian law. The region’s traditional custodians

have a long-standing aspiration to preserve, promote and educate visitors and residents about rainforest Aboriginal culture by developing tourism products and experiences (Ignjic, 2001; RAPA, 2016).

The study region has one large successful Indigenous-owned tourism experience (Mossman Gorge) and a number of small specialist tour operators and galleries that sell Indigenous art and artefacts. Although the Wet Tropics tourism industry generates significant revenue, and Rainforest Aboriginal groups have Native Title across the region, it has been a long-held contention from the traditional custodian groups that they derive little economic and socio-cultural value from the tourism economy (Ignjic, 2001). The WTQWHA was inscribed on the World Heritage Register in 1988 to recognise its outstanding universal values (Australian Government, 2021). The area offers significant opportunities to promote Indigenous tourism experiences based on rainforest Aboriginal knowledge, culture, and practices (Aboriginal Steering Committee, 1992; WTMA, 2021).

2.2. The cultural knowledge custodians, Rainforest Aboriginal groups of the region

The study region encompasses the customary estates of over 300 extended apical ancestor families recognised in the Australian Native Title system and is organised into 24 rainforest Aboriginal identity groups within 10 Aboriginal language nation groups (Schmider and RAPA, 2022). The traditional custodians' rights and interests are represented by over 90 on-ground and sub-regional legal entities, including registered Native Title entities, cultural heritage bodies, land trusts, cultural and economic development companies, and other bodies (Schmider and RAPA, 2022).

There is a direct link between Indigenous tourism, Country, and cultural knowledge. Each of the study region's identity groups speaks specifically for their own Country, ancestral place, and ontological landscape (Brigg & Graham, 2020; Graham & Brigg, 2023). This

references the Aboriginal relationality connecting the spiritual, physical, emotional, social, and cultural relationships between a locality with kin and culture (NAIDOC, 2021), recognised through traditional law and custom and within the Native Title legal system (RAPA, 2015). Groups speak for their Country at the family, identity group, language group nation, and biocultural study regional levels (RAPA, 2016).

For this reason, it is necessary to recognise the individuality of local traditional custodian groups and how cultural knowledge and cultural authority are held at location-specific extended apical ancestor family level (Babidge, 2011). As Wohling (2009) cautions, respecting the rights and views of the various groups within the hierarchy of cultural authority and cultural knowledge illustrated in Fig. 2 is essential if cultural knowledge is to be explicitly used as a tourism product.

3. Literature review

Building on earlier work by Butler and Hinch (2007), Ruhanen et al. (2015, p. 74) define Indigenous tourism as any 'tourism activity in which Indigenous people (sic) are directly involved either through control and/or by having their culture serve as the essence of the attraction'. While this definition does not explicitly address issues related to the retention of ownership of cultural knowledge, it does recognise the central role of Indigenous knowledge in Indigenous tourism. It highlights the urgency of ensuring unique cultural knowledge is collected and available to Indigenous groups or individuals embarking on an investment in the tourism industry.

Indigenous knowledge is described as unique local cultural knowledge, including traditional wisdom transmitted across generations, usually orally and through cultural traditions (Janke, 2022). Shizha (2016) reminds us about the communal ownership of Indigenous knowledge when codifying Indigenous knowledges for the contemporary knowledge economy. Chung and Yoon (2015) work provides insights into local communities as social capital for knowledge assets.

