PHYSICAL PRESERVATION OF NEWSPAPER RESOURCES IN THE LIBRARIES IN INDIA

Gouse Riyajuddin

and

D. Chandran

ABSTRACT

The twentieth century witnessed a tremendous growth of news papers in India. The newspaper played a vital role in the dissemination of information during the pre-independence India. Within a short time after independence, by 1954, "there was a rapid growth in the number and circulation of daily newspapers in the country both in English and other Indian languages". The function of a newspaper library is "to act as repository of all information required by the editorial and management departments of a newspaper". It is not enough if the information is stored but more important is to organize the collection in such a way that any information can be retrieved instantly. The present paper deals with the existing patterns of preserving the newspaper resources in their libraries and storage of information in some of the Telugu and English dailies in Andhra Pradesh and also recommends the modern methods of preservation in the newspaper libraries.

INTRODUCTION

Newspapers are the mirror of society and also the agents of social change and the creators of attitude and situations. They conduct companies, carry on propaganda, influence and educative voters, canalize public opinion and mould government policies. The press also makes a direct and visible impact on the functioning of the administration and political systems of the country. It provides comprehensive and objective information on all aspects of the country's social, economic, political and cultural life. Newspapers bring every person into touch with the active world. As Mahatma Gandhi said, 'One of the objectives of a newspaper is to understand the popular feeling and give expression to it, another is to arouse among the people certain desirable sentiments and third is fearlessly to expose popular defects.

HISTORY OF PRINT MEDIA IN INDIA

Indian print media is one of the largest print media in the world. The history of it started in 1780, with the publication of the *Bengal Gazette* from Calcutta. James Augustus Hickey is considered as the "father of Indian Press" as he started the first Indian newspaper from Calcutta, the Calcutta General Advertise or the Bengal Gazette in January 1780. In 1789, the first newspaper from

Bombay Herald appeared, followed by the *Bombay Courier*, later amalgamated with the *Times of India* in 1861.

The first newspaper in an Indian language was the *Samachar Darpan* in Bengali. The first issue of this daily was published from the Serampore Mission Press on May 23,1818. In the same year, Ganga Kishore Bhattacharya started publishing another newspaper in Bengali, the *Bengal Gazetti*. On July 1, 1822 the first Gujarati Newspaper the *Bombay samachar* was published from Bombay, which is still extant. The first Hindi newspaper, the *samachar Sudha Varshan* began in 1854. Since then, the prominent Indian languages in which paper have grown over the years are Hindi, Marathi, Malayalam. Kannada, Tamil, Telugu, Urdu and Bengali. The Indian language papers have taken over the marketing as per the latest **NRS** survey of newspapers. The following table lists out the top 16 newspapers in India by daily circulation.

NAME OF THE NEWSPAER		LANGUAGE	DAILY CIRCULATION\
			(in Millions)
1.	Times of India	English	3.146
2.	Dainik Bhaskar	Hindi	2.547
3.	Malayala Manorama	Malayalam	1.514
4.	The Hindu	English	1.360
5.	Eenadu	Telugu	1.350
6.	Deccen Chronicle	English	1.349
7.	Aananda Bazar	Bengali	1.277
8.	Amar Ujala	Hindi	1.230
9.	Hindustan Times	English	1.143
10.	Hindustan	Hindi	1.142
11.	Sakshi	Telugu	1.256
12.	Matrubhumi	Malayalam	1.077
13.	Gujarat Samachar	Gujarati	1.051
14.	Punjab Kesari	Hindi	.902
15.	Dinakaran	Tamil	.901
16.	Sakaal	Marathi	.879

(These figures are compiled by the Audit Bureau of Circulations.)

All the above newspapers are having their own their newspaper library. Newspaper libraries uniformly followed their owners' "private" information systems increasingly isolating themselves and their usefulness until the postwar information society. The updated information enabled to expand markets for newspaper information infinitely, changed newspaper office libraries into mainstream information businesses.

IMPORTANCE OF THE LIBRARY TO THE NEWSPAPERS

The more efficiently a newspaper can relate and tally past information on a subject or person with current information, the more effective will it be. The proper meaning and interpretation of wows event, plan or programme can be obtained only when studied against its background. The newspaper must project the event in it can be quickly understood by the reader. Items of new received thought various sources have to be processed, made readable and interesting, facts have to be checked and background material added. The library plays a vital role in linking an events to its background. 'To dig on the background, the services of memory unit, intelligence unit for reference section becomes essential for the editorial department. Checking of facts and adding of background data are the province of the information staff. The Librarian and his team of trained assistants. They capture current information, index it, abstract it or keep it in full and make it available rapidly on demand by the editorial staff. The library is the backbone of a newspaper establishment. There the different need of various departments.

The journalist to day has grater need of the library, because his job involves more hard thanking and hard searching then it ever did, say thirty or forty years ago. The decision to heave a library specially designed to provide information for the newspaper is usually made by someone in management who recognize the advantages of a professional research service.

PRESERVING NEWSPAPERS

Of the thousand of newspapers published in India each day. Newsprint is not archival-quality paper. It is made using untreated ground wood fibers with impurities remaining after processing that include resins, tannins and lignins. Lignin represents the largest amount of the impurities and although not an acid, it promotes acids reactions when exposed to heat, light humidity, or atmospheric pollutants. Acid is what causes paper to become brittle and deteriorate. And because of newsprint's high lignin content this deterioration can happen rather quickly. In preserving newspapers and clippings,

THE CLIPPING COLLECTION

The clipping collection is the unique part of the newspaper library; it is virtually irreplaceable. Newspaper libraries compile what is known as an inverted information file under separate subjects or personal names. That is all the material in the file concerns one subject or person. Newspaper store articles from the articles from the newspaper the library serves. Some large newspapers, particularly those with local competition or regional or national coverage, also file selected material from other newspapers. The Clipping collection is based upon a system of cross-filing articles.

Maintaining the clipping file is usually the largest, most critical and laborintensive part of library operations. The clipping collection must be current. There are newspaper libraries that regularly file clippings week after publication date. Every newspaper librarian will make different decisions about what to file. For example, in consultation with the editor.

TECHNIQUES

Each step in the physical processing of clippings is so time-consuming that it must be carefully scrutinized for efficiency. These are the necessary steps:

- Preparing the newspaper for marking.
- Marking, or classifying the newspaper
- Cutting the clippings.
- Folding the clippings.
- Sorting the clippings.
- Filing the clippings.
- Weeding the clippings.

Whether the clippings are to be filed lose, pasted in scrapbooks, indexed or microfilmed, these procedures will usually apply in Indian Newspaper libraries. Different newspapers have very specific procedures, based on their number of editions, number of sections to be marked according to their own operations. Newspapers with more than one edition may need to clip all editions.

MARKING THE NEWSPAPER

Marking is a demanding process; the marker should be left completely undisturbed. This might mean physical isolation from the rest of the library operation, or having the marker start work before the others stay late. Marking specifies how each article is to be filed, how many duplicates of a single article are to be filed and what cross-references are to be developed to and from a single article. It is helpful to salve two questions when marking any article.

Most newspaper libraries divided their files into topical and graphical sections, and the marking will reflect this division. Many newspapers have separate subject file for routine obituaries- for persons who have no files at the time of their death. While filing major obituaries in the regular biographical files. Other newspapers have separate current events files of clippings used within a limited time period and then discarded.

The clipping file, whatever its forms, is the heart of the newspaper library. Tailored to the newspaper it serves, the clip collection must provide quick, accurate, up-to-date information whether specific story, fact or background based on what the newspaper has already published. It can provide leads, sources new angles and perspectives, broaden and deepen stories, expand horizons of reporters and possibly even editors. It can and should improve the quality of the newspaper.

PRESERVATION OF PHOTOGRAPHS & GRAPHICS

The picture section of the newspaper library has existed since cameras became portable and popular. Editors know that a good picture sells newspapers, attracts attention to a story and bring the reader into the scene by tapping personal memory images in way words seldom do. Today's readers are visually sophisticated. The Indian newspaper libraries, or upgrading an old one, the starting point is the same: a survey of what pictures.

RECEIVING PHOTOS

Photos- are generated by wire services, in-house photographers, news syndicates, film and television companies, all levels of government, the public relations departments of most business firms, travel agents, book publishers.....the list is endless. Wherever they come from however, the arrive they go to the editors first. These pictures whether they ran or not. Ideally, the picture should be accompanied by the original release. At the very least, they must give information to permit accurate filing and future use. Pictures that do appear in the paper will have to be retrieved from the engraving newspaper library. Library return boxes in the news departments, the art department and in photocomposing areas are the most common method of retrieval.

SORTING PHOTOS

Once the pictures are on libraries dusk. It is customary to deal first with photos that were published, the photos that were published. It gives an idea of the photos that the editors thought must important and worthy of space, and it provides basic caption information. It will need at least one complete set of each day's editions, to match with the run photos. Some papers keep a master copy of the newspaper and mark on each printed picture how that picture was used. For picture files when marking the master copy. For picture files, the name of the person can be circled on the caption for a headshot, or the name of the file written across a subject picture. Another library employs a red grease pencil, and saves the master for three weeks, making notations if missing pictures appear during that time. Pictures are not keeping should go into a temporary hold file, whether they ran or not, although some libraries keep pictures for sixty days or even one year.

PROCESSING PHOTOS

Some papers use a non-electric typewriter to place information on each picture; other worry that rolling a picture around a platen may crack the film. One library has used writers for years with no apparent problem. A felt tip pen is satisfactory, but steel tipped and ball point pen smear. One good brand for the new photographic papers is the Sanford Sharpie. It is very water-resistant and writes permanently on everything but cloth. Date-stamps require a fast-drying permanent ink when used with Resin-backed papers. A satisfactory stationery store can advise on brands.

Once the file heading is applied on the long side of the photo and in the upper left hand corner, add the caption. The caption can be cut from the paper, or important elements written on by the marker. Be sure you provide sufficient information so the person or subject is clearly identified.

Standard white library past is the normal adhesive for attaching cut lines, or captions. Some libraries use rubber cement. Archivists claim rubber cement standard white library past is the normal adhesive for attaching cut lines, or captions. Some libraries use rubber cement. Archivists claim rubber cement will affect photos, but the Indian Newspaper libraries has used thinly spread rubber cement for over 15 years with no appreciable effect on photos. Some newspaper libraries use self-adhesive labels or transparent tapes. However, they off a photo, the picture is useless.

FILING EQUIPMENT AND SYSTEMS

Indian newspaper libraries chose between five-drawer filing cabinets and open shelving, do select cabinets. Filing us a more difficult operation with open shelving, do select cabinets. Filing us more difficult operation with shelving, may be less accurate. A few picture libraries file in folders. Unless all pictures to mount at least a 5"x7"size risk losing material out of the open side. Therefore, most librarians prefer open-topped (9" x12") file envelopes. Some over can be cropped judiciously without losing detail or composition. Editors frequently crop pictures.

A photo library may be started with two five drawer cabinets one for people and one for subjects. Bibliographical files can be kept by full names on each individual with alphabetical breakdowns on common surnames.

The newspaper library will need to be highly selective in what is filed. Where large library might need dozens of subject headings for the "President of the India," it also implies and many a librarian has personally discovered, that increasing a collection substantially increases its use. This is commonly known as the penalty for sources.

GRAPHIC MATERIALS

A photograph is only one way to illustrate a story. Use of old engravings, woodcuts and drawings has increased considerably in the past decade. The offer a change of style, can be dropped in as type breakers with little loss of space, may add a touch of humor and often relieve a busy art department. Artists can also use them with lineshot photos in a single composition, or as elements of a collage for hard-to-illustrate subject mattes. It is copyright free and can often be reproduced on a good coping machine.

MAPS

Developing a map file plays big dividends for even the smallest newspaper library. Black and white out -line maps are the basis for in-house map work.

At least on current, detailed world atlas is imperative. Maps of a particular locality and state should be available in as many varieties as possible i.e., political boundaries, school districts, census tracts, agricultural and water districts. I n addition to these, use oriented maps. Topological maps are helpful- to print a flooded region; transportation maps to show abandoned railway spurs, etc. Orthophotoquad, if available for area. Showing ground details with fascinating clarity. Earth satellite photos give you the broadest possible view of your entire region. Sources range from city hall to you local state departments, to federal government geologic surveys. Most maps sell for as little Rs.50.

Filing maps is not always easy. Obviously, some cane folded and can be stored that way in labeled folders. How long they survive repeated refolding depends on the extent of use. For specialized maps, or tourist maps that might not be a problem. Major maps from copyright-free government sources, however, come rolled and may present difficulties. Commercial map cabinets are ideal, but they take up a lot of floor space and they require stacking several maps in one drawer. As the collection increases, each map is handled more often.

PHOTO NEGATIVES

The filing and retrieval of negatives, line many functions of the newspaper library, is unique to each newspaper. However, there are certain principles which can be applied to any operation which maintains a collection of negatives. A prerequisite of keeping a negative file understands its value. First, negatives are original. Once destroyed there is no way to reconstruct them. They are not like the newspaper or photos which can be recreated when desired. Second, negative are the most efficiently compact from of storage for visuals. Third, they are longer lasting, under favorable conditions, than photo print and they provide a clean copy, unwrapped and untouched, whenever needed. Negatives can be held permanently, or in temporary files for a designated time such as three, six or twelve months. In many operations, re-use is highest in the first compel of works, then falls dramatically.

POLITICAL

It is assumed that the librarian is dealing with an existing file of negatives. If the library is taking over the negative file, from another department, or starting a new file, special thought should be given to staffing. The collection grew with no written politics governing its purpose or rules, these must be developed. Preparing written policies and procedures gives you a chance to examine the why and how of each activity followed, to insure that users have confidence in the file and that the needs of the editorial staff are being met. The librarian has to keep permanently, what to keep temporarily, and what to eliminate, access point become clearer. Access to temporary files may be cursory, but access to permanent materials must be in depth. The main access point includes:

- Photographer
- Date of assignment

- Subject of negative
- Personal names
- Corporate names
- Locations shown

Primary arrangement can be by subject or name(alphabetically), by date (Chronologically) or by photographer (alphabetically). The negative collection should be physically arranged in such a manner that material can be retrieved manually if necessary. Chronological order allows for all materials from any given date to be filed together. Dates can be turned into accession numbers. Access by personal names, photographer, or subject can be recorded in a card file. Color negatives can be filed with black and white negatives. Color negatives are not as stable but do have the same storage requirements. Indicate on local Indexes that the negative is in color. Store negatives in inert pH-neutral or acid free sleeves. Polyethylene or polypropylene plastic sleeves seem suitable, but polyvinyl and polyvinyl chloride sleeves are definitely not acceptable since they accelerate the aging of negatives.

MICROFILM INFORMATION RETRIEVAL SYSTEM

The application of micrographics to the operation of newspaper libraries is of great value. Probably the most important single reason for imposing this complex, sophisticated technology on an already complicated system of information retrieval is to make the best practical use of physical space. The ancillary function of a newspaper library in supporting the news and editorial needs, any new system must not make the retrieval of documents more difficult than existing system.

