Research Article

Disseminating Traditional Knowledge Through Digital Media: An Exploratory Study

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ARTICLE INFO	ABSTRACT
	Traditional Knowledge includes cultural heritage and practices passed through generations and preserved through oral traditions or education. Recognising the significance of traditional knowledge in the current scenario, National Education Policy 2020 also envisions integrating the Indian Knowledge System at all levels of Education. Traditional knowledge includes tribal knowledge and indigenous and traditional ways of learning in Mathematics, Astronomy, Philosophy, Yoga, Architecture, Medicine, Agriculture, Engineering, Linguistics, Literature, Sports, and Games, as well as in Governance, Polity, and Conservation. Digital media is an impertinent tool for preserving and sharing traditional knowledge globally. This paper investigates how digital media can be explored to disseminate cultural traditions and knowledge with sensible use. Here indulging in superstitious propagation and checking the authenticity of the sources are major challenges. It is important to avoid any cultural misinterpretation too. Research Questions are ● How can traditional knowledge be effectively disseminated through digital platforms? ● What are the ethical, cultural, and technical challenges of digital dissemination of traditional knowledge? Certain case studies are also selected through the World Wide Web and social media platforms. The basis of selection is their ability to demonstrate successful digital transmission of traditional knowledge. Further, with the help of thematic analysis, researchers detected the authenticity, popularity, and cultural sensitivity of the knowledge being shared on chosen digital media platforms. **Key Words**: Traditional Knowledge, Digital Media

Introduction:

Traditional Knowledge includes cultural heritage and practices passed through generations and preserved through oral traditions or education. Culture comprises the values, beliefs, practices, and material artefacts defining a group. Culture is "that complex whole which includes knowledge, belief, art, morals, law, custom, and any other capabilities and habits acquired by man as a member of society" (Tylor, 1871).

Heritage refers to the legacy of physical artefacts, intangible attributes, and natural elements inherited from past generations, which hold cultural, historical, or environmental significance for a community or society. Heritage encompasses tangible elements, such as buildings, monuments, and art, and natural heritage, including landscapes, biodiversity, and ecosystems that carry value for present and future generations. It also includes intangible elements, traditions or living expressions inherited from ancestors and passed on to future generations, such as oral traditions, performing arts, social practices, rituals, festive events, knowledge and skills to produce traditional crafts.

Types of Heritage
Cultural Heritage: Includes monuments, artefacts, and practices that represent a society's history and identity. Examples include historical buildings, ancient manuscripts, and festivals. Cultural heritage is preserved to maintain continuity with the past and to foster a sense of identity and belonging.
Natural Heritage: It comprises natural sites and landscapes that have environmental or ecological importance. Examples include mountains, rivers, and wildlife. Natural heritage is valued for its role in biodiversity, its aesthetic appeal, and its environmental significance.

Intangible Heritage: Refers to practices, expressions, knowledge, and skills that are part of a community's cultural identity. These include language, oral traditions, performing arts, rituals, and traditional craftsmanship. Intangible heritage is often passed down through generations and is essential to cultural diversity and identity.

Global Efforts for Maintaining Cultural Heritage and Diversity:

UNESCO says "The 'Intangible Cultural Heritage'(ICH) means the practices, representations, expressions, knowledge, skills as well as the instruments, objects, artefacts and cultural spaces associated therewith that communities, groups and, in some cases, individuals recognize as part of their cultural heritage". This ICH, transmitted from generation to generation, is constantly recreated by communities and groups in response to their environment, their interaction with nature and their history, and provides them with a sense of identity and continuity, thus promoting respect for cultural diversity and human creativity. 17 October 2024 was marked as the first International Day of the Intangible Cultural Heritage. For any cultural heritage to be enlisted, it may be oral traditions or expressions, performing arts, social practices, knowledge or traditional craftsmanship. ICH helps in achieving sustainable development goals. The UNESCO document on Intangible cultural heritage and sustainable development says that Intangible Cultural Heritage is essential for cultural diversity and sustainability and is in alignment with the UN's 2030 Sustainable Development Goals (SDGs). The following table shows the Representative list of ICH from India:

S.N.	Year of Inscription	Representative list of Intangible cultural heritage of Humanity from India
1.	2023	Garba of Gujarat
2.	2021	Durga Puja in Kolkata
3.	2017	Kumbh Mela
4.	2016	Yoga
5.	2014	Traditional brass and copper craft of utensil making among the Thatheras of Jandiala Guru, Punjab, India
6.	2013	Sankirtana, ritual singing, drumming and dancing of Manipur
7.	2012	Buddhist chanting of Ladakh: recitation of sacred Buddhist texts in the trans-Himalayan Ladakh region, Jammu and Kashmir, India
8.	2010	Chhau dance
9.	2010	Kalbelia folk songs and dances of Rajasthan
10.	2010	Mudiyettu, ritual theatre and dance drama of Kerala
11.	2009	Ramman, religious festival and ritual theatre of the Garhwal Himalayas, India
12.	2008	Kutiyattam, Sanskrit Theatre
13.	2008	The tradition of Vedic chanting
14.	2008	Ramlila, the traditional performance of the Ramayana