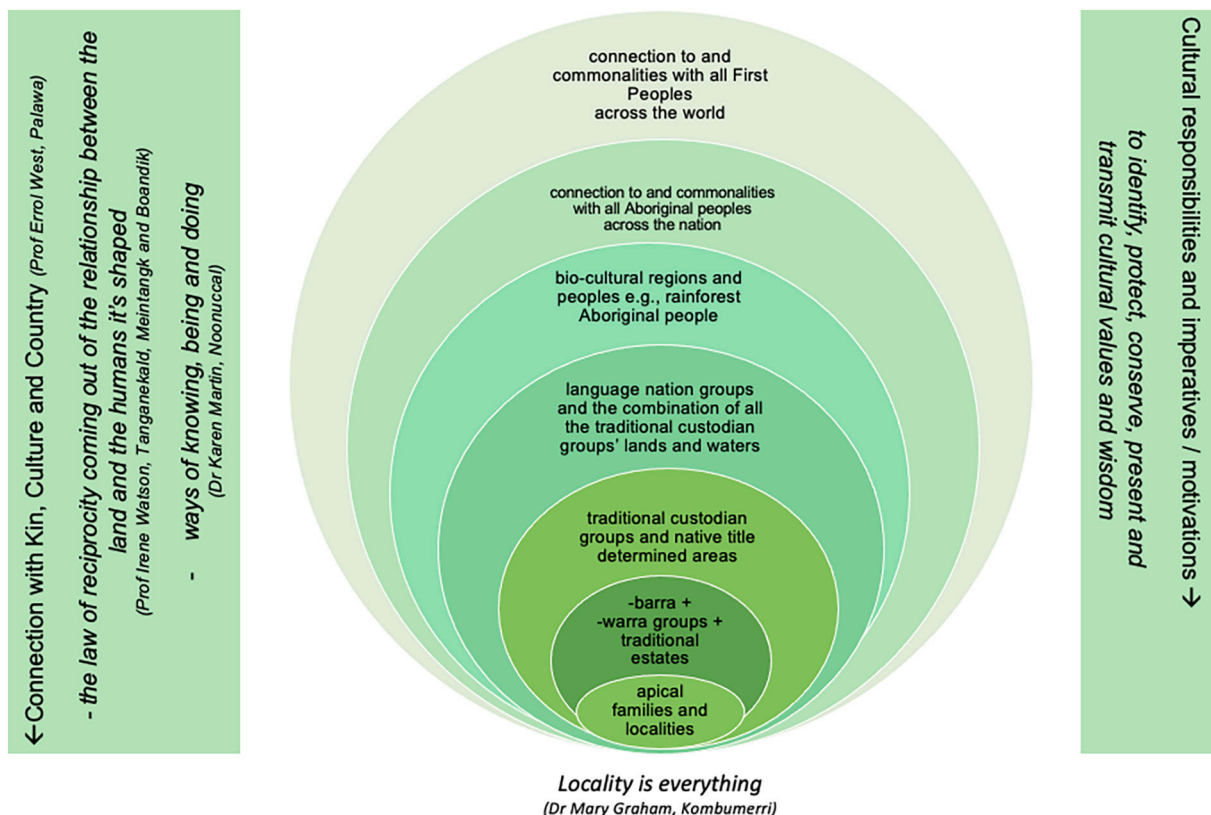


Fig. 2. Scales of cultural authority and cultural knowledge (Schmider & Locke, 2020).

Further insights can be drawn from: [Orozco and Poonamallee \(2014\)](#) about ethics in commercialising Indigenous knowledges; [Yiu and Law \(2014\)](#) about knowledge sharing for tourism; and [Wahab, Abdullah, Astuti, and Rohaizad \(2020\)](#) who commented how tourism can be used as a lever of preserving Indigenous knowledge by encouraging participation of younger generations.

Indigenous Australian cultural knowledge is subject to cultural and intellectual property considerations ([UN ECOSOC, 1994](#)). As set out in the United Nations Declaration on the Rights of Indigenous People ([2007](#)), Indigenous peoples hold collective rights and custodial responsibilities related to their unique cultural knowledge. For this research, [Hunter \(2005\)](#), p. 109) description of cultural knowledge was adopted: “It includes cultural heritage in the form of traditional stories, songs, dances, and ceremonies that reflect beliefs related to spirituality, family, land and social justice. It includes potentially patentable knowledge about traditional medicines, foods, farm practices, architecture and construction, handicrafts, artwork, and folk music. It includes knowledge about people, places, plants, animals, and historical events associated with a particular community”.

Two Google Scholar searches were undertaken to identify previous research into aspects of Indigenous cultural knowledge in Australia. The first used identifiers that included “local cultural knowledge” and “Wet Tropics”. For “local cultural knowledge”, searches included combinations of “traditional”, “Indigenous”, “cultural”, “biocultural”, “ecological”, “biodiversity” knowledge” ([Schultz, Walters, Beltran, Stroud, & Johnson-Jennings, 2016](#)). Publications from seven research institutions investigating issues associated with the study region were identified. Of the 3000 publications identified, 72 publications (2.4%) recognised traditional custodian interests; none had Aboriginal lead authors, 84 (2.8%) acknowledged traditional custodians as co-authors and 210 (7%) were written without acknowledging traditional custodians as co-authors. Most of this literature is concerned with the region’s environmental management.