The prime criteria for filming are:

- Document preservation
- Information retention
- Ease of information
- Better use of space

Microfilms are available in a variety of models. Microfilming of bound volumes of newspapers is the usual first step in the preservation of the published record. Microfilming of old photographic negatives has been done successfully in least one instance, although the use of microfilm in preservation photographs has been less successful. Newspaper clippings, and index codes that describe those clippings, can be stored on 16mm film and searched rapidly and automatically. The system was applied to 1000 clippings on file. The retrieval capabilities of the system are outlined in examples of newspaper library research storages. Photographic reduction of newspaper clippings on microfilm has long offered an inexpensive solution to the storage problem itself, but congenital microfilms technology does not provide for effective search and retrieval of clippings stored on film, even when assisted by a good index to the contents of the films. At considerable grater expense, modern computer technology allows for rapid retrieval of clippings indexed according to information selected for

keypunching. Computers by them selves, however, do not solve either the indexing or the storage problems. For those newspapers which use tape to drive their Linotypes, it becomes a simpler matter to feed that tape into a computer programmed to select the index entries. The storage, indexing, and searchretrieval problems can be solved with specially designed integrated computerand-microfiche systems, similar to the ones being developed. The development in information technology provides a retrieval low cost but highly effective solution to the information storage and retrieval needs of the more numerous moderate-sized newspaper libraries. This technology uses microfilm to store both the clippings and the index codes on the film and controls retrieval and display of desired clippings. The microfilming system provides a potentially useful alternative to the current dilemma of operating with a hand-stored file of clippings, or jumping into computer operations with both feet. It avoids the necessity of extensive keypunching to record printed information in machinereadable from for on line retrieval from manual operations to more sophisticated methods of information storage and retrieval for the newspaper morgue of the future. In process, it can bring more order and, hopefully, greater efficiency to the morgue.

WEEDING

Every housewife knows that if she is to keep her house neat and tidy and it things are to be arranged properly so as to be available in the whenever needed, timely spring cleaning is essential. This is particularly true in a newspaper library as the range of its interests are many times more and almost every day is an emergency. It is essential for all newspaper libraries to work out a weeding programme as soon as they become five years or more of age. The newspaper library grows with a vengeance, very often feel that if there could be an electronic brain to shift the material that enters a newspaper library so that the chaff is separated from the wheat, all newspaper librarians would welcome it. Newspapers, periodicals, handouts, leaflets and booklets, acts and bills, memorandums, reports, pictures and books, all this and much more come into a newspaper library constantly.

CONCLUSION

Newspaper office libraries uniformly followed their owner's dicta of private information, increasingly isolating themselves and their usefulness until the postwar information infinitely, changed newspaper office libraries into mainstream information business.

The newspaper industry in India has under gone a digital revolution of astounding proportions, one which is continuing at a rapid rate. The way from the initial writing of the story to rating of the track for delivery of the printed newspaper - have been automated. The newspapers are used first time for having current information, the newspaper that generates maximum current information is rated high by the readers. Therefore, accuracy of information also may be a parameter in selecting input for development of a newspaper information retrieval system.

The findings from coverage, in terms of both volume and verity of Indian newspaper physical preservation systems of an individual newspaper and if the whole set, considered under this study, have significance in selection input and retrieval. The coverage of physical space, as allocated on different categories of newspapers items by the Indian newspaper libraries. The factors noted above give some idea on physical preservation and generation in newspapers and their implications in information retrieval.

BIBLIOGRAPHY

- 1. Ashok Babu, T (2000) Vision of Future Library and Information Systems, Page No. 200-209.
- 2. Colley, Veronica (1987), The Preservation of News Papers Clippings, Special Library Association, P.41-43.
- 3. Gouse Riajuddin, Md. (1996) News Paper Libraries in Vijayavada A Survey, P.4-6.
- 4. Gouse Riajuddin, Md. (2008) News Paper Libraries in Andhra Pradesh (India) A Study on Emergence, Services and Professional Attitude towards Automation, P.95-112.
- 5. Goutam, Maity (2006) Identification and effectiveness of Factors in Designing a Newspaer Information Retrieval System.P.95.
- 6. Janda, Kenneth, (1970) A Microfilm Information Retrieval System for News Paper Libraries, P.33-47.
- 7. Judith D. Hinors, (1983) Guidelines for News Paper Libraries, News Paper Library, Automation, P.111-114.
- 8. Kathleen. A (1991), Information Technology Changes in large Newspaper Libraries, P.267-273
- 9. Kathleen. A Hansan (1986), Role of the Newspaper Libraries in the Production of News, P.714-718.
- 10. New Encyclopedia Britannica, (1974), News paper publishing, New Encyclopedia Britannica. 15th Edition: Volume 7. Chicago, U.S.A., Encyclopedia Britannica, Inc., P.473-482.
- 11. R.K. Mahapatra, (2007), News paper libraries in Orissa, Orissa Review, February-March.
- 12. Satyanaraya, VVV, (2006) Modern Librarianship Resource Sharing in Digital Library, Page 107-110.
- 13. Ward, Jean(1988) The News Library's Contribution to New making, Special Libraries, P.143-147.
- 14. http://en.wikipedia.org/wiki/List_of-newspaers_in_India_by_circulation1/15/2010. http://www.loc.gov/preserv/care/newspap.html 5/23/2009

PROTECTION & PRESERVATION OF LIBRARY NEWSPAPER

Vijetacharya Malviya Rajesh Kumar Gupta and

Naveen Kumar Srivastav

ABSTRACT

A library is cash treasure of knowledge. It is a store of valuable thoughts of great personalities and academicians. It is a centralized place of books, newspapers and other reading materials. Newspapers are made from wood fibers with impurities remaining after processing that include resins, tannins and lignin. Lignin represents the largest amount of the impurities and although not an acid, it promotes acidic reactions when exposed to heat, light, high humidity, or atmospheric pollutions. Acid is what causes paper to become brittle and deteriorate. Because of newsprint's high lignin content, therefore this deterioration can happen rather quickly.

In preserving newspapers and clippings, you should decide. What's your focus?

- Preserving the content (information) in the clipping.
- Physical clipping or both.

If the information focuses on, consider photocopying the clipping using acid free, buffered paper on a commercial copier. The archives have a peel test to evaluate the ink retention of a copier, which you can run if so interested. You can scan and store the clipping digitally. Most likely, you'll want to preserve the actual news clipping. There's nothing like looking at an actual clipping from times past to feel a sense of history!

The following are recommended steps:

- 1. Optional: spray one side of each clipping with a de-acidification spray, such as Book-keeper. This will neutralize the acid and also apply a buffering layer.
- 2. Place clipping in a polyester film folder with a sheet of alkaline buffered paper behind it.
- 3. Put the polyester sleeves in file folders of acid-free, alkaline buffered materials.
- 4. Store in a cool and dry location, such as a closet in an air-conditioned room.

This paper is attempting to aware all processes of Protection & Preservation of library Newspaper and to store our knowledge bank in long term duration.

Key words: Newsprint, Preservation, hygroscopic, deterioration

INTRODUCTION

Preservation is the most important function of every Library, Archive, Information Center, etc. to use the preserved materials for the present and future generations. Various means and processes have been adapted, since the existence of such organizations to preserve the materials. In preserving newspapers and clippings, you should decide your focus-preserving the information in the clipping, the physical clipping, or both. If your focus is on information consider photocopying the clipping using acid free, buffered paper on a commercial copier. The National Archives has a peel test to evaluate the ink retention of a copier, which you can run if so interested.

The ultimate purpose of preservation is to ensure protection of information of enduring value for access by present and future generations. This study provides an introduction to the problem of the aging of paper and the preservation techniques those are currently being employed in paper preservation especially in Newspaper Industries. The chemical reactions are responsible for the aging of paper are discussed with the conclusion that acid-catalyzed hydrolysis is the predominant mechanism for cellulose degradation and strength loss. A description and chemistry of mass de-acidification methods are presented. A summary of the literature on the evaluations of these processes is presented. The benefits and limitations of the mass de-acidification methods are discussed.

DEFINITION

Preservation can be defined as "all managerial, technical and financial considerations applied to retard deterioration and extend the useful life of [collection] materials to ensure their continued availability". Preventive measures can considerably extend the useful life of collections, and are usually much more cost-effective than interceptive measures taken to remedy damage after deterioration has taken place.

NEED OF PRESERVATION

"Assessment is the first step in the development of a preservation management program. It occupies a key place in the development of subsequent policies, procedures and programs". The preservation need assessment must therefore "aim to provide sufficient information on which to base programmed preservation activity in the given library". The "broader the approach, the easier will be the subsequent planning. The greater will be its likely impact and success". The assessment is thus concerned with the preservation needs of the library or archives as a whole, and not only with the condition the items in its collections, or with the preservation needs of special collections alone. Indeed, our research highlighted some important factors which need to be considered as part of a comprehensive preservation needs assessment:

- environmental factors:
- training needs;

- · security;
- disaster management;
- condition of the collections.

CATEGORY OF NEWSPAPER PRESERVATION

Using newspapers as an example, the preservation procedures should be divided into two parts:

- 1. Internal
- 2. External

INTERNAL PRESERVATION

It means the paper itself should be protected without any regard to its surroundings. Rag paper is very easily manufactured using materials should last for centuries. In most cases rag paper needs better quality. Newsprint (wood pulp) paper has something to say. Acid is always used in the manufacture of wood pulp paper acid is cleared by washing pulp even whether the paper is made for a year old or a century old, some of that acid is still in there breaking down the fibers of that paper. This reflects in the browning, brittleness and chipping that affects newsprint quality.

For long-term preservation of newspapers printed on wood pulp paper it is necessary to de-acidify them. This involves soaking, spraying or brushing with a de-acidification solution available from archival supply houses. This solution will disturb the properties of paper, making it extremely fragile and can be very easily torn. We should adapt highly recommended practice handling as water-soaked newsprint.

EXTERNAL PRESERVATION

The external preservation activities relate to protect the documents for long term use. These factors are discussed below:

ENVIRONMENTAL FACTORS

Light

Most paper items are susceptible to damage from ultraviolet (UV) and visible light. UV radiation emitted by the sun and fluorescent bulbs, is particularly damaging the paper items. Although all wave lengths of light are damaging, ultraviolet (UV) radiation is especially harmful to library and archival materials because of its high level of energy. The standard limit for UV is $75\mu W/l$ (Lumen). The sun and tungsten-halogen or quartz lamps, mercury or metal halide high intensity discharge lamps, and fluorescent lamps are some of the most damaging sources of light because of the high amounts of UV energy being emited. Rapid and serious deterioration of paper is caused by the oxidation of cellulose brought about by the ultraviolet rays in sunlight and fluorescent light. There are two effects of light on paper that result in its ultimate

embrittlement and deterioration. First, it has a bleaching action that causes some whitening of paper and fading of colored papers and certain inks. Second, it causes any lignin, which may be present in the paper, to react with other compounds and turns it yellow or brownish. It is this reaction that results in newspapers' turning yellow on exposure to light. The following factors concerning light should be known by all those responsible for preserving library material:

- Visible and infrared light sources, such as the sun and incandescent light bulbs, generate heat. An increase in temperature accelerates chemical reactions and affects relative humidity.
- The effect of light is cumulative. The same amount of damage will result from exposure to a strong light for a short time as to a weak light for a long time. 100 lux (the unit of measure of illuminance) on a picture for 100 hours gives it an exposure of 100 lux-hours, equivalent to 50 lux for 10 hours.
- Chemical reactions initiated by exposure to light continue even after the light source is removed and materials are put into dark storage.
- Light damage is irreversible.
- Daylight has the highest proportion of UV radiation and therefore must be filtered.

TYPES OF LIGHTING

- Fluorescent lamps are low-pressure mercury discharge lamps which
 produce UV radiation which in turn excites a phosphor coating that
 emits visible light. The use of different phosphors is responsible
 for the various color characteristics these lamps exhibit. Although
 fluorescent lighting is high in ultraviolet content, it is usually installed
 in libraries because it generates less heat and is more economical to
 operate.
- Incandescent lamps are the most familiar type of electric light source.
 Light is produced by passing an electric current through a thin tungsten wire flament. Incandescent lamps usually have less harmful UV radiation output than fluorescent lighting, but they generate more heat through infrared radiation. Tungsten incandescent lights also burn less efficiently and must be replaced more often than fluorescent lights.
- Tungsten-halogen lamps (also known as quartz halogen or just halogen lamps) also produce light by passing an electric current through a thin tungsten wire filament but with the addition of a halogen gas in the bulb, which enables the filament to operate at higher temperatures yielding a 'whiter', more efficient light source. Halogen lamps have three to five times the life and UV output of tungsten incandescent lights.

TEMPERATURE AND RELATIVE HUMIDITY

Control of temperature and relative humidity is critical in the preservation of library and archival collections because unacceptable levels of these contribute significantly to the breakdown of materials. Heat accelerates deterioration: the rate of most chemical reactions, including deterioration, is approximately doubled with each increase in temperature of 18°F (10°C). A frequent recommendation is a stable temperature no higher than 70°F and a stable relative humidity between a minimum of 30% and a maximum of 50%. High relative humidity provides the moisture necessary to promote harmful chemical reactions in materials and, in combination with high temperature, encourages mold growth and insect activity. Extremely low relative humidity, which can occur in winter in centrally heated buildings, may lead to desiccation and embrittlement of some materials. Temperature and relative humidity have been shown to be interdependent. Hygroscopic materials that normally contain moisture are the most sensitive to over-drying. Attics, bathrooms and basements are generally to be avoided. Inside walls are drier than outside walls, where moisture can collect. High humidity can lead to the development of foxing (small brown disfiguring spots in paper) or mold growth. Vigilance is necessary to ensure maintenance of acceptable environmental conditions.

The following statements need to be kept in mind whenever temperature and relative humidity are an issue.

- The first point that needs to be understood about temperature and relative humidity is that there is no one ideal level for all types of library material only values and ranges that minimize specific types of change in materials and objects. A temperature or humidity that is acceptable for one object may be disastrous for another. For example, photographic film, magnetic recordings, and digital carriers require low storage temperatures and relative humidity levels if their longevity is to be ensured; whereas parchment and vellum items require an RH higher than 50% if they are to retain their flexibility.
- There is extensive scientific evidence to suggest that paper will retain its chemical stability and physical appearance for longer at a constant, low storage temperature (below10 °C /50 °F)) and relative humidity (30-40%).
- However, while the paper text-block in a leather or vellum binding may benefit from being kept at a low RH, the binding itself will inevitably suffer. Leather and vellum need an RH of at least 50% if they are to continue to operate mechanically. The argument of Chemical *versus* mechanical damage or Content *versus* artifact has to be carefully considered when deciding what temperature and relative humidity ranges will have the most benefit for particular collections.

The effects of temperature on Newspaper

• It has been frequently stated that for every10°C (18 °F) rise in temperature, the rate of chemical degradation reactions in traditional library, newspaper and archive material, such as paper and books, is doubled. Conversely for every 10°C (18°F) drop the rate is halved.

