

# *Indira Gandhi National Centre for the Arts*

## Case Studies of Digital Preservation at IGNCA

### Indo-US Workshop on International Trends in Digital Preservation

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## *About IGNCA*

The Indira Gandhi national Centre for the Arts (IGNCA), established in the memory of Smt. Indira Gandhi, is visualised as a centre encompassing the study of all the arts.

The uniqueness of the IGNCA's approach to the art lies in the fact that it does not segregate the folk and the classical, the oral and the aural, the written and the spoken and the old and the modern.

Here the emphasis is on the connectivity and the continuity between the various fields that ultimately relate human-to-human and human-to-nature symbiosis.

The important functions in this endeavour are to search for and to store materials and data pertaining to the art and culture of India.

## *About IGNCA*

The IGNCA has been designated by the Government of India as the nodal agency for creation of a data bank on art, humanities and cultural heritage, the National Mission for Manuscripts, and National Mission on Intangible Cultural Heritage.

The Centre has also been identified by UNESCO as nodal agency for the development of regional database for South and South East Asian countries on art, cultural heritage and lifestyles through the application of state of the art technologies for standardization, exchange and dissemination of data.

## *Case Study-1*

Computer section established in 1988, and it was equipped with HP 3000 mini super computer, HP MINISIS Database management System etc.

Numerous database applications developed on HP system includes

**KK Term** - Database of terminologies on art and culture from classical texts,

**CATCAT** - Database of union Catalogue of Catalogues

**MANUS** – Database of Manuscripts,

**PICTO** – Database of paintings and photographic collection, and

Database of **Musical records** (LP records and Audio Tapes)

Very little was available on the backup tape device and major data was available on the server. Due to lack of proper backup of the data, all the data was lost when the server went out of order. The supercomputer environment was replaced by the PC environment in early nineties. In absence of institutional policy, a part of the data couldn't be migrated on the PC platform and finally lost.

## *Case Study-2*

Interactive multimedia exhibition on “**Gita Govinda**”

The exhibition was developed in collaboration with Xerox Polo Alto, USA with an objective to familiarise audiences on the fundamental concepts of Indian music, dance, art and their inter-relationship and interpretation.

The exhibition consisted of a network of 13 physical and virtual multimedia spaces that interpreted six songs of the poem spatially laid out across two circular rings. The multimedia experience makes explicit the dynamics of the variable and the invariable in Indian arts and bears testimony to the phenomenon of the underlying unity within the diversity of Indian culture.

This was involved a major documentation effort in video, audio, photography etc. In total, forty gigabytes of authored **Gita Govinda** content was presented to the public in 1997-98 and highly appreciated by the viewers.



## Case Study-3

When the digitization project was started in 1994, the IGNCA didn't conceptualize the long term preservation of the digital data at that time. The main focus of digitization was for the purpose of dissemination (web based and CD-ROMs). Over 1,00,000 slides of the IGNCA were digitised in PCD format during 1994-1999. Later PCD format was accepted as the archival standard in guidelines published by the UNESCO in March 2002.

Interactive multimedia CD-ROMs on

***Devadasi Murai*** – a temple tradition of India,

***Rock-Art*** – early rock paintings of India,

***Muktesvara Temple*** – A Siva temple from Karnataka and

***AJANTA*** – a World Heritage site from Maharashtra (India)

These products (CDs) were designed for defined hardware and software specifications in terms of platform like (PC/MAC), Operating system (Windows 98/ 2000/ XP), display resolutions like (480\*600, 600\*800, 724\*1024) etc.

In this fast changing technological scenario the life of the products (CD/DVD) are very limited. Although the content (images, text, video) used in these products are still usable but the provisions were not made for the periodic up gradation of the applications.

## Case Study-4

### ***KALASAMPDA (Digital Library: Resources of Indian Cultural Heritage)***

Kalasampada facilitates the scholars to access and view the materials including over couple of lakhs of manuscripts, slides, rare books, photographs, audio and video along with highly researched publications, from a single window. Multimedia computer technology has been used to integrates variety of cultural information accessible at one place.

The system aims at being a digital repository of content and information with a user-friendly interface. The knowledge base such created may help the scholars to explore and visualize the information stored in multiple layers. The facility is currently available only on **intranet**. Although, the partial information can be accessed from the IGNCA's official website [www.ignca.gov.in](http://www.ignca.gov.in), uploaded with necessary approvals.

Today, the services are totally dependent on the digital contents and long term preservation of the data becomes crucial for the institutions. Periodic migration of the data, keeping multiple copies of the same contents etc. is under consideration for the uninterrupted services to the scholars and artists.

## *To Encapsulate*

Following were the major reasons for the data loss in the IGNCA:

- The Digitization was started for the dissemination and backup of data was not given due importance.
- With the change in the computing environment the data was not properly migrated on the new platform.
- Multiple copies of data were not prepared for storing at different locations for security purposes.
- Frequent change of supervisors on the projects and improper data handover



## *Technology Scenario*

- Majority of the equipments generate digital output
- Frequent change in hardware
- Fast change in software platform and versions alarming applications being outdated.
- Change in Storage Media

## *The Immediate Needs*

- Long term data availability
- Support of data accessibility on all platforms
- Data migration policy both in terms of media and format

## *The Associated Problems*

- Institutions generally does not have sustained source of income
- Institutions have limited technical manpower
- Limited infrastructure in terms of hardware and software
- No Policy for data migration

## *Few Suggestions based on our experience*

- Generation of High quality data by the institutions as per the archival standards / formats
- Institutions should focus on data generation and dissemination of the content in digital form.
- Applications must be platform independent (preferably OPEN SOURCE)
- Products must be treated as short term dissemination tools.
- Digital data must have multiple copies with a copy in National Digital Archives for security
- Archives must have all the provisions for the availability of data for a longer duration.

## *Conclusion*

The institutions should mainly focus on the generation and dissemination of content in digital format.

For long term preservation of digital data, a **National Digital Archives** with **State Digital Archives** in every state may be proposed to support the institutions. The acceptance of data by these digital archives must be only in standard formats. Regular migration of data from one media to another media and one format to another format, for its long term availability will be the responsibility of these archives.

National Digital Preservation Policy (NDPP) may work on standardization of data format as well as digitization format for each data types, in collaboration with the industry partners and institutions.



*Thanks*