The second search focussed on “Indigenous tourism” and included ecotourism, nature and rainforest tourism, protected areas including world heritage tourism, heritage tourism, cultural tourism, and sustainable tourism. The review was limited to academic and grey literature from Australian governments and tourism industry publications. Regional-level reports written by Rainforest Aboriginal persons or groups were also included. The search identified 329 Australian and international sources. A substantial body of Australian literature on Indigenous tourism was identified but offered few examples of tourism

experiences developed from local cultural knowledge. Twenty-four Australian articles cited specific examples of local knowledge, including four papers that included references to the Wet Tropics. However, these were mainly concerned with the long-established, but currently closed, Tjapukai Aboriginal Park near Cairns. One article, [Leakey and Helling \(2003\)](#), discussed the Mamu Aboriginal group’s bush foods nursery project, where cultural knowledge was drawn from secondary and primary sources and used to develop short-worded signs for native plants.

Overall, the review failed to identify examples of literature that discussed developing and integrating managing Indigenous cultural knowledge as tourism industry products. This finding highlights an important gap in the literature. Nevertheless, the review provided insights that may assist Indigenous groups interested in developing cultural knowledge tourism products. These insights informed the development of the proposed framework illustrated in [Fig. 3](#). Examples included planning and development ([Ruhanen, Whitford, & McLennan, 2013](#)), visitor satisfaction ([Mkono, 2016](#)), community participation ([Schmiechen, James, & Tremblay, 2010](#)), databasing local cultural knowledge ([van Gelderen & Guthadjaka, 2017](#)), overcoming intellectual and institutional barriers ([Ens et al., 2015](#)), and product development ([Walker & Moscardo, 2016](#)).

The review also identified a preliminary list of the types of tourism experiences that may be developed and other ideas that could be incorporated into the stakeholder survey discussed later in this paper. A final and significant outcome of the review was identifying the lack of research into Indigenous cultural knowledge management issues and understanding of pathways that may be used to connect local cultural knowledge with the tourism industry to develop culturally appropriate tourism experiences.

#### 4. Methodology

Researching Indigenous needs and interests raises ethical considerations. Outcomes should include specific results that respond to Indigenous peoples’ needs and interests, and local Indigenous parties should directly benefit from the research ([AIATSISS, 2022](#)). [Whitford and Ruhanen \(2016\)](#) recommended that Indigenous tourism research be action-oriented, provide for iterative, adaptive, and flexible knowledge creation, be holistic and appropriate and provide a more inclusive and wide-ranging understanding of Indigenous stakeholder views. [Notzke \(1999\)](#) identified two additional areas: the need for market realism and



Fig. 3. Proposed framework for utilising cultural knowledge as a tourism product (adapted from [Schmider, 2020](#)).

professionalism, and addressing the operational environment of Indigenous tourism experiences.

The research supports rainforest Aboriginal peoples' long-held aspirations: to be involved in and benefit economically and socio-culturally from tourism, educate visitors and residents, and manage their cultural knowledge (Ignjic, 2001; RAPA, 2016). This gives agency to the need for Rainforest Aboriginal peoples to be heard. With this in mind, the research design is exploratory and utilises the interpretive/constructivist paradigm (Mackenzie & Knipe, 2006) underpinned by insider understanding and an Indigenous standpoint drawing on insights into cultural authority illustrated in Fig. 2.

Guided by research objectives 1–3, we looked at critical issues that need to be considered in identifying, collecting, determining, and using cultural knowledge for tourism purposes in the study region. We examined traditional custodian views about cultural knowledge available in publicly accessible materials from private and public archives, the internet, libraries, newspapers, film, and cultural artefacts (Thin, 2013). This secondary information supports Aboriginal narratives of Indigenous cultural knowledge including the impact of colonisation (Fredericks, 2010; Smith, 1999). However, reflexive care must be taken with secondary material because it may reveal the cultural processes and institutions associated with it (Thin, 2013). Strategies to empower traditional custodians to utilise their cultural knowledge in a tourism setting should align with Indigenous views and ethics and the long-established cultural protocols for sharing knowledge (IP Australia, 2021).