- Heat coupled with low relative humidity will eventually lead to desiccation and embrittlement of certain materials – leather, parchment/vellum, paper, adhesives, the adhesive binders on audio and video cassettes, etc.
- Heat together with high relative humidity encourages mould growth and creates an environment conducive to pests and insects.
- Cold (less than 10°C/50°F) together with high relative humidity and poor air circulation will lead to dampness and eventually mould growth.

The effects of relative humidity on Newspaper

Organic matter is hygroscopic. It gains and losses water with increases and decreases in RH. Consequently, materials expand and contract as moisture levels rise and fall

- An RH of 55-65% minimizes mechanical damage as materials retain their flexibility.
- A sustained RH above 65% can eventually cause adhesives in both modern and traditional library material to soften and lose their adhesive strength.
- Above 70% RH, biological attack is a serious probability even if temperatures are low. In areas of poor air circulation RH should not exceed 60%; and even when air circulation is good RH should not exceed 65% in order to avoid mould growth.
- A low RH (less than 40%) minimizes chemical change but can cause materials to shrink, stiffen, crack, and become brittle.

Dust and Dirt

Particulate pollutants, such as soot, dirt, and dust abrade, soil, and disfigure materials. Dust and dirt that have absorbed gaseous pollutants from the air become sites for harmful chemical reactions when they settle on library material. Particulate pollutants can also aid mould growth. Modern library material, such as magnetic and optical media, are very sensitive to dust and dirt.

Dust is commonly a mixture of fragments of human skin, minute particles of mineral or plant material, textile fibers, industrial smoke, grease from fingerprints, and other organic and inorganic materials. There are often salts such as sodium chloride (carried in from sea spray or on skin fragments) and sharp gritty silica crystals. In this chemical mixture are the spores of countless moulds, fungi, and micro-organisms which live on the organic material in the dust (fingerprints, for example, serve as good culture media). Much of the dirt is hygroscopic (water- attracting), and this tendency can encourage the growth of moulds, as well as increase the corrosiveness of salts, hydrolysis, and the release of acids.

- A. Before reboxing or refoldering archival records, the exteriors of storage boxes or envelopes should be cleaned with a soft cloth to avoid transferring dirt to documents during handling.
- B. Documents that are dusty and dirty may be lightly dusted with a clean, soft brush of the same type recommended for dusting photographs.

Dusting should begin at the center of a document and extend out across its edges.

- C. Dust cloths should never be used to surface-clean or wipe textual records or photographs. Such action will work the dirt into the paper fibers, abrade the surfaces of photographs, and possibly result in permanent damage. Dust cloths should be used only for wiping shelves and the exteriors of boxes or similar enclosures and bound volumes.
- D. Great care must be exercised when cleaning archival records that are brittle, fragile, or damaged. Bound volumes with loose covers, missing spine pieces, or delaminated covering material must be handled with special care as well.
- E. Maintaining a clean storage environment is an ongoing responsibility that will do much to preserve archival records. Shelves, archives boxes, and the exteriors of bound volumes should be brushed as needed to prevent dirt from being transferred to records during handling.
- F. Photographs should be lightly dusted with a soft brush before they are inserted in polyester sleeves.
- G. Records that have not been protected by a closed container (such as those in wooden Woodruff boxes and some steel roller drawers or records resting on open shelves) should be lightly dusted with a soft brush before being placed in new, clean folders and boxes.
- H. Shelves should be cleaned before refiling storage boxes and bound volumes. It is meaningless to dust or replace boxes and clean bound volumes, only to reshelve them in a dirty environment. When cleaning shelves, work from the tops of shelves or compartments down to the bottom, to avoid transferring dirt from dirty to clean surfaces. To expedite dusting, it may be helpful to attach to book trucks small bags containing a supply of clean dust cloths. When shelves are extremely dirty, a damp cloth or sponge may be used effectively. Shelves must be completely dry before records are reshelved.
- I. The exteriors of bound volumes should be dusted with a soft, dry cloth or brush to remove surface dirt that could be transferred to the pages during handling. The edges of volumes also should be dusted with a soft brush, making sure that the pages are held tightly together so that dirt will not shift into the interiors of volumes.
- J. Work areas should be kept clean. Dust cloths must be discarded when they become dirty, and brushes must be washed with soap and water and air-dried on a regular basis to avoid transferring dirt from one surface to another.

Water

Water occurs in all the normal state of matter- solid, liquid and gas. It acts as a physical agent of deterioration by causing hygroscopic materials to undergo dimensional changes. Water is harmful for the library collection may come from sources like natural calamities, human negligence, leaking roofs, defective plumbing and through open windows at the time of raining. Excessive water brings about biological attack on paper, which is usually manifested as the growth of fungus or

mildew. The effects of water are stained paper, rotted leather, smeared ink, weaken adhesive, sustained fungi etc. Water also does injury to the steel furniture due to rusting.

BIOLOGICAL FACTORS

Where there is condensation or moisture due to high humidity, there is always the presence of biological growths such molds or fungi, insects and rodents causing infestation. Biological agents attack paper and other organic materials when both temperature and humidity are uncontrolled. Mold spores remain suspended in the air until they find suitable conditions for their growth. If mold is observed in the collection yet environmental conditions are not altered to halt its proliferation, the mold will digest the material on which it has begun to grow. This results in the staining and deterioration of materials attacked and in rapid loss of strength of organic materials. The growth of fungi is revealed by the formation of whitish patches on book covers and documents, which later may become brownish or greenish in color. It is a common experience to note that this mold growth occurs more readily on items made of organic materials which are tightly packed, and this is due to the fact that a thin, stagnant pocket of moist air is formed which favors mold growth.

In addition to high temperature and humidity, man's negligence also favors the growth and proliferation of insects. The following manifests such negligence:

- accumulations of dirt and dust from poor or careless housekeeping practices;(Library Building)
- introduction of foodstuff to storage and exhibit areas;
- entry of insect-infested items into the collection;
- open windows, air vents or poorly sealed windows and doors;
- unattended roof leaks and cracks in a deteriorated museum building; and,
- Poor ventilation.

Rodents and insects are the worst enemies of books and other organic materials that are cellulose in nature. The materials contain proteins and carbohydrates in the form of sizing, paste or starches, and other organic substances attractive to insects. The nature and extent of the damage depend not only on the insect and material, but also on how promptly the infestation is discovered and controlled. Damage may vary from a few holes to complete destruction.

MICRO- ORGANISMS

Fungus

Fungus are a large heterogenous group of plant organisms. The fungal spores are present in the earth, water and air and remain in a dormat state for long periods. These spores sprout and grow when they have the required moisture and heat. Generally fungi grow in a relative humidity range of 63-100% and

temperature range of $15-35^{\circ}$ c. In libraries fungal growth is known as mould or mildew and they appear as brown/black vegetative growth on paper, leather and textiles. Fungus consume cellulose and also thrive on nutrients in leather, glues, pastes, binding threads etc. they weaken and stain the paper and can cause discoloration.

Bacteria

Besides fungus, bacteria also decompose cellulose in paper and binding textiles.

INSECTS

Book lice

Booklice are small soft-bodied insects that have relatively largeheads, fairly long antennae and strong-toothed mandibles. Booklice cause tiny superficial erosions of irregular outline to paper, leather, gelatin of photographic plates, watercolors, parchment, glue and gum of book binding.

Book worms or Book beetles

Bookworms affect very much books and manuscripts. As the name itself suggests they feed on paper and damage the paper extensively. In libraries the bookworms lay their eggs on the edges of the books and on the surface of the bookbinding. They make tunnels in the pages and boards of the books.

Cockroaches

Cockroaches are nocturnal insects that have reddish brown color and fetid odor. Cockroaches hide in warm, damp and dark places like the bathroom, floors of kitchen, under the sink, near water pipes, crevices, cabinets and cupboards. They cause superficial erosion of irregular outline; a blackish "comma" shape mark on paper is a positive indication of the presence of cockroach.

Silverfish

Silverfish are wingless insects with long antennae and usually with three (3) long, tail-like appendages that are of silver-gray color. They are usually found in moist locations, that is, under stones and boards, cracks and crevices or in dark places where humidity is greater than 55%. This type of insects cause superficial damage to paper of irregular outline, but much smaller than that caused by cockroaches, especially the glossy type, books and documents, and wallpaper, and, eats away glue, paste, etc.; also attacks photographic plates and gelatin.

Termites or White Ants

Termites are small, yellowish or whitish social insects live in wood and under the ground. They live under conditions in which humidity within the colony is maintained at a high level. In books, they produce deep, crater-shaped holes, or deep, irregularly shaped erosions; sometimes this leads to almost total destruction of the volume and bring about irreparable loss or damage.

Rodents

Rodents include mice, rats, squirrels and many other species. Mice and rats are mainly found in libraries and they find their way into buildings through dry drains and openings in doors and windows. In libraries they eat and destroy materials made up of paper, cloth, leather, glue, etc. These animals & birds are very swift to move and hide in dark corners.

Disasters

It is important for every library, no consideration of size, comfort/facility to take all precaution possible to prevent the occurrence of an avoidable disaster. To face the consequences of disasters, natural or manmade safety measures are must. Also should be quick in nature.

Natural Man-made

Hurricanes Acts of war and terrorism

Floods Fires

Earthquakes Water (broken pipes, leaking roofs, etc.)

Volcanic eruptions Electric short circuit Explosions

Sandstorms Explosions

Strike by users/ employees

Riots

Numerous resources have been published to aid institutions in implementing disaster avoidance measures and formulating a disaster response and salvage plan. Only the key points are listed here. It should be mandatory for every library to have a written plan in which all these elements are fully developed.

A 'phased' approach can be used in disaster preparedness (as it can in preservation activities in general). That is, it is acceptable, as a first phase, to begin with a few sections (even in outline form), particularly if the institution focuses

First on those issues that are of greatest concern. In a subsequent phase, the planners can gradually add more detail and other sections as they become better educated, have time to pursue the plan, and are able to develop consensus on how the institution should organize its preparedness activities.

Disaster planning usually involves five phases:

Risk assessment Ascertaining the dangers to the building and its

collections

Prevention Implementing measures which will remove or reduce any

danger

Preparedness Developing a written preparedness, response, and

recovery plan

Response Procedures to follow when disaster strikes

Recovery Restoring the disaster site and damaged material to a

stable and usable condition.

The preservation of newspaper/books in library can be appropriately dealt with the causes of damage/factor and the recommendations. There of for preservation. The central idea is to protect the items in library as a whole not in process. It is not the case of safety of one part and other parts later on in future.

RECOMMENDED LEVELS FOR PRESERVATION

Recommended light levels

Lighting in museums, galleries, and exhibition rooms is usually left to specialists. This should also be the case for library reading rooms and storage areas. While 200-300 lux are acceptable levels for reading rooms, attaining such levels with a Combination of natural and artificial light, which satisfy staff and researchers, is difficult. In stack and storage area 50-200 lux is sufficient. However, to achieve these levels it would be necessary to exclude all natural light and rely entirely on artificial lighting. Light sources with ultraviolet radiation emissions above 75 microwatts per lumen require filtering.

Light levels for display materials

In exhibition situations, the light level falling on the surface of objects on display must be kept low. No more that 50-70 lux during an eight-hour day for a maximum of 60-90 days, is often recommended for light-sensitive materials like colored paper, newsprint, and certain bindings (e.g. textile bindings), and media like manuscript ink and watercolors.

Recommended levels of temperature and relative humidity

In general, library material should be stored and used in stable conditions which are not too hot, not too dry, and not too damp.

- If temperatures do rise above 20°C (72°F) it is vital that relative humidity levels do not rise or fall beyond acceptable levels.
- In institutions, temperatures are often dictated by what is deemed suitable for human comfort, around 20-22°C (68-72F) for sedentary activities. Human beings are sensitive to changes in temperature but relatively insensitive to changes in humidity, while the opposite is true for most library material.
- Many attempts have been made to provide 'ideal' figures for temperature and relative humidity levels. However, it is now recognized that it is probably impractical and unrealistic to maintain a building or stack temperature at one setting throughout the year, especially in areas with extreme temperature
- Variations, without incurring huge costs.

Preventing insect and pest infestations

It is now accepted that an Integrated Pest Management (IPM) approach should form part of every preservation program. IPM in volves:

- Using sticky traps. Traps have the advantage of catching insects before they can be found visually; they catch a wide range of species; they can be placed in areas which are difficult to inspect; trapped insects can be identified and counted; traps are good indicators of an increase in insect numbers in one area; they also highlight any failure of control treatment.
- Preventing pests and insects from entering the building making sure doors close properly, installing mesh screens for windows and doors, etc.
- Monitoring the building regularly for the presence of insects and pests.
- Ensuring all staff, from cleaners to librarians, are vigilant and report any signs of fresh damage and activity.
- Checking all material which is to be accessioned before it enters the library.
- Understanding the biology and life cycles of insects and pests, which helps to know when and where they are likely to breed, what they are likely to eat, where they are likely to live.
- Eliminating or containing all sources of likely infestation ideally food and drink should not be consumed on the premises; flowers and plants should not be allowed in the building.
- Maintaining an environment not conducive to pests and insects, this is clean, cool, dry, and well-ventilated.
- Using appropriate exterior lighting, such as sodium vapor, which is less attractive to insects.
- Implementing a cleaning and hygiene programme rubbish should be safely and properly disposed of; attics and basements regularly checked and cleaned.

Fire Protection

Fire protection of library collections is a challenge as they typically involve irreplaceable documents, high values per square meter, large open spaces and objects that are tender and easily damaged if subjected to smoke, heat or extinguishing agents in case of fire.

Inert air is also referred to as hypoxic air (reduced oxygen concentration) and comprises slightly altered concentrations of components of air. Typically 5 % oxygen is substituted by 5 % nitrogen. Inert air has predetermined oxygen level and safely vents spaces to be protected continuously. Inert air is safe to breathe, but prevent ignition and fire in common materials. Inert air replaces the use of inert gases. Inert air is produced by simple and reliable generators that fit into existing or new air conditioning systems so that no pipes, nozzles or other equipment need to be installed in the rooms to be protected.

As a continuous inerting system it creates an atmosphere that is safe for humans to breath, but in which common materials cannot ignite or burn.

1. Preventive mode: 15-16 % O₂ (staff occupy area occasionally or normally)

2. Suppression mode: 10-12 % O₂ (short term occupation)

PRESERVATION IN INDIAN CONDITION

We have discussed the preservation problem prevailing in all over world. These preservation problems are somehow or the other different in India covering all the direction east west north and south. In India every state has its own problem on weather construction of building institutional necessaries, expertise, in library science. A central board or commission should be constituted to analyses the problem and its remedy.

CONCLUSION

The development of human being is cent percent related with the library now with electronic equipments. Knowledge without library and other items like Newspaper, electronic equipments is not possible. The upkeep of these items is connected with library. Library does not mean a room for safety of books in almirah, racks but it is a well designed building. The building should consist of rooms for books newspaper etc, big reading room/hall, projector room, office, conference hall. The entire building should be constructed keeping in view safety and preservation of all the items required by library. This article covers under preservation building, furniture, light, fire, electrification and so on. While making category the focus of observation is safety/preservation from manmade disasters only, Nature made disasters are exceptional. We can not restrict earthquakes but can construct building to that level of safety where minimum damage to library.

