

## **Vast Repository of Art and Crafts and the Need for Digitization- The Position of India**

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### **Abstract**

Over the past few years, there has been a rise in interest and knowledge about the importance of controlling and safeguarding Cultural Heritage on local, national, European, and global scales. "the heritage of physical artefacts and intangible traits of a group civilization that are inherited from previous generations" (Falser, 2011) is how Cultural Heritage (CH) is described. Recent man-made and/or natural disasters (such as the Iraq War, the Tsunami, earthquakes, fires, etc.) have only heightened the urgency of the situation. As a result, authorised authorities at all levels realised it was more crucial than ever to take all necessary precautions to safeguard Cultural Heritage for future generations.

The datafication and repurposing of such assets has significant promise because to recent advances in IT tools like processing images, AI, and Big Data technologies. A bibliometric and webometric study was conducted to investigate the current state of and future prospects for digital platforms dedicated to the promotion of art culture with yoga. It became out that three main categories of digital infrastructure—web portals, databanks, and purpose-built applications—exist for the preservation, dissemination, and promotion of art, culture, and yoga. The importance of universities in India being digitised to protect cultural heritage is highlighted in this research.

**Keywords:** Art culture Tools, Bibliometric Analysis, Culture, Datafication, Information Technology, Internet Platforms.

### **Introduction**

The creative sector is developing by drawing ideas from cutting-edge developments in other industries. Considering India's long history of diverse creative practises, the rate at which art is being digitised is unparalleled. Preservation and restoration efforts, as well as international exposure for Indian artists, are all receiving a boost from cutting-edge interventions like AI, VR, and Blockchain. The Buddhist caves of Ajanta are among the earliest examples of India's famed artistic tradition. The digital masterworks of contemporary artists are a living testament to the subcontinent's enduring cultural legacy. India's creative heritage has seen many transformations throughout the years, but the country's appetite for cultural fusion remains constant.

As a result of the information technology revolution, our customs and preferences have evolved. It has now spread across the world's cultural canon, including India's, supporting a new wave of Art Digitization. The West has developed a strong appetite for traditional forms of Indian art, such as

Mithila's Madhubani painting. These designs were formerly generated using a time-consuming manual procedure, but today they may be made via computer-aided designs (CAD).

With the help of the Digital India initiative, India's many artistic traditions will have a place to shine once more, and the country's cultural heritage will be preserved for future generations. Virtual reality (VR) techniques are also being used by a growing number of museums, which allows them to expand their audience while also improving their visitors' overall experience. Today's generation relies heavily on information technology, and it permeates every aspect of their daily lives. Today, thanks to the proliferation of digital resources, information from anywhere in the world can be accessed with just a few mouse clicks. Our efforts to promote and shape our artistic, cultural, and yogic legacy were aided by the integration of information technology and other technologies. India has a rich cultural history dating back more than a thousand years, which has contributed much to the country's progress. With 28 states or 8 union territories, India is home to a wide variety of distinctive cultural practises, expressions, and products. The digital revolution in India kicks off with the widespread availability of Android-powered smartphones. Everything in society, from commerce and academia to entertainment and beyond, was linked digitally. Many people have worked hard since the introduction of IT in education to digitise the existing physical resources, such as processed papers, photographs, creating panoramas of historical monuments, etc. The Indian government has made a step in the right direction by introducing a national site on art and cultural heritage as part of the Digital India campaign on December 10, 2019. The Indian art and culture portal is the first official government site to make the art and cultural resources of all the Indian states or union territories easily accessible to the general public in one place. Accessible to scholars all around the world, this site has digitised materials from institutions such as museums, academies, libraries, and archives throughout the country. Yoga portal is a comprehensive database dedicated to the study and digitization of yoga mythology. Promoting art and culture may benefit from the use of ICT technologies. Creating data or datafication is handling digital records and applications. Datafication and resource reuse have resulted from the notion of employing technologies like HTML, PHP, computer vision, artificial intelligence, digitalization, audiovisual programmes, and big data to conserve and pass on our rich legacy and culture to future generations and promote them internationally. Datafication is the digitization of formerly analogue sources, such as people, things, and audiovisual routines.