Fig. 3 illustrates a simplified process framework for utilising cultural knowledge for tourism experiences. The framework presents a knowledge hierarchy connecting local cultural knowledge supply with its ultimate availability for tourism experiences and is able to provide the elements recognised as important by Lodhi and Mikulecky (2010). The three stages of the framework mirror the three Research Objectives outlined earlier. Based on the available knowledge supply, the framework conceptualises the challenge of growing Indigenous tourism through three hierarchical steps commencing with stage 1, identifying, collecting, and assessing the local cultural knowledge supply. Stage 2 is concerned with the potential to develop cultural knowledge products based on supply, while stage 3 relates to strategies for operating cultural knowledge experiences. As the hierarchy illustrates, not all cultural knowledge is anticipated to be used as tourism products and experiences or will be of interest to the tourism sector.

A mixed-methods survey was adopted using open and closed questions that aligned with the three themes (identify, authorise, and implement) represented by the stages of Fig. 3. In addition, we included qualitative questions that enabled participants to provide lengthy responses in their own words. Insights from the literature review, the lead author's insider knowledge across the study area, the two Indigenous authors' combined experience in applied and academic Indigenous research and the second author's expertise as a tourism academic informed question development. The lead researcher's insider understanding of participants' contexts provided a subjective advantage in analysing responses mapped back to the framework stages. This approach enabled the development of an informed understanding of how Indigenous groups can access, manage, and use information related to local cultural knowledge and opportunities identified by respondents for participating in the tourism industry.

Giving agency to Rainforest Aboriginal peoples' voices was paramount. Using the Mearns and du Toit (2008) model of a tourism-centred Indigenous knowledge audit across communities was not feasible because many traditional custodians live away from their specific Country. However, understanding the views of a sample of traditional custodians from across the study region was vital. Using a qualitative sampling matrix (Creswell, 2002) and the lead researcher's networks (Haselmair, Pirker, Kuhn, & Vogl, 2014), we utilised purposive sampling of participants across the study region's traditional custodian groups. Participants were selected using two criteria: their roles within their

Aboriginal groups as traditional custodians who had some understanding of cultural knowledge available locally and elsewhere, and participants had some sense of Aboriginal groups' aspirations to engage in tourism operations. Participants were given the option of electronic self-completion or recorded face-to-face yarning with the lead researcher. All but two of the 28 participants chose face-to-face engagement using the yarning method. Interviews were recorded with the participant's permission, taking an average of 62 min each between May and September 2020.

Indigenous research yarning involves a respectful relationship, empowering, culturally friendly, and informal conversation with a view to in-depth understanding (Fredericks & Adams, 2011) as reflected in the lead researcher's Indigenous standpoint. Bessarab and Ng'andu (2010) outlined how yarning can be a specific method contextualised explicitly as 'research yarning' instead of conversational or social yarning. As well as being an ethnographic method, yarning can be used for semi-structured interviews.

Part 1 of the survey focused on socio-demographic factors. Part 2 included questions about participants' views on cultural knowledge, existing publicly available cultural knowledge records, tourism activity in their identity group's lands and waters, and integrating cultural knowledge into tourism products. Qualitative questions were used to empower participants to provide responses in their own words. In Part 2 (a), participants assessed 24 cultural knowledge topics, indicating their possession of knowledge, ability to transmit it, its shareability with non-Indigenous individuals, and local availability. In Part 2(b), participants responded to inquiries about their local cultural knowledge, including its documentation in collecting institutions, research and publication status, potential benefits, and personal knowledge of a database. Parts 2 (c) and 2 (d) asked for views on the benefits of participating in tourism, their knowledge of local tourism and their vision for tourism. Questions in Part 2 directly corresponded to the framework outlined in Fig. 3.

Content analysis of questions in Part 2 was based on themes identified during the literature review. It employed Saldaña (2016) provisional coding for exploratory methods, which allows for anticipated identifiers to be derived before fieldwork. The lead author's insider understanding of participants' contexts provided a subjective advantage in analysing responses mapped back to the framework stages (Fig. 3).

The research team ensured that relevant codes governing research into Indigenous issues, including AIATSIS (2018), were adhered to. To gain ethics clearance, we followed the directives outlined in the National Health and Medical Research Council's guidelines for undertaking research with Aboriginal and Torres Strait Islander peoples and communities (NHMRC, 2018).