The preservation is mainly concerned with educational, Institutional, public libraries, Information centers research library. These are categories in academic, public & special libraries. One is personal library also by renowned literary persons, scientists. The existence of library clearly covers certain agencies like social organizations, institutions, universities wherein financial requirement is dominant. When books are printed the press and its machinery also cooperate in preservation such as use of ink on printed books newspaper. The paper factory also contribute/cooperates while manufacturing, quality papers for use of books.

While we are discussing financial impact on safety of library, the staff/employee of library are also responsible for preservation. There should be a trained staff, not the staff posted for training in library. The user of library sometimes prove themselves enemy of library. They snatch pages from book and take away newspaper clipping advertisement for services. These willful action forfeit the preservation.

The preservation of library is so vast subject that this article is few lines of the book for preservation.

REFERENCES

- 1. Agarwal, O.P. (1977) Care and Preservation of Musseum Objects, New Delhi: National Research Laboratory for conservation of cultural property.
- 2. Agarwal, O.P. and Barkeshli Mandana (1997)). Conservation of Books, Manuscripts and paper documents, Lucknow: INTACH, ICCI.
- 3. Bokhare, Narendra. (1997). Conservation of Manuscripts: Prevention is Better Than Cure- Conservation of Cultural Property in India. Vol 30. New Delhi: p52-63
- 4. Brandis, L. and J. Lyall. 1997. Properties of Paper in Naturally Aged Books. *Restaurator* 18: 115-30.
- 5. Guidelines for Control and Prevention of Termite Infestation in Archives and Libraries, (1991). New Delhi: National Archives Of India.
- 6. Gupta, C.B. & Haider, S.H. (1995). Conservation Practices in Ancient India-CCPI, vol-28, New Delhi: P36-43
- 7. IFLA Principles For The care and Handling of Library Materials International Preservation Issues One
- 8. Jeyraj, V. (1995). Care of Archival Materials, Thanjavur saraswati Mahal Series No: 395.
- 9. Malman, David. "Lighting for Libraries," in *Libris Design* (<u>librisdesign.org</u>).
- 10. Prasad, Lalan Kumar. (1995). Protection of Documents from Photo Chemical Effects of Light-CCPI, vol. 28, New Delhi: p45-49.
- 11. Repair and Preservation of Records, (1988). New Delhi: National Archives of India
- 12. Uniyal, C.P. (1995). Preventive Conservation of Archival Materials: Some Rather Ignored but Vital Aspects- CCPI, vo-28, New Delhi: p50-55.

DIGITIZATION AND DIGITAL PRESERVATION OF HERITAGE COLLECTION IN INDIA AND IRAN: A COMPARISON

Leili Seifi

and

Dr. Khaiser Nikam

ABSTRACT

This paper gives a brief introduction to the heritage collection in India and Iran and notes the ongoing digital preservation in both countries. It investigates access and management digital preservation of cultural heritage and some current projects in both nations.

It discusses the problems faced by the libraries and museums in archiving and managing, preserving, and providing continuing access to these digital assets for their long-term management. And also discusses about technical, economic, language, technological issues in digital preservation with focus in both countries.

INTRODUCTION

In the present age, rapid developments of information technology and communication systems have brought about revolutionary changes in the organization and management of information. The advance application of information technology has touched each and every activity of library and information centre. Now information technology brings a unique opportunity to the field of preservation, with the digital preservation facility of non digital documents.

Preservation of digital resources like e-journals, database records, web sites, e-mails, digital images, audio-visual materials, interactive programs or any other kind of binary data is called digital preservation. Digital preservation is defined as consisting of a set of managerial activities that will: (a) ensure the long term maintenance of a byte stream sufficient to reproduce the document and (b) provide continued accessibility of the contents over time and through evolving technology.

India and Iran are rich in terms of arts and cultural heritage resources (including manuscripts, works of art and artefacts) as well as scholarly resources generated in educational institutions. A number of organizations possess such resources. This cultural heritage should be accessible not just to the eminent class of scholars but also to all. Some of the key issues regarding access to cultural heritage are given below:

1. Collect, store and organize for long term preservation

- 2. Select, digitize, organize and validate content to create an effective archiving system for users.
- 3. It should be accessible to all users, irrespective of the technology they use or their disabilities, including navigation, content, and interactive elements.
- 4. Access systems should be user-centred, as per the needs of users, relevance and ease of use.
- 5. It should take care of multi-linguality. Access in more than one language should be provided.
- 6. It should use interoperable systems within cultural networks to enable users to easily locate the content and services that meet their needs.
- 7. Copyright, ownership rights and other legal issues should be clearly defined and protected (Guar, 2009)

ISSUES RELATING TO DIGITAL PRESERVATION

Ownership Issues: In case of digital materials, the ownership is diffused. Libraries often pay license fee for accessing the material, which is hosted at the server of the publisher. Unlike the book scenario, libraries do not always hold copies of the material making responsibility for long term preservation unclear. To achieve a copy of the digital resource, the libraries will have to take permission from the right owner whether the author himself of the publisher or any other intermediary.

Fragility of the Media and Technological Obsolescence: The greatest concern of digital preservation is relatively short life span of digital media and higher rate of obsolescence of the hardware and software used for accessing the digital records. Magnetic tape may be unreadable just thirty years after manufacture. The newest recording medium- optical disk- may indeed have a longer life than the digital recording surfaces that have gone before. It is likely, however, that today's optical storage media may long outlast the life of the computer system that created the information in the first place. This is the ultimate irony of recorded history. In order to achieve the kind of information density that is common today, we must depend on machines that rapidly reach obsolescence to create information and then make it readable and intelligible.

Fragility of the Integrity of Digital Information: The integrity of the information objects in the digital environment is so fragile that as stakeholders disseminate, use, reuse, recreate and re-disseminate various kinds of digital information, they can easily destroy valuable information, corrupt the cultural records and ultimately thwart the pursuit of knowledge. One of the greatest dangers to long life of the digital information is the ease with which it can be abandoned and then deliberately or inadvertently destroyed.

Copyright and Intellectual Property Right (IPR) Issue: The IPR issues on digital contents are much more complex than for printed material. IPR issues in digital environment have implications not only on digital contents but also to any related software. Simply refreshing digital materials onto medium,

encapsulating content and software for emulation, or migrating content to new hardware and software, may lead to infringement of IPR unless statutory exemptions exist or specific permissions have been obtained from the right owners.

BARRIERS TO ACCESS CULTURAL HERITAGE

There are many barriers in free and fair access of Indian Cultural Heritage not only to common people but also to the scholarly community. Some of such barriers to access to Indian Cultural Heritage are discussed below: -

Technological barriers

Technological acts both as a barrier as well as a catalyst in enhancement of access to information and knowledge. It also helps in the preservation of Cultural Heritage.

Economic barriers

Without adequate financial resources neither Cultural Heritage can be preserved nor can access be provided. Unlike resources in science and technology, it is expected that access to resources in the field of Cultural Heritage should be made free of charges. However, there is cost involved in it.

Language barriers

India is a country with many languages and scripts. The cultural heritage material particularly manuscripts are available in different languages and scripts.

So language is a barrier to access to Indian Cultural Heritage material. Many inscriptions available in India are still not being translated.

Technological obsolescence

Many of the audiovisual cultural heritage material are still not integrated into traditional library activities. Old gramophones, spool tapes, many more old form of audio visual material is facing problem of technological obsolescence as players for many of these equipments are not available (Guar, 2009).

INITIATIVES IN DIGITAL PRESERVATION OF MANUSCRIPTS IN INDIA AND IRAN

Thinking the importance of digital preservation, in India and Iran too, numbers of projects are taken by different organizations for the preservation of these valuable manuscripts in digital format.

In July 2000, a pilot project for digitization of rare manuscripts was initiated by National Archives of India, collaboration with Department of Science and Technology and National Institute of Advanced Studies, Bangalore. Under this project, rare manuscripts, viz. Bhagwadgita, Ramayana, Mahabharata, etc, are digitized and stored in CD medium.

One of the major functions of the National Library of a country is to collect and preserve nation's intellectual and cultural heritage. Therefore National Library has taken several steps to preserve this heritage as well as to increase the accessibility and awareness of these records. National Library of India, Kolkata is the apex body of library services India. This National Library has about 3600 rare and historically important manuscripts in different languages. These manuscripts are preserved separately in the Rare Books division. This Library has initiated a digitization programme, known as 'Down the Memory Lane', to digitize these manuscripts along with other rare books and documents are archived on CDs. Between the year 1999 and 2001 approximately 6601 books and manuscripts containing 2.5 million pages were scanned and archived in 548 CD- ROMs.

Established in 2001, Nanakshahi is a registered trust at Punjab for creating a comprehensive Digital Sikh Reference Library. This trust introduced a Project named" Virsa "under which one hundred fifty manuscripts of Sri Guru Granth Sahib and other manuscripts available in the Government Museum and Art Gallery, Chandigarh and Kurukshetra University are digitized.

In February 2003, the Department of Culture, Ministry of Tourism and Culture, Government of India Lunched a national level mission for the preservation of the manuscripts India's real treasure of culture. The Mission has laid emphasis, on digital preservation of rare manuscripts all over India and already a number of manuscripts are captured in digital form.

Indira Gandhi National Centre for Arts (IGNCA) was launched on 19th November, 1985 by the late Prime Minister of India Shri Rajiv Gandhi and registered at New Delhi on 24th March 1987. This Centre has taken a nation wide project for digital preservation of manuscripts. This Centre is digitizing a number of manuscripts in Assam also.

Khuda Bakhsh Oriental Public Library located in Patna, Bihar has taken a pilot Project of Digitization of Manuscripts since October, 2005, which has a mighty collection of about 21,000 manuscripts in Arabic, Persian, Urdu, Turkish, Hindi and Sanskrit written on Palm- Leaves (Mazumdar, 2009).

The Oriental Research Institute was established in Mysore by His Highness Sri Chamaraja Wodeyar, the then Maharaja of the erstwhile State of Mysore, in the Year 1891. Then the name of the Institute was" Government Oriental Library". The purpose of establishing the institute was collection and preservation of important manuscripts and publication of rare valuable works. ORI considers the amalgamation of ancient wisdom and the modern technology as a key to success in sharing knowledge worldwide. Hence, ORI is experimenting in digitization, image enhancement, computerization and archival database of its huge collection of manuscripts. At present, with its limited digital laboratory, ORI has successfully done some experiments and has got some fruitful results, which will be implemented on large scale after the establishment of a well-equipped laboratory in the proposed National Centre for History of Science (NCSH) building.

The Rampur Raza Library is a treasure house of Indo Islamic learning and Art. It was founded by Nawab Faizullah Khan in 1774 AD. His descendants

continued to enrich the collection. After the independence and merger of Rampur State in the Union of India, the library was brought under the management of a Trust till the Govt. of India took over the library on 1st July 1975 under the Act of Parliament which declared it as an institution of National importance. Its affairs are managed by the Rampur Raza Library Board whose Chairman is H.E. Governor of U.P. This library digitized more than 200 000 image of rare paintings, specimens of Islamic calligraphy, precious illustrated manuscripts, and art objects. They stored digitized items in CD.

The Library of the Asiatic Society is the grand stay, glory and honour of the Society. Its importance lies not in numerical strength but in its rich and unique contents. The collection has been built up mainly with gifts received from the members. The Society moved into its own building in the early part of 1808 and the Library was thrown open to the members and the public in the same year. The library has started digitizing of manuscripts and rare books from 2009.

One of the major functions of the National Library of a country is to collect and preserve nation's intellectual and cultural heritage. Therefore National Library has taken several steps to preserve this heritage as well as to increase the accessibility and awareness of these records. National library and national archive established in 1973 in Tehran. These libraries have good collection such as Books: 1/4 million, Periodicals: 2500, over 5000 titles of old periodicals are cited in the archive, Non-book, resources: 150000, Manuscripts: 18,000, Lithographic books: 13000, Handwritten Documents: one million.

Astan Quds Razavi Library established in 1430 in Mashhad. Collection is such as Books: 1100291, Manuscripts: 46596, Periodical: 1546, electronic audio Visual: 35952, Manuscript Microfilm roll: 34726 Map: 1800.this library also has good collection of rare material and manuscript and started digitizing the collection.

The Islamic Parliament established in 1908 in Tehran. Collection of Library include Books:218964, Manuscripts:2400, Periodicals:1300, National & historical documents:12 Million, Map:100, Photos:10000, Rail:400, Viedo film: 115, Governmental Report: 10100. This library have started digitizing some of manuscripts and governmental reports.

Tehran University, Central Library established in 1971 in Tehran. Library has good collection of Books: 340000, Manuscripts around: 120000, Periodicals: 215000. The library already computerized all of books. And currently initiating digitizing manuscripts.

CHRONOLOGY

There are a number of studies available in India and abroad on digital preservation of cultural heritage.

People like Bansode (2008), Kashimura (2007) have examined different aspects of digital preservation of rare materials. Also Abd Manaf (2007) in his study has examined the current state of digitization initiatives by cultural institutions in Malaysia. Ramana (2005) has studied about digital preservation, digitization of manuscripts and preservation techniques which are currently use in India.

Mischael(2007) has examined the role of libraries in access to, and preservation of cultural heritage in concert with a wide range of other cultural institutions.

According to Majumdar(2005) the Indian culture and civilization dates back to 2300-1750 B.C. The past literary heritage of India is in the form of manuscripts available in palm leaves, cotton, silk, wood, bamboo, and copper plates. The initiatives taken by the Indian Government in introducing the National Mission for Manuscripts is the right step towards preserving these culturally significant works.

Literature Review: Some of the studies carried on this topic are presented here.

Rao(2005) has studied the tools and technologies developed for preservation, archiving, replication and dissemination of rare and rich artefacts, capture model, conversion model and the hosting model are also described. Mastumura(2004) has studied preservation of cultural heritage of all types has been of the focus of UNESCO's activities. Webb (2003) has presented a very brief review of the draft charter on the presentation of the digital heritage, submitted to the UNESCO. Shadanpour(2008) has examined different aspect of digital cultural heritage in National Library of Iran. Niknam(1991) has studied the state –of-theart of conservation, preservation and restoration in Iran. He focused on activities in different institutions.

Kupriene and Prokopcik (2008) say professionals representing library, archives and museums community are now dealing with a new challenge. Preservation of digital information digital preservation Europe Project, that is responsible for coordination of digital preservation activities in Europe. Thiyam Satyabati(2008) says manuscripts are one of the precious materials of our cultural heritage, acting as a valuable source of history and knowledge and offering perspectives on contemporary society. Gholamhosseinzadeh (2007) has studied the use of information technology and digitization in different libraries in Iran and how they have made changes in various for several years. Natarajan (2004) has studied the definitions of digital preservation and the requirements for preservation. The managerial aspects of digital preservation and planning requirements are given along with the advantages of digital access and the problem faced for preservation. According to Chudamani and Nagarathna(2005) Indian Institute of science library, digitizes some of the specific documents which are presently in print format.