Table: ICH enlisted in UNESCO from India

Intangible cultural heritage (ICH) supports achieving sustainable development across various dimensions: Social, Economic, Environmental, Gender equality and Peace and security.
Social Development: ICH supports inclusive social goals such as food security, healthcare, water management, and education, enabling communities to sustain traditional knowledge systems.
Economic Development: ICH supports economic growth by sustaining livelihoods, generating employment, and promoting responsible tourism. It offers innovation for development by adapting traditional knowledge to modern needs.
Environmental Sustainability: ICH contributes to environmental sustainability by promoting practices that protect biodiversity, support sustainable resource management, and enhance resilience to climate change.
Gender Equality: ICH plays a role in shaping and transforming gender roles, helping to foster gender equality through cultural expressions and practices.
Peace and Security: ICH promotes peace and conflict resolution through practices that encourage dialogue, mutual understanding, and community cohesion. It also aids in post-conflict recovery by fostering shared cultural values.

Community Identity and Continuity: ICH, transmitted through generations, strengthens community identity and continuity, promoting respect for cultural diversity and creativity. ICH plays a major role in addressing fundamental human needs and its integration into development strategies for holistic, sustainable progress.

National Education Policy 2020 and Indian Knowledge System:

National Education Policy 2020 envisions that "Knowledge of India" includes knowledge from ancient India and its contributions to modern India and its successes and challenges, and a clear sense of India's future aspirations about education, health, environment, etc. These elements will be incorporated accurately and scientifically throughout the school curriculum wherever relevant; in particular, Indian Knowledge Systems, including tribal knowledge and Indigenous and traditional ways of learning, will be covered and included in Mathematics, Astronomy, Philosophy, Yoga, Architecture, Medicine, Agriculture, Engineering, Linguistics, Literature, Sports, Games, as well as in Governance, Polity, conservation. Specific courses in tribal ethno-medicinal practices, forest management, traditional (organic) crop cultivation, natural farming, etc. will also be made available."

Traditional Knowledge-

In academic contexts, "traditional knowledge" refers to the knowledge, innovations, and practices developed by indigenous and local communities over time, often transmitted orally across generations. This knowledge is deeply rooted in the cultural and environmental context of these communities and covers a wide range of areas, including agriculture, medicine, ecology, and spirituality. Traditional knowledge is not static but evolves as communities adapt to new challenges and environments. Traditional knowledge may include an understanding of local ecosystems, such as species identification, animal behaviours, and environmental patterns, Indigenous and traditional medical knowledge as natural remedies and techniques for maintaining health and treating illnesses and the ways communities have adapted to changing environments and climates over centuries.

Education system and academia are increasingly recognizing the value of traditional knowledge as a legitimate and valuable form of knowledge, complementary to scientific understanding. This recognition seeks to validate traditional knowledge systems, ensuring they are preserved and respected in scholarly work, and acknowledging their potential contributions to solving global challenges. Indian traditional knowledge itself was very rich. In modern academia, IKS is explored not only for its historical importance but also for its potential applications today. It contributes to interdisciplinary fields such as agriculture, traditional medicine, and sustainable practices. Government initiatives, such as the National Education Policy 2020 in India, encourage integrating IKS with contemporary education to promote a culturally rooted and holistic learning approach.

Material and Method:

Research Questions for the present study are:
•How can traditional knowledge be effectively disseminated through digital platforms?
•What are the ethical, cultural, and technical challenges of digital dissemination of traditional knowledge?
Digital Humanities and Digital fieldwork are used in this study. Digital Humanities is the utilization of computers and computational tools for the exploration, analysis, and production of humanistic knowledge." (Jennifer Guilian). The researcher tried to explore the answers to the above research questions through the exploration of digital media. Here digital media includes all available resources on the World Wide Web related to cultural and traditional knowledge. An exhaustive list of web resources is available, but the scope of the present paper is limited with few government portals and representative work in the field.

Results:

Here are available web resources that are successfully transmitting traditional knowledge through digital media. YouTube is very effective for this purpose.