#### 4.1. Limitations

While saturation was achieved with study participants, saturation on a whole-of-study region scale may not have been achieved due to the number of traditional custodian identity groups, gender, age-related characteristics, number of traditional custodians in the region, size of the area and the impact of COVID-19. In part, this participant gap relates to Aboriginal pedagogy of place (Dempster, 2007), with the research deliberately recognising cultural authority imperatives with the region's multiple traditional custodian apical ancestor families, identity groups, and custodial relationships with Country. Another participant-related gap involved the location and the need to engage with traditional custodians in the northern and southern parts of the study region. A final limitation that must be addressed in the future is that the research design did not consider the relationships between traditional custodians' individual and or collective skill sets and capacity to engage in the tourism industry.

## 5. Findings

Female respondents made up eighteen of the twenty-eight-person

sample. A fifth of respondents were members of the generation referred to locally as the “younger generation” (generally aged under 30). The age range of participants tended towards persons notionally retired from the mainstream workforce or with adult children. Seventeen, nearly two-thirds, held a leadership or management role in a traditional custodian legal entity. While three, a tenth, were over 65, a third were considered within the Indigenous community to be the “elder generation” holding cultural authority. A third of respondents who commented about their cultural sharing and teaching roles were more likely to have leadership roles or elder seniority.

5.1. Views on the cultural knowledge supply and sharing (RO1)

Responses to a listing of 24 cultural content topics led to identifying a further 15 topics and potential product and experience storylines across environmental, ecological, historical, social, cultural, spiritual, and political areas. Most respondents, more than three-quarters, considered there needs to be more cultural information held locally amongst traditional custodians. All respondents either know or think that information about their Country, Aboriginal group, culture, or language has been recorded or researched. All indicated they know or believe that various collecting institutions, including libraries, museums, archives, and research centres, hold their cultural knowledge information. Table 1 illustrates a range of sources identified by participants as sources for secondary information.

In addition to those in the survey, the Indigenous research yarning method identified a further 30 collecting institutions within these categories. In this regard, Respondent 7 said, “... it will be good to know where everything is, the parties holding the material have obligation, and while it will take years (to do so), it will be good to bring it back to Country.” Respondent 10 also held this view “... to have all that information gathered... I mean it’s also wealth of stuff so that the younger people or even the older people could look at and see and read. Not only just through visual, but auditory.... information belongs in Country because it comes from that Country.”

Every participant agreed that it is essential that cultural knowledge held in public repositories is made available for them to access freely, especially if informants had been members of the extended apical ancestor family or identity group. For example, Respondent 23 stated, “... every bit of information that’s been taken from people, Aboriginal people, Bama, belongs to them, and it should be given back .... It would be the most exciting and wonderful day.... if all of that information was handed back to the rightful families that they’ve gleaned all of this information from ...” Respondent 6 clarified, “... it needs to be given back to the families and community but collected all together and people have to be able to work it

Table 1  
Sourcing secondary information.

1. Local networks	Local Indigenous organisations including traditional custodian entities, historical and family history societies, local museums, local government including local library history sections, and tourism visitor centres
2. Regional networks	State government department regional offices, research centres, the conservation sector and land management parties, the regional Aboriginal land council
3. State level sources	State government department head offices including state library and state museum and state archives, state historical and geographic societies, university anthropology and library units, and relevant inter-state institutions, e.g., museums and archives
4. National level sources	National government department offices and national library and national museum and national archives, national bodies such as the Australian Institute of Aboriginal and Torres Strait Islander Studies
5. Online sources	Google, Google Scholar etc., YouTube, FaceBook pages and groups
6. Miscellaneous	For example, church mission records held at state, national and international levels

through and be able to say what’s right or wrong with this ...” All participants were emphatic that this information should be available through a cultural knowledge information database. However, less than a half have used a database of this type.

Participants were asked for their views on sharing their traditional custodian group’s cultural knowledge. Results indicated that younger Aboriginal persons had little cultural knowledge because of Westernisation influences. Respondent 17, a youthful generation, demonstrated this by stating, “... the hardest to know about are Aboriginal beliefs, values, lore, rituals and ceremony because it contradicts white-man law today and society today”. Respondent 10 also supported this observation “... when I’ve done cultural training, a lot of our young people seem to have lost their identity and picked up other identities.”

A third (nine) of the twenty-eight respondents noted that most of their cultural knowledge sharing was through teaching roles. This included visitors to their Country or within the extended apical family, locality, or identity group, with Aboriginal young persons or with organisations with Aboriginal employees. Respondent 8 demonstrated this by stating she is a cultural practitioner teaching her children how she was brought up, and Respondent 6 teaches traditional law through Aboriginal workshops. Respondent 10, who works with organisations employing Aboriginal persons, stated, “I kept saying to them (employers), you know, flip the coin; Australia does have another side, another history. It may challenge their worldview and perceptions, but it’s a reality.”