CONCLUSION

The India and Iran are rich in terms of arts and cultural heritage resources (including manuscripts, works of art and artefacts) as well as scholarly resources generated in educational institutions. In this paper some of organizations that possess such resources are mentioned. This cultural heritage should be accessible not just to the eminent class of scholars but also to all.

REFERENCES

- 1. Abd Manaf, Zuraidah. (2007). The state of digitization initiatives by cultural institutions in Malaysia: An exploratory survey. Library Review, 56 (1), 45-60.
- 2. Bansode, Sadanand. (2008). Creation of Digital Library of Manuscripts at Shivaji University, India. Library Hi Tech News, 25 (1), 13-15.
- 3. Chudamani, K S; Nagarathna, H C. (2005). Cost effectiveness of infrastructure in digitization of traditional Format library materials: a case study of Indian Institute of Science. SRELS Journal of Information Management, 42 (4), 515-522.
- 4. Gaur, Ramesh C. (2009). Barriers to access to Indian Cultural Heritage: Copyright, Permission Rights and Ownership issues vis-à-vis IGNCA Collections.pp.20-30 Indo-Us Workshop on International Trends in Digital Preservation, Pune, India, March 24-25, 2009.
- 5. Gholamhosseinzadeh, Zohreh. (2007). A survey of usage scope from information technology in storage and retrieval of manuscripts in the libraries of Iran. Faslname-Ye Ketab/Library and Information Studies 17(4), 13
- 6. Kashimura, Masaaki. (2007). Series: Digital archiving of rare books by the HUMI Project (11): anintroduction to the digital archives of rare books and theirpublication. Journal of Information Science and Technology Association (Joho no Kagaku to Gijutsu), 57(2), 89-93.
- 7. Kupriene, Jurate; Prokopcik, Marija.(2008). Digital Preservation: Vocational Training. The Case of Digital Preservation Europe. Informacijos Mokslai/Information Sciences, 44, 78-87.
- 8. Majumdar, S. (2005). Preservation and conservation of literary heritage: a case study of India. International Information and Library Review, 37 (3), 179-187.
- 9. Mastumura, Tamiko. (2004). An international initiative for the preservation of digital information. UNSECO's charter on the preservation of digital heritage. Journal of Information Processing and Management, 47(7), 471-475.
- 10. Mazumdar, Nirmal Ranjan.(2009). Digital Preservation of Rare Manuscripts in Assam.pp.14-19 7th International CALIBER-2009, Pondicicherry University, Puducherry, February 24- 27, Ahmedabad.
- 11. Michael, Gorman. (2007). The wrong path and the right path: The role of libraries in access to, and preservation of, cultural heritage. New Library World. 108(11/12), 479-489.
- 12. Natarajan, M. (2004). Digital preservation of cultural heritage information and its Implications. Journal of Library and Information Science (India), 29(1&2), 14-25.
- 13. Niknam, Mehrdad, (1991) Conservation of library materials in Iran. Conservation-Administration-News.46; July; 6-7.
- 14. Shadanpour, Farzaneh,(2008). The Digital Heritage. Faslname-Ye Ketab/Library and Information Studies. 18(4); winter; 93-108.

- 15. Thiyam Satyabati, Devi(2008). Impact of Information Technology on the Societal Archive: A Case Study of Manipuri Manuscripts. The International Information & Library Review, 40(3), 179-184.
- 16. Webb, Colin. (2003).UNESCO campaign to preserve the "digital heritage" and consultations in Asia and the Pacific. International Preservation News, 30, 4-9.

NEWSPAPER AND DIGITAL ARCHIVES: A CASE STUDY OF MADHAVRAO SAPRE MEMORIAL NEWSPAPER MUSEUM, BHOPAL, A UNIQUE TREASURE OF INDIAN JOURNALISM

Dr. R.G. Garg

Rajnish Tamrakar

and

Amit Tamrakar

ABSTRACT

The Indian culture is unique and varied. This section on culture of India contains information on various aspects of the great Indian culture. The term of 'cultural heritage' denotes all kinds of materials objects associated with cultural traditions. Libraries and archives play a critical role in organising, preserving and providing access to the cultural and historical heritage of the society. In the relatively stable world of printing, hand written and mechanically reproduced information, libraries and archives managed to preserve this rich heritage for specialised scholars and for the general public. In this context, the paper will attempts to highlight the Indian cultural heritage resources available at "Madhavrao Sapre Memorial Newspaper Museum and Research Centre, Bhopal" in the form of newspaper, books, periodicals, manuscripts, letters etc. This paper also highlights the present status of preservation of these precious collections and difficulties and many more.

INTRODUCTION

More than any other medium, newspapers serve to record the daily lives of a peoples and the world around them, newspapers are also a rich source of cultural and social information. These have tremendous significance for the society, in general, and for the researchers and historians, in particular. Okarafor (1991) has discussed the role of newspapers in providing current, retrospective and supplementary information. The researchers, historians, genealogists and others continue to use older newspapers because of the immense amount of information held in them. The newspapers have lot of intellectual content which need to be preserved for posterity. Many people mistake Newspaper Museum to be a mere library and collection of old and rare papers but those who have seen it closely know that it is the testimony of creation of history. No doubt, newspapers are a rich source of cultural and social information.

LIBRARIANSHIP

Four wheels of librarianship are: collection of materials appropriate for libraries, organisation of the collection, preservation of materials and dissemination of information.

Preservation of Cultural Heritage

Preservation of cultural heritage available in book and various non book forms is one of the crucial issues before the librarian. Physical condition of the book may be damaged or decayed due to factors, such as climate, insects, acidified paper, binding system, old age, handling of book etc. As such the librarians or information professionals are required to see that our cultural heritage is maintained properly and every possible step is taken to preserve them not only for our present use but also for the use of our future generation.

As per the definition given by International Federation of Library Association (IFLA), preservation includes all the managerial and financial considerations, including storage and accommodation provisions, stabbing levels, policies, techniques and methods involved in preserving library and archive materials and the information contained in them.

As per Conway- the term preservation is an umbrella under which most libraries and archivists cluster all of the policies and options for action, including conservation treatments. It has been the responsibility of librarians and archivists and the clerks and scribes who went before them to assemble and organise documentation of human activity in places where it can be protected and used.

Conservation

According to IFLA- Conservation denotes those specific polices and practices involved in protecting library and archive materials from deterioration damage and decay, including the methods and techniques devised by technical staff.

Restoration

As per the definition given by IFLA, restoration denotes those techniques and judgements used by technical staff engaged in the making good library and archive materials damaged by time / use and other factors.

BRIEF ABOUT SAPRE SANGRAHALAYA

Madhavrao Sapre Memorial Newspaper Museum and Research Centre is a treasure house of National Intellectual Property in form of newspapers, periodicals, journals, reference books, correspondence and other precious documents. It was established in 19th June, 1984 founded by Journalist Mr. Vijay Dutt Shridhar. This newspaper museum registered under the M.P. Society Act (1973), R.N. 16415.

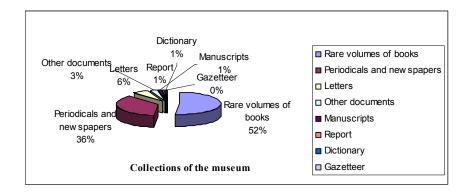
AIMS AND OBJECTIVES OF THE MUSEUM

- 1) To collect, consolidate and preserve the National intellectual heritage.
- 2) To provide a suitable and reliable place to individuals of elder generation who have preserved rare and important historical documents, manuscripts and are now not able to look after their life long preserved intellectual treasure, where it is preserved in the name of donor.
- 3) To provide reference material to Researchers and writers under supervision.
- 4) To conduct educational, training refresher course, seminar, workshop, group discussion, lectures, research activities in the field of journalism and mass communication. Publication of journals and books.

COLLECTION- AT A GLANCE

Since, 25 years, Sapre newspapers museum has innumerable number of rare documents including newspapers, books, journals, periodicals etc. The vast collection provide reference materials to researchers on literature, journalism & mass media, history, political science, sociology, economics etc. One of the prime aims of the Sapre Museum is to serve as a major resource hub for the oral, written and visual materials. Following tables shows the Sapre museums at a glance:

S.No.	Documents	Nos.
1	Rare volumes of books	28,048
2	Periodicals and newspapers	19,846
3	Letters	3,500
4	Other documents	1,467
5	Manuscripts	653
6	Report	467
7	Dictionary	282
8	Gazetteer	163



COLLECTION (PRINTED MATERIALS)

Rare Books

Acquisition of rare books in library is a very challenging job for librarian and information professionals. It has acquired books published in 18th and 19th centuries. Museum having near about 28,000 rare books. Lots of books in several personal collections in reference library may also be put under the rare book category. Some of the books are also in injurious form.

Manuscripts

Sapre Museum has about 653 rare and historically important manuscripts in different languages. These manuscripts are preserved separately along with their important and rare books in the rare books division.







Newspapers and Periodicals

The news paper section of the museum is unique with rarest of the rare newspapers kept very safely under chemical treatment. Some newspapers are as old as 1681 AD while many publications have been kept right from the day of their inception till date. India's first newspaper i.e. "Hicky's Gazette" is also available in museum. It has also a very rare collection of Indian as well as foreign publication. Name of various Indian and foreign publications available at Sapre museum is mentioned in Annexure-I.







Rare Reference

Material is available on freedom struggle, political awakening, social reforms and self reliance, swadeshi movements. Old and new editions of gazetteers, encyclopaedias, annual registers, inquiry commission reports, studies report, white papers, memoirs, biographies, commemorative volumes on towering personalities.

AFFILIATION WITH UNIVERSITIES

Sapre newspapers museum is recognised with many universities as a research centre like "Barkatullah University, Bhopal", "Makhanlal Chaturvedi National Journalism & Communication University, Bhopal", "Rani Durgavati Vishwavidyalaya, Jabalpur", "Kushabhau Thakre Patrakarita awam Jansanchar University, Raipur" etc.

The museum provides reading facilities to the students, research scholars etc. More than 600 students who have registered in various universities in the country have completed their D.Lit., PhD, M.Phil report for awarding the relevant degree.

Museum more used by the serving journalists and academicians who know that whatever not available with rest of the world rest of the world would definitely be on the racks of the Sapre museum.

TREASURE- TROVE FOR KNOWLEDGE SEEKERS

Many people mistake Newspaper Museum to be a mere library and collection of old and rare papers but those who have seen it closely know that it is the testimony of creation of history. The hand written and correction carried documents of important personalities including political leaders, writers, poets, scientists and journalists give a different insight into the historical aspects of nation.

The section despite being a small one having letters of those who shaped the destiny of the country and state is a rare one for Madhya Pradesh. Similarly the collection of old radios and tools of information makes you relive the past.

ARCHIVES

Some of the archives in India have rare and valuable information which needs to be digitised and preserved for posterity. Besides to National Archives of India (NAI), there are 27 states archives, which house documents relating to pre and past British rules of various department, princely states, deeds, agreements, documents relating to religious, political, economic matter, old newspapers, old maps, treaties, rare books etc. If documents are not properly preserved these may deteriorate. Digitisation is one such solution.

NEWSPAPERS ARE THE PRIMARY SOURCES

Researchers are always fond the primary sources of information. Newspapers are the original or primary sources of human thought and knowledge in various fields of human endeavour. These are primary sources of human civilisation stored on a variety of medias viz. clay tablets, stone, metals, tree barks, palm leaves, animal skin, cloth, paper etc. In historical research, researchers are engaged to dig up facts of pasts and verification of theses events stimulates the findings to establish as legitimate when primary sources would be available. These primary sources are particularly indispensable because only they are entirely reliable, since secondary sources may have chances of errors as these are repetitive in nature and generally multiplied from one edition to the next.

Complications

With bare minimum staff and very meagre funds the survival of museum is a miracle of sorts in the age when huge government budgets are unable to sustain the running museums of the country. In the beginning many people donated money for the museum when it used to run from a rented building in old Bhopal but now it has a very little support from outside. But the indomitable zeal and spirit of the founder of Sapre Museum has created a unique institution in Madhya Pradesh which is not only rare in the country in terms of manuscripts and old issues of news papers but also in terms of thought.

Suggestions for Digital Archives

The original and rare documents available in the museum should be converted in micro forms for longer life. For this purpose micrographic technology may be used like KODAK KOMSTAR 100/200 microprocessor etc. Other advance technology may also be used for the same. For avoiding the daily use of original documents microform copy should be used in daily routine and for retrieval purpose computer technology may be used. In other words we can say that the COM (Computer Output Microforms) and CAR (Computer Assisted Retrieval) technology will be more useful for future of this prestigious institution of journalism. All these things will be possible by latest equipment and trend staffs and for it extra financial support is required.

CONCLUSION

Newspaper is the mirror of society. Newspaper captures day to day life of a community and its citizens. Today, thousands of newspapers are being published every day. Many people mistake Newspaper library to be a mere library and collection of old and rare papers but those who have seen it closely know that it is the testimony of creation of history.

REFERENCES

- 1. Tripathi, M, Jeevan, VKJ and Sonker, SK. Digitally archiving- newspaper clipping. National conference on digitisation and digital preservation, 11-12, December 2008, New Delhi. P. 112-120.
- 2. Okarafor, E.E. Managing newspapers collections in Nigeria. Information development. 1991, 7 (2), p. 99.
- 3. Ramaiah, Chennupati K. and Babu, K. Sunrendra. Preservation of digital cultural heritage materials: problem and prospectus. National conference on digitization and digital preservation. 11-12, December 2008, New Delhi. P. 55-67.
- 4. Nandi, Subodh Gopal. Manuscripts: its preservation and management in visva- bharti library. XXVI IASLIC all India conference. 26-29 December 2007, New Delhi. P. 227-233.
- 5. Babu, B. Ramesh and Ramesha. Digital preservation: major issues, challenges and possible solutions in digital environment. National conference on digitization and digital preservation. 11-12, December 2008, New Delhi. P. 121-128.

	Annexure-I
Indian Publication	Foreign Publication
Hicky's Gazette	Nature
Bombay courier	Sphere
Bengal Harkaru	Punch
Friend of India	Illustrated London news
Bombay times	Times
Indian mirror	Observer
Patriot	Field
Victoria paper	Sunday dispatch
Delhi institute journal	Sketch
Bengali pioneer	Graphic
Native opinion	Illustrated sporting and dramatic news
Amrit bazaar patrika	National geographical magazines
Bihar herald	Economist
Statesman	Daily telegraph
Illustrated weekly of India	Reader's digest
Tribune	Outlook
Sunday mail	Country life
Modern review	Los Angeles times
Indian review	Asian review
Pictorial gazette	Voice of India
Bombay chronicle	New statesman
Harijan	News week
Young India	Listener
Times	
Deccan chronicle	
Hindustan standard	

DIGITAL PRESERVATION OF NEWSPAPER RESOURCES (HARD COPIES ARCHIVESE-PAPER ARCHIVES ETC.)

