**Design and Development of Prototype Multimedia Database on AIISH Events and Literature Database on Communication Disorders**

**Introduction**

With advances in the computer technologies and the advent of the World Wide Web, there has been an explosion in the amount and complexity of digital data, they being generated, stored, analyzed and accessed. Much of this information is multimedia in nature, including digital images video, audio, graphics and text data. Companies like Google, Facebook, Amazon, and eBay manipulate petabytes of data every day. For example, Facebook handles 20 petabytes of data, managing 20 billion photographs in 4 different resolutions, growing by 2 billion photographs per month. The Facebook database is serving 600,000 photographs per second for a user base of 300 million active users [4]. Google manages vast amounts of semi-structured data: billions of URLs with associated internet content, crawl metadata, geographic objects and hundreds of terabytes of satellite image data, with hundreds of millions of users and thousands of queries per second [5].

Considerable share of this vast data is also contributed by the scientific literature……………… *Growth of scientific literature………………….*

In order to make use of this vast amount of data efficient and effective techniques to analyze and retrieve data based on its content need to be developed.

The All India Institute of Speech and Hearing (AIISH) established with the objectives of human resource development, clinical care, research and public education pertaining to communication disorders, has been conducting a number of professional activities and generating a huge amount of multimedia information since its inception the in the year 1965. The country has been contributing to the field of communication disorders in the form of scientific research; the major contribution is by AIISH.

**Aim and Objectives of the Project**

The two-fold aim of the project is to design and develop a prototype multimedia database on Institute events and a literature database on Indian research in Communication disorders. The specific objectives of the project are:

1. To preserve and archive the multimedia resources generated at the Institute.
2. To organize and provide web based access to the multimedia resources of the Institute
3. To create and develop metadata contents and facilitate searching and browsing of the multimedia contents
4. To facilitate regional language subtitle support for the video resources
5. To design efficient indexing, classification and event-based searching techniques with high degree of precision
6. To create an online photo album on the Institute events and activities
7. To develop a gateway of Indian research on communication disorders

**Materials and Methods**

The following step by step methodology will adopted for the study.

1. Survey of OSS applications in the field of Information management and identification of the suitable ones for the design and development of the proposed databases.
2. Evaluation of the features and capabilities of the OSS identified. main open source DAM solutions that are currently available. In determining which products are suitable to have the description *Open Source* applied, we have assessed each vendor to identify if they use a licence that is [OSI approved](http://www.opensource.org/) as the main criteria for inclusion…. then preservation oriented solutions. Digital Asset Management Solution
3. Development of system architecture
4. Customization of the selected OSS as per the requirements including interface design, database integration & coding, development of search system
5. Collection of resources
6. Surveying of the literature on communication disorders by various means and identification of publications based on research in India
7. Identifying the major events since the inception of the Institute and collecting videos and photographs from the concerned Departments and Sections
8. Metadata creation for the identified sources
9. Uploading of the materials
10. Trial running of the databases

**Significance of the Study/ Study Implications**

A major share of the digital data is constituted of the scientific literature related to the contribution of research in the form of literature. It is estimated that …..

**Need for the Study**

AIISH, the premier institution in the country pertaining to communication disorders. The Instiute being the premier organization in the country on communication disorders, is very dynamic and live in its activities. In the last five years, the Institute carried out … conferences/workshops, ….. guest lectures….., inaugurated ….. new initiatives and organized …………celebrations resulting in the production of thousands of photographs and videos. However, these resources are not being organized properly and there is no access to these resources

unstructured form, making it more difficult to manage and to extract meaningful information from it. This massive increase in the volume and complexity of data is challenging

**Significance of the Project**

The MM is much more power resource for communication. There is an urgent need for a system for managing and organizing these valuable resources of the Institute.