5.2. Views on converting and utilising cultural knowledge for tourism products (RO2)

The Indigenous research yarning method proved helpful in exploring participants’ knowledge of the tourism products and experiences available within their Country and in understanding the perceived authenticity of cultural knowledge products. While there were no comments about internal authentication and approval processes for sharing cultural knowledge with non-Indigenous parties, a fifth of respondents referred to authorisation from elders.

Yarning affirmed the 16 previously identified experiences and revealed an additional nine. One example was the ‘Welcome to and Acknowledgement of Country’ (Pelizzon & Kennedy, 2012). All but one also believed there were not enough cultural products in their Country but were unsure how to rectify this problem. Table 2 outlines the initial list of 16 tourism products and experiences identified by the lead author corroborated by literature and nine additional products and experiences

Table 2  
Tourism products identified by authors and respondents.

Tourism-related experiences identified from the literature	Additional tourism-related experiences identified by respondents
Trails	Social media including Facebook sites, Instagram, LinkedIn
Guiding	Aboriginal and dual place naming, with explanations
Immersion and direct experience (living it)	Welcome to and Acknowledgement of Country practice
Displays	Educational talks including young people’s groups
Information centre / museum / cultural centre	Site information, including massacre site information
Songs	Aboriginal campgrounds
Graphics	Festivals, including sports
Artefact collections	Video clips and films
Artworks	Tourism visitor pledges
Dance	
Signage	
IT products and digital technology	
Website	
Database	
Language	
Publications including brochures	

identified in this research.

### 5.3. Views on opportunities for traditional custodians to implement strategies to participate in the tourism industry (RO3)

The final research objective aimed to identify insights on strategies for operating cultural knowledge experiences in their Country. Three-quarters of the respondents (twenty of twenty-eight) indicated significant challenges facing traditional custodians hoping to participate in tourism. This included loss of cultural knowledge, problems developing authentic experiences, difficulties in recovering and revitalising cultural knowledge from sources that may contain biases made by non-Indigenous authors and successful repatriation of cultural knowledge information held in non-Indigenous institutions or by others. Respondent 4 supported this view "... because we've lost elders with significant knowledge and language that goes with it and the stories, ... the challenge for us now is finding that information that might have been recorded with Auntie X back in the '80s..."

All respondents considered the challenges identified in the literature relating to participating in the tourism industry to be relevant. These challenges were presented under seven headings: loss and recovery of cultural knowledge; issues related to Indigenous knowledge systems; conserving, transmitting, managing, and interpreting traditional knowledge; product development issues; community participation issues; and ownership issues. Because they recognised all aspects as challenges, respondents had difficulty nominating what they considered the most significant challenges for traditional custodians making decisions about incorporating cultural knowledge into mainstream tourism.

There was general agreement that Aboriginal and mainstream tourism operators should include cultural knowledge products in their offerings. However, as Respondent 19 observed, "... We have a lot of tour groups that come through that we don't even know about ... but hey, don't talk with us even though we have agreements with (government) ..."

Respondents were also asked if they knew of or had utilised the tourism industry or tourism-related government networks to assist them in becoming involved in tourism. Only one respondent engaged with an industry body indicated knowledge of a resource for helping traditional custodians develop cultural knowledge promotion products and experiences. The two main approaches for building on cultural knowledge to increase Indigenous participation are addressing the seven sets of challenges and the Indigenous-managed offerings of mainstream operators.

## 6. Discussion

This research investigated three related knowledge management objectives that collectively identified opportunities for local traditional custodian groups to develop authentic local cultural knowledge experiences. The Indigenous research yarning method gave the researchers valuable insights that may have been missed if standard survey or interview methods were used. Results identified a number of issues that needed to be resolved at each stage of the cultural knowledge framework (Fig. 3). The findings also provide valuable perspectives in demonstrating how applying cultural knowledge management strategies relates to tourism planning, management, and development practices. From this perspective, the findings support Cooper (2018) acknowledgement of the value of knowledge assets.