Rajesh Kumar Gupta

Vijetacharya Malviya

and

Naveen Kumar Srivastava

ABSTRACT

The rapid development of electronic imaging and storage technologies holds great promise for enhancing access to all types of research materials, including newspapers. As implied above, for example, the highly labor-intensive task of newspaper indexing can be accomplished with remarkable efficiency and savings by conversion of text into electronic form. Because of the size of most newspaper pages and their brittleness, the direct use of electronic imaging as a tool for newspaper reformatting is still far from a practical reality. Cost considerations may further prevent it from becoming a widely-available option. It should also be emphasized that digitization, for a wide variety of technical problems, is not generally accepted as a preservation technique.

Because of old rare & special type of documents have always been important tools for research, acquiring knowledge and future planning. These are significant reference for ongoing research and act as strongest implements of history. Digital preservation of newspaper to import new life to antiquated contents perishable media such as paper to reinstate in its usable form forever

Digital preservation of newspaper involves various steps are as follows.

- 1. Selection of material or text.
- 2. Disbinding the material or text.
- 3. Scanning
- 4. Image processing
- 5. OCR conversion formats
- 6. To creation metadata
- 7. Output form & managing storage and delivering systems.

Therefore digital preservation techniques for any type of library documents has come as it reduces storage space, longevity of the materials and enhances the retrieval efficiency of information. It has provided new opportunities to capture, store and provide all time access to information anywhere. Digital preservation enables to add life store to rare brittle and fragile documents. Thus emergence of digital technology has proved to be more relevant and important on account

of its wider suitability as well asunder the changing scenario. Therefore we must convert and protect the newspaper in digital formats for the future convenience.

This paper is attempting to highlight the system, importance needs of preserving the documents specially newspaper resources. Because of digitalization adds to the sustainability of libraries particularly when objective of libraries are changing in the new environment.

Keywords: Digital Preservation, Digital Archive, Newspaper, Digital Libraries, Digital technologies.

INTRODUCTION

This is the age of knowledge based economy revolution society. It stands to reason that knowledge is the most important asset for all the countries. Digital technologies are used increasingly for information production, distribution, and storage. It is a set of activities required to make sure digital objects can be located, rendered, used and understood in the future because of deterioration takes place in documents with passing of time. Therefore, it has to be need and proper care of the different types of documents to save for getting the views, news, information and culture of nations for the future reference.

Newspapers are among the most important social publications. These documents contain cultural data and news about social events, national and international economic and political developments and the world's circumstances of the time. But the material properties of newspapers make them unsuitable for preservation. Digitization provides new opportunities to extend their utilization and thus avoid damage to these valuable historical archives. Digital technology and high-speed networks are leading to comprehensive changes throughout the society. Information resource is growing every day and so are the user's expectations. So to save the valuable information and fulfill the users' requirements for posterity, digital documents and resources should be managed and preserved at a tremendous rate. Digital technologies present a preservation solution for the documents in the libraries and information centers with increased access to digitized documents through the Internet and as well as by digital practice of projects.

DIGITAL PRESERVATION

Libraries have preservation issues of all kinds to deal with, especially the deterioration of newspaper resources. Digitizing as a means of preservation is quite beneficial. It helps to preserve specific and most useful documents without denying access to those who wish to study them and wants to update themselves. Users can retrieve digitized documents like reference study materials, archives and newspaper without loss of time by searching their required information. Through the digitization of newspaper and other documents many users can access the same documents in the same time without any botheration. Digitization of documents does occupy most less space comparatively traditional arrangement of document.

The term "digital preservation" refers to preservation of materials that are created originally in digital as well as those converted from legacy documents and artifacts (printed documents, pictures, photographs or physical objects) into images using scanners, digital cameras, or other imaging technologies for access and preservation purposes. Digital preservation is preserving the digital medium that holds the digital information by storing it in the correct environment and it is very easy to convert the digital document into required form e.g. Floppy Drive, CD, DVD etc. and we can modify into latest forthcoming technology.

PRESERVATION TECHNOLOGY AND INFRASTUCTURE

Digitization requires certain technologies. These include storage technologies, ie a variety of devices to store and retrieve information in digital form such as magnetic tapes/cassettes, floppy disks, hard disks, DAT Taps, CD-ROM, smart cards; processing technology creating the systems and applications software that required for the performance of digital network; communication technologies primarily to communicate information in digital form; display technologies and varieties of output devices.

There are various components are suggested for the digital preservation of newspaper and other essential documents.

- Central Processing Unit
- RAM
- Hard disk
- CD Drive
- Modem
- Key Board
- Monitor
- Printer
- Scanner
- Digital Camera or Video Camera
- Graphic Cards

NEED OF DIGITAL PRESERVATION

Information content is very typically available in most of the libraries and information centers in printed form including books, archives, newsletter, and specially newspaper. Over a period of time the volume accumulated is so large that management of the content becomes very tedious work. Preservation of news has long recognized as a role for libraries. The simples approach is to collect and put old newspapers on a shelf. More ambitiously, the US National Endowment for the Humanities (NEH) and the Library of Congress (LC) have supported microfilming old newspapers under the United States Newspaper Project (USNP). Recently, there has been a effort to digitize the microfilm as

part of the National Digital Newspaper Program (NDNP). The basic reasons for preservation of printed documents with the help of IT are as follows:

- Easy to handle and transit: The information available in digital form in CD or on net is very easy to receive, store and send.
- Frequent use: Where only a single copy is available in printed form and it is in frequent use, electronic preservation is needed.
- To retrieve easily: The preserved documents in digital form can be edited, processed and distributed in a very simple manner. For large content databases, content can be retrieved by way of predefined keywords and text based search mechanisms.
- World wide accessibility: Digital information has an advantage of world accessibility, if permitted.
- Security: The security of information is most important factor to preserve the documents in digital format. The rights of information access, update, download, etc can be defined and distributed easily.
- To save space: Very large volumes of data can be safely kept and preserved in electronic form and can be accommodated in very limited space.
- To reduce printing cost: It is an economical method. Very low cost is involved in mass replication.
- Reduces postal charges: A large volume of information can be transferred from one place to another place at low cost through email.

PROCESS FOR DIGITAL PRESERVATION

The preservation of Library collection through IT is an easy task, if you have all the required infrastructure on one platform.

The preservation process

The preservation process can be divided into the following two processes:

Scanning documents and making image files

In this process the scanning of documents is an initial process. The document should not be scanned below 300 dpi resolution. Basically, the resolution depends on the physical condition of the document. At the time of scanning, the resolution, color combination, proper centering of documents, etc are very important aspects to keep in mind. The scanned images are typically stored in file formats like jpg, tiff, etc. These are very heavy file formats taking a very large amount of storage space. The final output is converted to a light format like PDF, which is a popular format having a wide acceptability amongst users, with a structure of easy navigation through links and searches. PDF formats allow various security measures to be buildt in to prevent a user from editing, downloading, or even printing. A backup of the document in CD can be kept in the tiff/jpg format as well as in the final PDF format.

Scanning and preparing full text files

The scanned and processed images, before being converted to PDF files, under the process to separate the text and media from the image files. The next process which is an important task is to rectify the errors and make text files error free with the help of Optical Character Recognition (OCR) process. This process also involves proof reading and checking quality of text files. After completion of all the above processes, the text is converted into the Mark up Language like XML, HTML, etc. along with complete tagging which enables the database to be integrated with any WEB application. In such types of documents, a full text based search is feasible and advanced search like search within the search and Boolean Operators, etc. can be built up or incorporated easily.

Optical Character Recognition (OCR)

In the early days, it was also thought that optical character recognition (OCR) technology would provide for a kind of instant indexing facility, by changing the scanned image files of newspaper pages into searchable text files, which, at the very least, would be searchable on natural language. However OCR is not yet 100 per cent reliable, and even though it is improving, it still is not suitable for many older newspapers, where there is blurred print, very small, or elaborate fonts. Weber and Dorr (1997) say that the "economical cut-off point for machine text recognition is 99.95 percent (so) if there are more than four or five mistake per 1,000 (character) units, processing by hand is more economical". Lagoze (1996) also suggests that even a 99 per cent accuracy rate means that "on pages with 2,000 characters, 20 errors per page will be presented in OCR-generated text".

CHALLENGES & FINDING OF DIGITAL PRESERVATION OF NEWSPAPERS

Digital preservation has many challenges. Like in the areas of planning, resource allocation, implementation for future access and application of preservation methods and technologies necessary to ensure that digital information of continuing value remains accessible and usable to moderate the knowledge gaining and to holds and maintain our history and customs.

Durability Problem

Because of the durability of digital content has become difficult for documents a number of complex and interrelated reasons into long term as most of the documents exist only in encoded form, specific software is required for handling them. The digital components like hardware and software are also often changing their versions or processing capacity. Technology used is becoming obsolete and digital documents depend on them and the digital documents become unreadable.

Form of Material

Digital materials have a very short life comparatively in traditional format.

Recording media for digital materials are susceptible to worsening and catastrophic loss. We are trying to preserve acid-based papers, thermo-fax, nitrate film, and other fragile media for decades. In this situation magnetic and optical media ae qualitatively different as these are the re-usable media.

Problem Occurring in Media

Due to advancement in the computer hardware, storage, and software industries, media obsolescence is a very common fact. When greater storage and processing capacities are available in the market at lower cost, slowly the market for the old product market will go down. So devices, processes, and software for recording and storing information are being replaced with new products and methods on a regular three-to five-year cycle. The documents created in digital form are equally vulnerable to technological obsolescence. For example, the short-lifetime media are eight-inch floppy disks, taps cartridges and reels, hard-sectored disks, and seven-track tapes those storage formats are inaccessible and more durable storage media are CD-ROM/ DVD-ROM and optical WORM.

Software-based Problem

The digital documents are in general dependent on application software to make them accessible and meaningful. But the problem is that software is also developing and changing versions. Copying media correctly at best ensures that the original bit stream of a digital document will be preserved. But a stream of bits cannot be made self-explanatory. Every software has different kinds of encoding for which every computer needs some specific software to activate the digital documents. A bit stream can be made intelligible only by running the software that created it, or some closely related software that understands it.

Standards

The absence of established standards, protocols, and established methods for preserving digital information creates problems. The main objectives of digital libraries are to organize the information; maintain the intellectual property rights, and presentation, retrieval and visualization of digital materials. The main role of digital libraries and archives are the further accessibility of information and preservation of the valuable materials. Digital preservation remains largely experimental and replete with the risks associated with unproven methods. Moreover, digital preservation requirements have not been factored into the architecture, resource allocation, or planning for digital libraries.

The larger community of researchers and publishers has established standard encoding and acceptable levels of accuracy to enable word searching and retrieval of full text. Much work has been done to establish descriptive, structural and administrative metadata elements to ensure the discovery, structure, and management of digital objects now and into the future. Testing is underway to develop strategies to address media preservation and technological obsolescence. In areas where standards have not been finalized, best practices are in place to ensure that digital objects are being managed in such a way that keeps them safe now and allows us to implement long-term strategies as they emerge.

BENEFITS OF DIGITAL PRESERVATION OF NEWSPAPERS

Benefits of using digitization for paper-based materials include:

Increased Accessibility

- Works are accessible to everyone with Internet access from the World Wide Web thus providing equal access to a widest range of users.
- Works can be accessed by multiple users at one time independent of their location, 24/7 365/1.
- Works can be more readily incorporated into instructional and educational applications.

Increased Functionality

- Users can simultaneously compare selected digital page images of originals.
- Digital images can be converted to searchable text files to enable searching and analysis of content within and across works, independent of location.
- Users can have cut and paste options for ease of citation, etc.
- Output Capability to Other Media
- Can create printed facsimiles in accordance with preservation specifications to meet user needs.
- Can generate computer output microfilm that meets preservation specifications.
- Can generate multiple digital copies without loss of quality.
- Paper facsimiles can be generated easily at cost.

METADATA

Standards-based metadata provides descriptive information for discovery, structural information about the digital object, contextual information about the creation of the digital object, and administrative information to facilitate management over time.

- Use of MARC (530, 856) fields- to locate accessible files and relate them to other versions and to collections.
- Dublin Core Metadata Initiative to develop and promote interoperable online metadata standards that support a broad range of purposes and business models.
- OAI (Open Archives Initiative) to develop and promote interoperability standards that aim to facilitate the efficient dissemination of content.

- MODS (Metadata Object Description Schema) an XML schema for a bibliographic element set that may be used for a variety of purposes, and particularly for electronic resources.
- PREMIS (Preservation Metadata Implementation Strategies) a joint effort by RLG and OCLC to develop a core metadata element set and work on practical aspects of implementing preservation metadata in digital preservation systems.
- NISO (National Information Standards Organization)- Technical Metadata for Digital Still Images (Z39.87-2002).
- METS (Metadata Transmission & Encoding Standard) a standardized schema for encoding descriptive, administrative, and structural metadata using XML.
- JHOVE (JSTOR/Harvard Object Validation Environment) a tool for identifying, validating and characterizing digital objects.

FINDING

By the study of digital preservation of archives to hard copies of newspaper we would able to state that without digital preservation not any institute organization can exist in long term as knowledge and information delivery centers. After observation of various projects on digital preservation it is very clear that we can save the knowledge and customs of any society or civilization in long term. Digital preservation of newspaper and other documents is an essential and challenging assign work of modern era. For an information professional we also find that its very technical expensive and to be need the trained people in the digitization technique and projects.

It has been also observed that a positive attitude should be adopt by government to sharpen the digital preservation project. We find that digital preservation is the ultimate option to preserve our knowledge and information amongst intellectual committee for future reference.

CONCLUSION

Digital preservation has raised many challenges of a fundamentally different nature which are divergent compared to the problems of preserving traditional format materials. Some of them are in the areas of planning, resource allocation, and application of preservation methods and technologies necessary to ensure that digital information of continuing value remains accessible and usable. Digital preservation of newspapers resources is an essential and challenging task of the library and information Professionals of this digital era. It has become a universal issue today which calls for a global solution. The purpose of Digitalization has been instrumental to ensure the durability, usability, intellectual integrity of the data/information contained in the materials to be preserved for the present generation and generations to come. As an extension of their role and activities, libraries, archives, information organizations, etc., mostly of national importance should give concerted efforts for this challenging

issue. Digital preservation is the best and the latest means, so far in existence, to preserve the world memory for the generations to come.

BIBLIOGRAPHY

- 1. Allen, Rober B. & Johnson, Kirsten A. (2008) Preserving digital local news. *Emerald, The Electronic Library, Vol.26 No.3, pp. 387-399.*
- 2. Amrita A. pandey (2005), Digital Preservation. *IASLIC:International Conference on Information Management in a Knowledge Society, Editor Kamalavijayan, D. et al.* 2005.
- 3. Kathleen Arthour. et al. (2004), Recognizing Digitization as a preservation reformatting method.
- 4. Mange Ram & Satish Malik (2005), Digital Information Preservation: A challenge to Libraries. *IASLIC:International Conference on Information Management in a Knowledge Society, Editor Kamalavijayan, D. et al.* 2005.
- 5. Mieczkowska, Suzanne & Pryor, Kathryn (2002), Digitised newspapers at Norfolk and Norwich Millennium Library. *Emerald, Collection Building, Volume 21. Number 4. pp 155-160.*
- 6. Salek Chand (2005), Preservation of Library Materials Using it Techniques in Digital Era. *IASLIC:International Conference on Information Management in a Knowledge Society, Editor Kamalavijayan, D. et al.* 2005.
- 7. Yogesh R Parekh & Pragnesh Parekh (2009), Planning for Digital Preservation of Special Collections in Gujarat University.