The more of our social lives we move into digital environments, the more datafication will accelerate. Datafication is a kind of technological application that brings art and culture to the forefront, which might facilitate greater cross-cultural understanding. In addition, it allows people of diverse backgrounds, ethnicities, religions, languages, and nationalities to freely access information on cultural heritage.

Find similarities between modern and ancient customs with object-oriented database queries.

Global thinkers from all walks of life may benefit from the use of communication-ICT technologies to spread their expertise. Since these resources are accessible 24/7/365, it's easier for different intellectual communities to work together. Therefore, it will encourage cultural and educational exchange programmes, as well as tourism and other commercial endeavours.

The Information Profession and Libraries: Libraries have long been the go-to institutions for collecting and organising data in various formats (print, digital, etc.). Specifically, their goal is to

make information retrieval and access easy for everyone. The result is a suite of information services that makes use of a wide variety of in-house and publicly available data. In order to effectively manage information and create and provide high-value services for their customers, they often establish synergies and consortia. It could be argued that different libraries exist for the well-defined needs of different users (i.e. public, educational, scientific, national), but the fundamental purpose and value of a library remains the same: to collect and manage information in order to make it available to anyone who is interested. Librarians and information specialists take on several hats in this regard. Vassilakaki & Moniarou- Papaconstantinou (2015) conducted a thorough literature analysis to highlight the most important responsibilities of modern librarians. When considering all types of materials (i.e. articles, book chapters, etc.) and libraries (i.e. open to everyone, academic, school), six (6) main roles emerged. These roles were the following (Vassilakaki and Moniarou-Papaconstantinou 2015):

- a) Information specialists as educators, with emphasis on librarians' roles in developing and delivering information literacy programmes to the intellectual/research/school community and participating in classroom instruction;
- b) experts in technology; responsible for ensuring the long-term success of digital libraries and institutional repositories. Information specialists are sought for their expertise in developing an institutional repository, particularly in defining the appropriate metadata for storing and uploading data. They must also instruct writers on the usage of institutional repository to upload project-related research and make it freely available online. According to the authors, IR librarians are primarily responsible for the following tasks: software knowledge, project management, collections definition, metadata advice, submission evaluation, and author training.
- c) By integrating themselves into the curriculum, embedded librarians want to foster more communication and cooperation between libraries, academic departments, and teachers. Expert hunters, information controllers, and copyright counsellors are in high demand in this age of dwindling resources, and this is where information consultants come in. They need to encourage creativity, make data easily accessible, and incorporate it into the routines of company management. Managers of knowledge are responsible for vetting and disseminating relevant data to end users, as well as educating them on how to make the most of available data and services. They are responsible for managing the company's knowledge bases and facilitating internal communication and sharing of information. There are four main opportunities for knowledge managers to take advantage of (Rooi and Snyman, 2007): creating a setting where knowledge can be freely shared; managing the corporate memory; moving information management into a new context that is more closely tied to business processes and core operations; and fostering information literacy within the company. When it comes to copyright authorization in the setting of an institutional repository, subject librarians must act as academic liaisons, promote information literacy programmes, identify and manage information resources, adopt new ways of meeting users' information needs, and more (Leary, Lundstrom, and Martin, 2012). All of these responsibilities highlight the value of information professionals in organising data and meeting the needs of various user groups with appropriate tools and information. The paper provides a concise overview of the top 10 challenges and opportunities now faced by information workers and, by extension, libraries. The top 10 advantages and highlights are as follows: The Library and Information Science community may learn a great deal from the successes and challenges highlighted in the context of

World Vision (IFLA 2018). Information professionals will need to embody and advance these ideals and tenets if they are to continue serving their clients effectively and providing them with valuable services and resources.

**Users experiences are designed to address the following principles:**

1. bring attention to the significance of the past,
2. approach the study of events from many angles,
3. History should be studied in its whole, not only via written texts from different time periods, but through all that people have left behind (archaeological artefacts, iconography, epigraphy, architecture, artwork, etc.).consider that there are no definite facts in history, just competing interpretations of the relics and opinions.

A diverse team was assembled from the start of the project to develop the novel technologies and design the user interfaces for the four pilots. As we get closer to the project's completion, it has become abundantly clear that our decision to assemble a multidisciplinary team was both wise and effective. This group included experts in the fields of computer science, development, history, information science, and the social and humanities. Everyone contributed their knowledge and skills as required by the project.