Digital resources available related to IKS-

The Indian Knowledge System (IKS) encompasses the vast and diverse body of knowledge that has developed in India over the centuries. It includes a wide range of disciplines, such as Philosophy, Science, Mathematics, Medicine, Arts, Literature, and Spirituality, often rooted in ancient texts and practices. IKS is characterized by holistic approaches, integration with nature, and practical applications for social and spiritual well-being. Academia is increasingly studying the Indian Knowledge System as a distinct intellectual tradition, recognizing its contributions to various fields and its potential relevance in modern contexts. For the present study, following key aspects of IKS were included, and further relevant selected digital resources (case study) are discussed which have exhibited an exhaustive list of documentation and dissemination of the knowledge.

The website of IKS (Indian Knowledge System) is a cell under the Ministry of Education (MoE) and AICTE (All India Council of Technical Education). It is established to promote interdisciplinary research on all aspects of

IKS and preserve and disseminate IKS for further research and societal applications. On the Indian knowledge system dropdown menu of Bhartiya Khel,75 traditional games are listed and the rules of playing and detailed descriptions are also there. National Curriculum Framework for School Education 2023 also emphasises the importance of games and cross-curricular pedagogical approaches.

Apart from the IKS web page plenty of reading material and ongoing activities are available on the following web pages - Bhishma IKS, Sangam Talks, Study with Dadhich brothers, Knowledge Knocking, IIT Gandhinagar course on IKS and Gateways to IKS. The Sanskrit Department of Mumbai University uploaded 60 lectures on their YouTube Channel on the occasion of completing 60 years of the Department.

Digital Resources related to Cultural Preservation- The Ministry of Culture, under the government of India, is promoting and disseminating all forms of art and culture. On the website of the Ministry and Culture, under the drop-down menu Tangible, Intangible and Knowledge links related to museums, institutes and libraries are given. UTSAV portal is providing access to live streaming from various places of pilgrimage from its online *Darshan* page. It is a very authentic way of preserving and communicating traditional knowledge of India. It also has a plethora of manuscripts that are digitalised. The National Museum for Manuscripts and the National Library of India provide these texts with just a click away.

Digital Resources related to Sanskrit:
YouTube Channels like Sanskrit Today and Sanskrit Learning Channel offer free tutorials on spoken Sanskrit, grammar, and *Shlokas*. The Official Website of the Ministry of Culture, Government of India is having a treasure of downloadable resources, including Sanskrit grammar guides, vocabulary lists, and ancient texts with translations. Sanskrit learning resources are available on the SWAYAM portal also.

Digital resources available related to Yoga, Ayurveda, Medicine-
Morarji Desai National Institute of Yoga functioning under the Ministry of AYUSH is an autonomous organisation working to promote yoga philosophy and practices based on Ancient yoga traditions for holistic health and well-being. On its website (yogamdniy.nic.in) under the communication and documentation drop-down menu plenty of digital books on various relevant topics are available. It covers topics ranging from yoga for health and wellness, fundamentals of *Yoga*, *Yoga* breaks at the workplace, *Yoga* Apps, *pranayam*, Yogic Management of Diabetic Mellitus, *Yoga* for children, *Yoga* for pregnant women, *Yoga* management for arthritis, *Yogic* management for back pain, stress management etc. It also has video links related to proper *Yogic* practices. It is also on Facebook and YouTube. The Ministry of AYUSH - *Y*oga Portal, and other institutes are also disseminating *Yogic* courses. Yoga Course is also available on SWAYAM Portal too, for Skill building Digital resources related to Mathematics, Science and performing arts are available.

The Indian knowledge systems also include agricultural practices and environmental management techniques, such as traditional water conservation and crop rotation methods.

Challenges
In order to accurately represent and preserve the traditional knowledge systems, digital dissemination of traditional knowledge presents a number of ethical, cultural, and technical challenges. The ethical challenges include obtaining informed consent from communities prior to knowledge sharing, respecting cultural sensitivities regarding information ownership and access, managing data privacy and security, and navigating intellectual property rights. Cultural Challenges incorporates loss of cultural context when traditional knowledge is removed from its cultural settings, cultural sensitivity while sharing culturally sacred knowledge publicly, undermining the interpersonal, community-based transmission methods, cultural appropriation where elements of a community's culture are taken, commercialized, or used without permission or respect, often for profit. Technical challenges while disseminating traditional knowledge points out digital divide, preservation of authenticity, digital security and language barriers

To address these challenges, there are several potential solutions and best practices like taking community consent, following cultural protocols that honor the values and sacredness of certain types of knowledge, collaboration with Indigenous groups, taking all sorts of security measures etc.

Conclusion

Traditional knowledge is vast, and Indian knowledge was not preserved in modern ways. That is why the government and academia are promoting that scholars of various disciplines join hands to dig into the past so that this ancient knowledge can be disseminated properly. Although these web resources are preparing and providing enough resources, it is also required to promote their efforts through practitioners in the field.

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