DIGITAL PRESERVATION OF NEWSPAPER RESOURCES: A SYSTEMATIC APPROACH FOR TRADITIONAL AND ONLINE NEWSPAPERS

Dhananjay. B Sutar

Dhananjay S.Gurav

and

Sunil R. Birje.

ABSTRACT

The paper is related with ensuring effective of use of information contained in newspapers which is available in both traditional as well as in online form. A newspaper is not only an effective media of current information for social change but also a strong media to protect rights and freedom of people.

The importance and utility of newspaper clippings is not restricted within the library itself but the same can be of much interest for users of Press Libraries, children, journalists, researchers and an average layman. But certain difficulties like inferior quality of the paper used in publishing the traditional newspapers, difficulties in its preservation over a long period of time etc. enable us to follow systematic procedure for newspaper clippings and converting it into the digitized form to ensure its durability. There are also greater possibilities to evaluate certain social issues through qualitative and quantitative analysis of information contained in clippings as a part and parcel of applied research.

The issues for the effective use of information published in traditional newspapers through newspaper clippings are related with systematic organization of clippings, checking for duplication, marking, cutting, classification, preservation and storage etc. and its digitization by using scanner, Optical Character Recognizing , software and text editor. The information available in online newspapers can be stored according to the subject content and effectively be disseminated by creating various online communities. The information can be stored through microfilming and can also be stored on CD's, Pen Drives and other storage devices for its use to the Press Libraries, Journalists, Scientists and Technologists, Students, Library and Information Professionals, Geographers, Historians, etc. The feasible solutions for easy and speedy access all the time to all the people from one window to such digitized collection of newspaper clippings are also suggested in the paper. It is also suggested that Digital Preservation of Newspaper Resources is an outcome of self-inspiration, group working and a motivating factor to increase team spirit among library professionals.

Keywords: Newspapers, Newspaper Clippings, Impact of ICT, Digital Preservation, Online Access, Management.

INTRODUCTION

Information is provided to the information seekers through various written and communication channels. These media are in print or non-print forms which include books, periodicals, pamphlets, Radios, fax, telecommunication network, internet, etc.

In libraries, various information media are available but none is more current than daily newspapers. Newspapers are the most effective source of current and up to date information and it is an effective media of information for social change, because newspapers not only provide information to the readers but also impart education and protect rights and freedom of people.

NEWSPAPER CLIPPINGS

The newspapers provide current information containing public news or comments on public news. Every citizen has the right to freedom of speech and expression which is represented by newspapers. However, reasonable restrictions are also imposed by the state on this right for sovereignty and unity of India, providing security to the states, for public order, friendly relation with foreign countries, public order and safety, etc.

Newspaper clipping is an activity of cutting a piece from newspaper to preserve it in a proper manner to facilitate its use. It is necessary for librarians to clip useful articles or descriptions given in newspapers for its preservation through clippings.

Definition of Newspaper:

"Newspaper means any printed periodical work containing public news or comments on public news published in conformity with the provision of section 5 of the press and Registration of Books Act, 1867." (Venkatappaiah 1990)

Newspaper is "A written (not-necessarily printed) means of conveying current information." (Bernouw, Eric. et. al. 1989).

Meaning and definition of Newspaper Clippings

"The dictionary meaning of 'clip' is 'to cut short or to cut off or to fasten together' and 'clipping' means 'a piece cut out of a newspaper." (Virkar, K. B.1989)

Taking into consideration the dictionary meaning of the word clipping, we can define newspaper clippings as- "Cutting off a piece of newspaper with informational value".

ADVANTAGES OF NEWSPAPER CLIPPINGS

The newspaper clipping services offer the following advantages to libraries and Information services. These relate with offering variety of information services and administrative effectiveness in making available the information from the place of its publication to the place where it can be consumed effectively.

It has following advantages:

- Clippings occupy less space.
- The paper used in publishing the newspaper is of inferior quality and newspaper clippings ensure the durability of the same with the task of pasting the piece of newspaper (clipping) on a strong backing paper sheet of standard size.
- Newspaper clippings ensure flexibility because any new cutting can be inserted anywhere in the existing order at their proper place.
- The information published in newspapers is reliable as it is regulated by the press and registration of books act, 1867. The article 19(2) of constitution of India also puts restrictions on the information which is not unreliable.
- Properly organized and handy nature of newspaper clippings in book form facilitates its comfortable use.
- Coverage of comprehensive information by avoiding duplicate reading material is facilitated by clipping service.
- Newspaper clippings save the time of the readers as it facilitates the classification, cataloguing and shelf –arrangement of clippings to retrieve the information contained in it in shortest possible time.
- The clippings help to avoid duplication of material because only the clippings of rare information can be collected.
- The person responsible for collecting clippings can select the most comprehensive articles and the information is highly selective in nature.
- The clippings can be made more attractive by using other parts of newspapers e. g. pictures, colored thick lines, diagrams or photographs published etc.

UTILITY OF NEWSPAPER CLIPPINGS

The utility refers to the usefulness of clippings to the readers. From librarians and readers point of view, its utility can be explained with the help of following points.

- 'Facilitates Selective Dissemination of Information (SDI): The highly selective nature of collected information facilitates Selective Dissemination of Information to readers as per their requirements.
- Provides Current Awareness Service (CAS): It can be used to provide current awareness service wherein the current trends in various subjects are brought to the notice of readers.
- Facilitates Reference Service: Newspaper clippings help readers to answer a specific query or it can be consulted or referred to for a specific information requirement.
- The subsequent addition of clippings to the existing one at their proper place makes provision of current information more valuable.

- The arrangement of clippings according to the subject and in chronological order helps to follow topical sequence. Thus, topical sequence and specification is possible which ensures maximum use of information to the readers.
- Newspaper clipping is an interesting area of work in libraries, where library personnel can be well trained and educated.
- The newspaper clipping is a recreational activity. It is the out-come of self-inspiration, group working, co-operation of library personnel, which result in enthusiasm.' (Sutar D.B., 2001.)

In a nutshell, newspaper clippings not only make provision of information in library but it also increases the team spirit among the library personnel.

ORGANISATION OF CLIPPINGS IN TRADITIONAL WAY

The presentation of news in newspapers is not always continuous. In newspapers, the information is provided in column format. Sometimes, the remaining part of information is continued on another page in different column. Such nature of presentation of information in newspaper creates difficulty in its use. To make their use very effective, the systematic organisation of clippings in libraries helps readers as well as librarians to put the information to maximum use. The various steps in organisation of clippings include: Reading, Selection, Checking for Duplication, Marking, Cutting, Pasting, Stamping and Dating, Filing, Classification, Cataloguing, Preservation and Storage, Weeding outdated Clippings and Administration.

The analysis of above steps is given below which is necessarily to be followed sequentially.

Reading

For newspaper clipping, identifying informational value of the news and contents in newspapers, thorough knowledge of subject of clipping , understanding of informational needs of users; and awareness about collection development to strengthen weaker sections of library collection is essential.

Selection

The criteria for selection of the news items to be clipped should be

- a. The scarcity of information.
- b. The language of the information which is simple and easy to understand.
- c. The coverage and quality of information.
- d. Informational needs of readers/ Demands of readers both present and future.

Duplication

It becomes necessary to avoid duplication of information which would otherwise result in waste of time in cutting, pasting and filing of clippings; the cost of pasting material., and wastage of efforts of library personnel.

The selection of information from newspapers must be based upon certain criteria given below:

- a. The information which is presented neatly and systematically i.e. procedural or as per development of theme of subject;
- b. The layout of the information which is most suited for clippings i.e. reasonable size, is to be selected to lie within the file;
- c. The language of the information which is simple to understand and easy to read:
- d. The typeset of information which is clear and fresh;
- e. The length of the article representing the information;
- f. The durable quality of the paper as comparable to other newspapers publishing the same information.
- g. The information accompanied by pictures, facts, table or data etc.

Marking

After selection of information, it is to be marked with coloured pencil. While marking the selected information care is to be taken:

- a. that the marking should not go on the written matter;
- b. that it should be marked at the out set of the margin;
- c. that the original border around the information in newspapers should be covered ,as the same piece is to be pasted on a blank paper. It gives better representation of information.
- d. that marking should be made at the margins to facilitate its cutting;
- e. that if the information about the same news is continued on another page, then, an indication with an arrow mark is made to cover all the information. This requires much consideration at the time of marking the newspaper because the information is continued on another page quite frequently.
- f. That the day and date of publishing the newspaper along with the volume and the issue number and also page number is to be marked from the newspaper.

Cutting

When the marking on newspaper is completed, it is necessary to cut the news items to be pasted. The following things should be considered as necessity for cutting the newspaper clipping:

- a. For cutting the paper, use of scissors or special cutters is to be made instead of using the blades.
- b. The scissors or cutters are to be of pointed ends to facilitate easy cutting.
- c. The articles continued on next page, where marking through an arrow mark is made, should be covered at the time of cutting.
- d. While cutting the articles, care should be taken to cover all the information and cutting should be made in the margins or the border out side the news item to ensure attractiveness of size of the clipping.

- e. At the time of cutting, arrangement of the heading of news and also of the large columns can be separated to save the space and also to facilitate its pasting on sizable backing paper in compact form.
- f. While cutting the news, other important elements of the newspaper i.e. name of newspaper, the day and date, volume and issue number and the page number are also to be cut off for clipping purpose which has immense value to retrieve the information after filing.

Pasting

When the cutting of selected item is completed, then the clipping is to be pasted on standard size of the paper. Generally 5"X8" size is helpful. While pasting the clipping, following points should be considered:

- a. For pasting of clippings, liquid gum is to be used which spreads easily on the backside of clipping. The brush is to be used to spread it quickly with equal amount.
- b. Accumulating too much of gum at centre and also at the corners of the clippings is to be avoided, if done so, at the time of actual pasting the gum comes out of the border of clippings and spreads on backing paper. So, appropriate quantity of gum and use of brush is a pre-requisite for effective pasting.
- c. Use of solid adhesives like Synthetic gum or crafty glue etc. is to be avoided because it takes time to spread widely on back side of clipping and secondly at the time of pasting, if the part of it touches the backing paper, it can't be adjusted further because of very sticky nature, but this is not in case of liquid gum, if used.
- d. At the time of actual pasting of clipping, the pictures related with a specific piece of information are to be pasted between title of the news and the printed subject matter.
- e. If the clipping is larger than the backing sheet, it should be folded to lie within the bounds of a file by completing the below mentioned steps:
 - i. That on the surplus part of the paper which is coming outside the fold; a piece of sizable paper on the backside of it (i.e. surplus part of the clipping) is to be pasted to ensure its durability.
 - ii. Where actual folding is made to lie within the file, use of tisco tape on the actual fold wherein matter is printed, is to be made so that the written matter should not erased out because of frequent handling.
- f. If the continued part of news item comes rightly or partially at the back side of the same page then, before cutting the news item, the continued part should be Xeroxed first or another copy of the same newspaper is to be acquired to get all the information together.

Stamping and Dating:

The pasted clippings are to be stamped and dated either on the top or bottom of the backing sheet.. The relevant information should be put neatly in the following sequence: Newspaper Name, day and date, volume, issue number and page number.

The importance of the activity is that, it helps to locate the information quickly and forms a base for cataloguing the documents.

Filing

The filing of clippings is an intellectual task, which is to be done carefully. Before filing, the clippings should be kept in some order. In the words of L. C. Kumar "Before filing the clippings subsequent to their classification, they should be kept in some order. Demand for any clipping can come at any moment and press clipping should be able to give up-to-date information at any stage with clippings contained in the file and unfiled clippings. The essence of the problem is that any time a clipping is asked for; it should be easily located whatever the stage may be. The clipping should be kept newspaper- wise and within that date wise or they should be arranged according to the broad geographical division." (Kumar, L. C 1964.)

Classification

To locate the information quickly from the clippings, it is necessary to classify them. Classification helps to arrange the clippings according to their subjects in a very useful order. Such an arrangement results in maximum use of clippings by readers.

Generally, at the time of filing of the clippings, those are filed as per their subject. Such a file or folder can be vertically arranged on a shelf just like a book. While classifying the clippings, the following points should be covered:

- a. On a completed file, in which clippings on similar subjects are organised together, a book tag is to be fixed and class number should be put on it for representing the subject of clippings.
- b. The choice of the 'subject heading' is to be made for classification purpose.
- c. The use of very flexible and scientific scheme of classification should be adopted.
- d. The classification scheme should be similar to that of the scheme already followed in the library for classification purpose.

Cataloguing

The cataloguing of clipping file is necessary to locate the clippings from the collection in shortest possible time. In cataloguing the clipping files, following points are to be taken into consideration-

- a. Cataloguing of clipping file is to be done only after completion of the insertion of all the clippings;
- b. Cross-reference entries should be prepared to indicate the related works.
- c. The serially published work is to be indicated with the help of the volume and issue number of newspapers in the catalogue to specify the titles of clippings.
- d. Use of special catalogue cabinet should be preferred for the catalogue of clippings.

Preservation and Storage

The preservation of clipping file is a very important aspect in organisation of clippings because more time and planned efforts of library staff are involved in preparation and completion of the file. For preserving the clipping files carefully-

"Microfilming of newspapers and press clippings serves the following purposes:

- *i)* space economy;
- ii) easy duplication;
- iii) better security; and
- iv) use by many clients at a time." (Mukhopadhayay, Samyasam1984)

Weeding out of Outdated Clippings

The clippings require weeding off unnecessary articles frequently.

"Now, the information published in the newspaper is of fleeting interest. So such collection need frequent weeding. Otherwise, these became outdated. After an interval of six months or any definite time of interval, clippings need to be checked for weeding. But in weeding out the old clippings, it is to be remembered that some of the clippings which inform about the scientific and industrial research have the importance for a long time." (Basu, Harendranath 1971)

"Weeding must be carried out regularly for four reasons-

- *i)* the space available for storage in files is limited;
- ii) the growth of the collection is high;
- iii) useful material will be buried under the dead weight of ephemeral cuttings; and
- iv) as the year pass by the news, print become brittle." (Naidu, Kemasundar G; Gunjal S. R 1985).

Administration

The administration aims at achievement of objectives of the clipping service. To administer the clipping services efficiently, the thorough and complete understanding of readers' interest and their informational needs is necessary. Organization of clippings in a systematic way (as explained earlier) helps to locate the information quickly. For administering the sectional work, following points are necessary to be taken into account:

- a. The policy of organizing and providing clipping service should be made;
- b. The classification and cataloguing schemes to be adopted should be considered in advance;
- c. Daily work performance of each attendant is to be recorded;
- d. Reasons behind low performance or less work is to be mentioned;
- e. Periodic checking of the clipping is to be carried out.
- f. The service is to be evaluated on the basis of circulation statistics and reference queries answered on the basis of clippings.

g. For efficient administration of clippings, preparation of exhaustive index to the materials available in clippings is preferable.