There will be a focus on the need to create synergies and work with related and unrelated professions, as well as on the many roles information professionals have taken on and should take on in relevant research initiatives. In particular, information professionals should see themselves as technology experts. Therefore, they must keep up with the latest developments regarding handling cultural heritage details using various international guidelines; be able decide which standard to use, and in what way, for every kind of information (i.e. photos, museum artefacts, books, etc.); take evaluates to succeed willingness and re-use of the schema established as well as of the metadata that was created; and finally, create manuals as well as train other experts to utilise the relevant resources to provide the appropriate data.

**The Indian Progression**

Today's generation relies heavily on information technology, and it permeates every aspect of their daily lives. Today, thanks to the proliferation of digital resources, information from anywhere in the world can be accessed with just a few mouse clicks. Information technology, in combination with other technologies, allowed us to investigate the possibility of conserving, publicising, and reshaping our extensive cultural canon, which includes not just works of art but also traditional indigenous remedies and bodily forms.

India has a rich cultural history dating back more than a thousand years, which has contributed much to the country's progress.

**Information overload**

Digital resources on Indian art and culture, including archaeology, dance, festivals and fairs, handicrafts, heritage, writing, monuments, music, painting, and theatre, are made available via the Art and Culture webpage, an official government of India webpage.

## Vast Repository of Art and Crafts and the Need for Digitization- The Position of India

Gateway to Vedic Culture As the foundation of our civilizations' wisdom, science, tradition, and culture, this portal is dedicated to the Vedas. They are revered not just as sacred texts but as the origin of Indian and global culture.

Numerous comprehensive catalogues of available materials can be found online. Among them are:

**a Databank/Databases :** These are developed with a DBMS as the backend and hadoop/Nosql for big data as the front end, both of which serve as interfaces for the final consumer.

**b. Kalasampada :** The IGNCA's rare archives have been digitally preserved through the datafication of uncommon manuscripts with user-friendly material and data integrated into a single computer connect (window) that allows users to view lakhs of writings, one lakh slide, uncommon books, hundreds of rare photographs, video and audio recordings along with strongly researched publications.

**c. Standalone tools :** (Google Play apps) Explores Google Play-stored works of art, museums, locations, etc. A digital library of rare books, a virtual tour of India's Archaeological Monuments in 360 degrees, and information about listed and unprotected Sites of India are all included in this travelling exhibition.

**d. Yoga Educational Software :** Shareware Chakras The chakras are described in detail, complete with illustrations and associated mantras, in Chakras Software.

**e. Yoga Freeware for Health and Self-awareness** Articles and photographs of asanas contributed by yoga teachers from across the world are included in this programme, along with directions for yoga and meditation.

Information workers are among the most adaptable and open-minded professionals out there. So, it's not out of the ordinary for them to take on new responsibilities and/or modify those they already have in order to meet the evolving information requirements of their target communities and audiences. It's important for meeting regular requirements and adapting to new circumstances. Information specialists, however, must work closely with a multidisciplinary research team to ensure the project's success. Every information specialist in a global research team has to be able to draw on their soft skills. Members of such an interdisciplinary synergy need to find a way to communicate effectively, accept the differences that may arise between disciplines as well as cultures, find common grounds of debate, share a common vision for the project and acknowledge that everyone involved has the same overarching goals.

### Conclusions

Information management for cultural heritage is challenging. There are various obstacles to overcome, including but not limited to the need for scholars from diverse fields to work together towards a shared objective and adapt to modern information and communication technology. This paper set out to discuss the varied responsibilities and skill sets required of information professionals engaged in historic preservation projects, including but not limited to soft (i.e. interpersonal) and hard (i.e. technical, administrative, and project management) skills.

Information workers would benefit greatly from honing these abilities in order to take part in large-scale, multinational cultural heritage initiatives and, more significantly, to work closely and

productively with scholars from other disciplines. Professionals in the information industry might also utilise the space of a cultural centre or library to disseminate the project's first findings and subsequent outcomes. They might also utilise the space to educate the public about the research's implications and practical applications, so enhancing the users' knowledge, abilities, and proficiency.

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