### 6.1. Towards the cultural knowledge supply

The results highlight the advantages Indigenous groups can derive from adopting knowledge management strategies for retrieving cultural knowledge, protecting their intellectual property rights, and utilising cultural knowledge to develop tourism experiences. Fig. 3 offers a simplified framework for this process. One of the key barriers to

developing cultural knowledge-based tourism products is understanding how knowledge management strategies can be used to build and utilise cultural knowledge databases. This is reflected in the finding that while all participants said they thought that their Country, groups, and culture had been researched and believed these records should be made available, there was little evidence of local groups identifying, accessing, and retrieving this knowledge.

While there was some knowledge about the location of cultural knowledge information in the public domain and agreement on the need for a database to house it, the research found strong support for systematically collecting, cataloguing, authenticating, and using this knowledge for tourism purposes. At the national level, there has been acknowledgement since at least the mid-2000s (Nakata & Langton, 2007) of the need to repatriate cultural knowledge housed in libraries and collecting institutions. Removing access and repatriation barriers will assist Indigenous groups to regain control over aspects of their cultural knowledge.

The findings also indicate the need to catalogue data consistently to assist traditional custodians in searching databases. To this end, libraries in Canada, New Zealand and Australia are working towards developing classification schemes based on Indigenous knowledge (Masterson, Stableford, & Tait, 2019). These classification systems are based on transitioning from the traditional Western cataloguing and classification system to more decolonised, user-friendly, and culturally appropriate methods based on the relevant cultural knowledge structures.

Stage 1 of the framework, managing the local cultural knowledge supply, adopted a different approach to those used in the past. Past approaches generally focused on business and tourism experience development support. While the approach used in this research has a specific focus on applying local cultural knowledge as a pathway for developing Indigenous tourism experiences, it also has a second focus on how Indigenous, tourism, educational/ scientific, governmental/ inter-governmental, industry and environmental networks (Xiao, 2006) can support cultural knowledge management and product development.

### 6.2. The potential to develop cultural knowledge products

Stage 2 of the framework relates to converting cultural knowledge into tourism products. Despite the Indigenous research yarning method being used to probe, all but one participant has yet to develop a vision for engaging with the tourism industry in their Country. While the research identified an extensive and comprehensive range of potential 'storylines' suitable for use in tourism contexts, it is apparent that traditional custodians need to know more about the opportunities for developing tourism experiences in their own Country (Notzke, 1999). Resources such as the Tourism Events Queensland guide about storytelling (TEQ, 2021) and the Tour Guide Program operated by the Wet Tropics Management Authority (WTMA, 2012) are two examples of the type of assistance needed.

The Indigenous standpoint empowerment imperative (Bodkin-Andrews et al., 2016) emphasises the need to investigate the demand for cultural knowledge products. Each product identified in Table 2 represents a specific activity pathway that can be used to develop Indigenous tourism experiences, although not all can be commercialised. For example, while guiding can generate jobs, information activities such as Facebook sites and tourism infrastructure, including themed trails, can create authenticity, provide an Indigenous perspective to the landscape, and indirectly support Indigenous-owned tourism businesses.

### 6.3. Strategies for tourism industry participation

The final stage of the framework relates to the strategies that facilitate the successful conversion of local cultural knowledge into the tourism products and experiences identified in Table 2. Although there are some successful examples of incorporating Indigenous cultural knowledge into tourism experiences in the study region (e.g., Mossman



George), the responses indicate assistance was required with identifying strategies for converting cultural knowledge into tourism experiences. This need is a reflection of the current structure of government support programs for Indigenous tourism enterprises that provide funds for business development but not for identifying cultural knowledge necessary to support Country-level experiences.

## 7. Conclusion

The place-based nature of cultural knowledge and tourism (Figs. 1 and 2) and the lack of traditional custodians' direct exposure to and participation in the tourism industry are significant challenges that need to be addressed. The results do indicate there is strong support for developing management systems for retrieving cultural knowledge from various institutions and for developing cultural knowledge products and experiences. However, it is also apparent that traditional custodian groups and their cultural knowledge holders need support in accessing and managing secondary cultural knowledge sources and developing these as tourism products.

The research makes a number of contributions to Indigenous tourism research and to advancing Indigenous cultural knowledge management theory. The first contribution relates to the validation of the Indigenous research yarning method as a strategy for obtaining information that aligns with cultural protocols around sharing knowledge and adds a new dimension to how knowledge can be collected and verified. This finding confirms Bessarab and Ng'andu (2010) observations that the method's culturally-appropriate respect, protocol, relationality, and accountability in Indigenous research enable Indigenous participants to engage more freely and in-depth.

Second, the findings affirm the importance of and support for retrieving cultural knowledge as a prerequisite for developing authentic Indigenous tourism experiences. The retrieval process will require traditional custodians identifying, accessing, and managing publicly available secondary information. A robust cultural knowledge management system for storage and retrieval as recognised by Lodhi and Mikulecky (2010) and that recognises Indigenous cultural and intellectual property considerations (Janke, 2022) will be needed to achieve this.

The third contribution is validation of the cultural knowledge framework (Fig. 3) as a proposed model that can guide Indigenous groups in utilising cultural knowledge for tourism. While relatively uncomplicated, the framework provides an effective visual and operational representation of the actions required to use authorised cultural knowledge to create products for sharing and educating (RAPA, 2016). It is also evident that empowering traditional custodians is essential because cultural knowledge authority, rights, and responsibilities involve the apical ancestor family groups. This approach supports the concept of "speaking as Country" (Rigney, 2021), recognising the need for place-based approaches as highlighted in Figs. 1 and 2.

Insights were also gained into the extent of traditional custodians' aspirations to become involved in tourism and, through this process, create a distinctive Indigenous destination image that is original and will assist in developing an alternative image to conventional Western presentations while complementing existing images. Developing a distinctive Indigenous overlay to existing destination imaging will overcome the current Western-centric perspectives of landscape observed by Seiver and Matthews (2016) and provide alternatives to Western-centric expressions of culture noted by Ruhanen and Whitford (2019).

While an extensive range of potential cultural knowledge suitable for developing tourism products and experiences (Table 2) was identified, the study was unsuccessful in identifying specific strategies that could be employed in stage 3 of Fig. 3 for converting participant enthusiasm into specific experiences, echoing the gap identified earlier in the literature review. Addressing this challenge will require support that includes strategies for accessing and collecting cultural knowledge, conserving it, utilising it to develop tourism experiences, and ongoing access to

training and business support. Current business support provided by the Indigenous Land and Sea Corporation ([www.ilsc.gov.au](http://www.ilsc.gov.au)) is one avenue for achieving this outcome.

This research has highlighted the importance of adopting appropriate cultural knowledge management strategies for collecting, managing, and using Indigenous cultural knowledge as the basis for developing authentic Indigenous tourism. A corollary of this observation is the need for Indigenous groups wishing to use cultural knowledge as the basis for developing new tourism experiences to understand and employ customer knowledge management strategies (Muniz, Dandolini, Biz, & Ribeiro, 2020) to prevent a mismatch between perceived and actual tourist demand for these experiences. On a destination scale, where Indigenous knowledge experiences compete with non-Indigenous experiences, possibly with both products based on a similar tourism resource such as the Wet Tropics rainforests, consideration needs to be given to how Indigenous cultural knowledge management strategies can be successfully employed to progress traditional custodian aspirations.

### 7.1. Future research

Future research could investigate the characteristics of an Indigenous-led capacity-building approach supporting knowledge management platforms, including data-mining and information and communication technology strategies (Diamini, 2017). Research of this type should also consider how traditional custodians, universities, tourism industry bodies, collecting institutions and government parties can assist in enabling Indigenous tourism planning, development and management using the cultural knowledge framework as a guiding analytical tool. There is also scope for expanding the process framework illustrated in Fig. 3 using process models, such as in software engineering (Sarker, Faruque, Hossen, & Rahman, 2015), to highlight Indigenous engagement and leadership and continuous improvement overall and within each stage.

### CRedit authorship contribution statement

**Joann Schmider:** Writing – review & editing, Writing – original draft, Visualization, Validation, Software, Resources, Project administration, Methodology, Investigation, Funding acquisition, Formal analysis, Data curation, Conceptualization. **Bruce Prideaux:** Writing – review & editing, Supervision, Methodology, Conceptualization. **Bronwyn Fredericks:** Writing – review & editing, Supervision, Methodology, Conceptualization.

### Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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We honour the Country we live in, work on and travel through, and its traditional custodians.

### Appendix A. Supplementary data

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.annale.2024.100141>.

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- Professor Prideaux's tourism research interests relate to coral reefs, protected areas, rural and remote areas, crisis management, sustainability issues, and climate change.
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