According to Sutar D. B. 'Newspapers are the best and cheapest source of information to acquire the nascent information needed by readers. In this era of Information Technology, the newspaper are also available on the internet. The readers can read any newspaper published by any country through internet and can copy the required information on the floppies or CD's. It can become an alternative solution to 'Newspaper Clipping Service' (Sutar D. B., 2007.)

NEWSPAPER CLIPPINGS IN DIGITAL ENVIRONMENT

Newspapers are particularly difficult to preserve over a long duration and to access as they are large in format. It is also difficult to extract information unless it is indexed or the searcher knows the exact dates to seek information. Hence, a system for the digitization, indexing and presentation of information in newspapers requires deliberate efforts to provide press clippings service.

Digitization often referred to as image capture, is the process of creating a digital representation or image of an original artifact through scanning or digital photography. The various digitization processes include image scanning, OCR of scanned textual document, microfilming and then scanning the microfilm, rerecording audio and audio on to digital media, tagging text and digital photography. The use of such digitization projects for News items enable press libraries, archives, museums and academic libraries to make effective and systematic News paper Clippings Collections in more accessible way by providing virtual collections via the creation of high quality digital objects.

With the Digitization of News clipping, the awareness of the staff members as well users is increased, handing of fragile original clippings can be minimized, easy search, speedy access and retrieval of desired news item is greatly facilitated. We can also manipulate and preserve the clippings for longer duration and can store it on variety of storage devices.

Newspaper clipping services as one of the information services are very lucrative with growing demand and popularity. Thousands of people from all over the world are just reading news in the privacy of their own homes. In an age of information driven society, the individual people, government agencies, academic institutions and private corporations need almost unlimited news and information about the related subjects and topics that affect their daily lives, performance and transactions. News paper clippings are preserved in digital form in order to ensure usability, durability and integrity of information. Digitization of News paper clippings comprises of planning, funding, deciding goals, selection of clipping, determining the set procedure, digital conversion process, OCRING and Converting them into PDF format. Creation of Metadata by application of digital preservation methods and technologies ensure to maintain the information with ever continuing value as it remains accessible and usable for present and future generation.

KEYS ISSUES FOR MANAGING THE DIGITIZATION OF NEWS PAPER CLIPPING SERVICES THOUGH WEB

The things that require serious consideration for digital preservation of clippings relate with technical aspects of digitization of clippings. This may include:

- Formal planning and funds,
- Skilled Manpower with ICT knowledge and Skill
- IPR issues and its Management
- Deciding the goals of clippings service and selection of the information content
- Selection of clipping as per subject grouping
- Determination of digital conversion process
- Preparing the clipping for digitization
- Digital Conversion by using digital tools like scanners, digital cameras etc.
- OCRING, editing, noise cleaning of scanned clippings.
- Conversion of text, image and video into PDF, jpg, tiff formats etc.
- Quality assurance check for output.
- Metadata creation (Technical, administrator, subject based) by using Dublin Core Standard
- Provision for digital archiving and Preservation of data (Backup)
- Mount the data
- Remote access
- Listing and storing original clippings properly,
- Evaluation and Management.

ICT INFRASTRUCTURE FOR DIGITIZATION OF CLIPPINGS:

The ICT infrastructure required for digital Newspaper clippings Service contain the following:

Hardware: Computer System Configuration

Dual Core Xeon Based Server, 1* Xeon 3000 series

Processor 3040, (1.86 GHz, 2 MB L2 Cache/1066 MHz FSB)

Intel 3200 Chipset (OEM) Server class Mother Board

2 GB DDR2 667 MHz RAM with ECC, 4 Port SAS

Card, 2* 73GB 3.5" 15KRPM SAS HDD

DUAL Gigbit Ethernet Controller, DVD Writer

Internet Ready Keyboard /USB Optical Mouse

17" LCD TFT Monitor, Win2k3, SCO OS6.0 & RedHat Enterprise Linux Advanced Platform 5 Certified Microsoft Windows 2003 R2 32bit Pre loaded with 5 user license (with recovery media)

Scanner: Scanner, Flat based Scanners, Digital Cameras etc.

Softwares : HTML editors, Pixview, OCRING software, Image editor: Text Bridge or Abbey Reader, Primo PDF, Acrobat Reader, Metadata storage software, DSPACE, Green Stone etc.

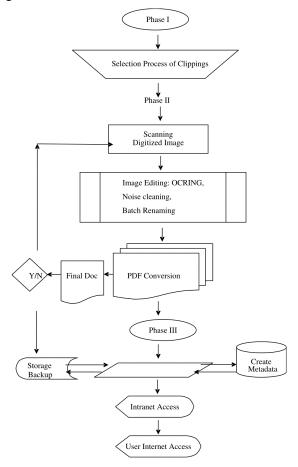
Fedora : Fedora is Linux based operating system that provides users with access to the latest free and open source software, in stable, secure and easy to manage way..

Other software's: Abbey Fine Reader, OCRING, Batch Renaming and PDF Conversion.

Storage Devices: CD's, DVD's, Hard-disk, tapes etc. for storing the data.

DIGITIZATION WORK FLOW

The following diagram shows the actual Digitization work flow of the News paper Clippings.



PHASE - I

Selection Process of Clippings

The selection of the newspaper clippings are done as per the above stated procedure, but for selection of the clippings from online newspapers, there is a facility to 'clip' the news item automatically. We can create the folders for the various subjects and simply paste the relevant and highly selective information in the respective folders. Other details like the name of newspaper, volume number, issue number; page number etc. can be typed for easy retrieval of Information. For Manually prepared clippings, the newspaper clippings should be arranged according to the subject and the date for creating the metadata.

PHASE - II

Scanning Digitized Image

Scanner is primarily used to digitize clippings. There are many types of scanners like, flat based scanners, drum scanners, sheet feeder scanners and digital cameras for image capturing. The use of scanners helps to maintain digitized image file. The use of related software and application programmes for image editing is also to be taken into consideration.

The use of software provided along with the scanner helps to take a digital image of paper page through scanning and we can transform it into a Bitmap or Tagged Image File Format (TIFF). These images should be stored on hard disk with standard filenames. The OCR process starts once with some or all of a batch of documents that have been scanned. It can be undertaken by the person who operates the scanner, or by someone else who has knowledge about it. Typically a scanning resolution of 300 (dots per inch)dpi is needed, although sometimes 200 dpi is also acceptable.







Capture Image by Camera

Image Editing

For image editing, OCRING, Noise cleaning, Batch Renaming and PDF Conversion etc. are essential steps. The main problem with digitized newspapers is that it is difficult to obtain good results with OCR from older texts.

OCRing

An Optical Character Recognition or OCR system transforms a scanned image

into text. The input is a digitized image in TIFF or Bitmap format—preferably a clean, high-quality image. The output is a word processor or web file, typically in RTF, Word, or HTML format.

One, which eliminates most scanning as well, is to retype the documents manually, using a word processor. This still requires the images and front cover to be scanned, but the remaining pages need not be scanned—thus one can dispense with both powerful scanners and OCR software. A very low cost alternative to OCR is simply to use a PDF image version of the document pages.

After completion of the image document, cleaning and OCRing on screen, evaluation and printing evaluation is need to be checked.

Noise Cleaning

The process of removing unwanted pixels from the scanned image is known as noise cleaning as it arises due to so many reasons, like low paper quality, dust particles, and ink of low quality. The process involves clear unambiguous spots, analysis and understanding of the document content.

Batch Rename file

Batch Rename file software or primo-PDF software is used for storing the multiple pages in a single file name and in the PDF format.

There are two approaches for this:

- (1) to use a numbering scheme that reflects number already used in existing cataloguing;
- (2) to use meaningful names. Thus images will be named according to document ID generated by the cataloguing and scanned document will be stored in the database and is identified by its document ID. All these scanned, Batch Rename files are stored in CD –ROM, USB Hard disk.

PDF Conversion

Once scanning has been completed and TIFF files are available, an automatic converter (usually Adobe Acrobat or Adobe Photoshop) converts all TIFF files of book pages into PDF files.

PHASE - III

Create Metadata

For description of images, there is need for metadata i.e. structured data about data. Metadata can also be defined as data that facilitate the management and use of other data. The Meta data information according to Dublin Core Standards is stored and managed by DSpace software for each scanned documents.

Preparing the metadata to index the document by indexing software package is next step in this process. It indexes every word in image clipping for locating archives information. Any document management solution work as data is linked to digitized images of clippings to enable fast and accurate retrieval. Such a metadata has many uses in assisting the use of electronic and non-electronic resources of the internet. Boolean searches are possible across the whole database, revolutionizing access to newspaper resource.

Descriptive Metadata describes the attributes of digital clippings, subject, such as title, creator, keywords, descriptions, publishers, date, sources etc.

Administrative Metadata records information about creation, initial capture settings, scanner parameters, file formats, program used to create it, compression technology, creator, versions, etc.

Intranet, Internet User Access

Digitized clippings are partly linked to the notion of digital interoperability, which is in turn linked to the Open Archives Initiative (OAI) and its Open Archives Initiative Protocol for Metadata Harvesting (OAI-PMH).

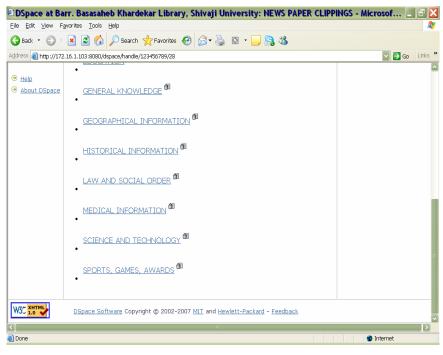
'Open Archive Initiative for Metadata Harvesting' (OAI-PMH) is a web based protocol developed by the Open Archive Initiative for harvesting metadata from the digitized clippings deposited, which expose their metadata. This harvested metadata from various repositories is further stored to build services for providing search facility.

Dspace

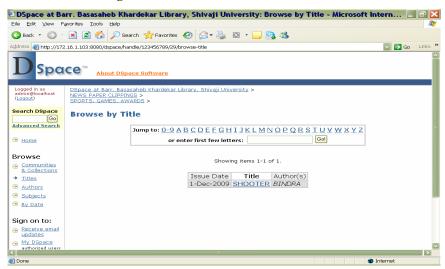
It is now world wide freely available downloadable software as an open source system that can be customized and expanded. The DSpace is digital asset management system. By using DSpace, we can create standard Dublin Core Metadata, index the data and retrieve various forms of digital content and create various communities as per our need. It is shown below:

Communities created in DSpace

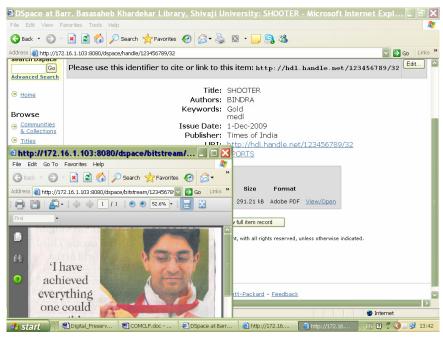




Collection Browsing



Digitized Collection in Sports Community



DIGITIZED NEWSPAPER CLIPPINGS SERVICE THROUGH E-MAIL

We can collect the clipping articles according to the demand of specific information requirement of variety of institutions, organizations, companies or communities of people. We can File these clippings in folders according to names of Institutions, organizations, companies or business units, by their names. On experimental basis, the collection of more than 10 clippings on different subjects was made and the procedure of their digitization mentioned above was successfully implemented for digitized collection of newspaper items. It was stored in the separate folder on computer. Now, this digitized newspaper clippings service can also be provided through e-mail facility. A short notice about your services and fees can also be provided, if need be. Every time you spot an article, you clip it, digitize it and send it to your client / user. Similarly you can promote and build your business or library news paper clippings services. You can also scan your local level library services directly and send out a solicitation letter to each of those listed. A short to the print advertisement in some local news papers, magazines will bring you the new clients and users for you.

CONCLUSION

The diversified needs of readers and innovations in the field of Information and Communication Technology have been forcing the librarians, press libraries to make paradigm shift in their newspaper services. On the other hand content management facilitated by open source softwares has made library professionals anxious about digital preservation of clippings, their storage with the help of software and retrieval through user friendly search techniques. The digital preservation of clippings with the open source softwares can help to preserve, index and redistribute the nascent and intellectual output as the best strategy for content and knowledge management.

REFERENCES

- 1. B.P. Prakash, (2004) Digital Imaging, Information Technology Application in Libraries: A text book for beginners, Reproprint (P) Ltd., Orrisa, , p. 575-578
- 2. Basu, Harendranath G. (1971) *Press Clippings Service: A Case Study*, IASLIC Bulletin, Vol. 16, No. 2-3, P. 140.
- 3. Bernouw, Eric. et. al. (1989) Ed. *International Encyclopedia of Communications*. Vol. 3.New York; Oxford University Press,. P. 179.
- 4. Dr. M. Natarajan, Upendra Bhakta, (2007) Developing a frame work for Digitization Issues and Problems, Recent Technologies, in Management and Library systems: Issues & Challenges.P. 349.
- Fuzluddin Ahmed, (2009) Digitization as Means of Preservation of Manuscripts: Case study of Osmania University Library, E-Content Management 7th International Caliber-2009, Information Library and Network, Ahmedabad, p. 93-97
- 6. G. Rajeshwar Kumar, D.L.N. Chary, K. I Reddy, (2007) Need of Digital Libraries in Modern Era,. Recent Technologies, in Management and Library systems: Issues & Challenges., p. 194-199
- 7. http://www.Dspace.org, (21st December., 2009)
- 8. Kumar, L. C. (1964) Newspaper Clipping Service and Research. 'Library Herald'. Vol. 7. No. 2 & 3., P. 142.
- 9. Madalli Devika; Prasad A.R.D., *Unified Approach to Searching across Information Services*, ICAL 2009 Technology, Policy And Innovation, p. 257
- 10. Mahender Pratap Singh, (2004) 'Digital Library, Use of Information Technology in Library and Information Science', Abhjeet Publication, New Delhi . p. 465-575
- 11. Mukhopadhayay, Samyasam. (1984) *Press clipping Library*, Herald of Library Science, Vol. 23, No. 1-2, P. 55.
- 12. Naidu, Kemasundar G; Gunjal S. R. (1985), Newspaper Clippings in Agricultural
- 13. Sciences, ILA Bulletin, Vol. XII, No. 1-2, P. 37.
- 14. New Zealand Digital Library Project at the University of Waikato, http://www.Green-stone.org, (7th December., 2009)
- O. Seshaiah, Veerananjaneylu, (2009) 'Developing an IR using Green stone Digital Library Software, E-Content Management' 7th International Caliber-2009, , Information Library and Network, Ahmedabad, p. 161-166

- 16. Sutar D. B. (2007), *History of Newspapers*, SRELS Journal of Information Management, Vol.44 No. 1, p.83-94.
- 17. Sutar, D.B. (2001) A Role of Newspapers as an Effective Source of Information for AIDS Awareness in Sangli District. Kolhapur, Shivaji University, pp. 34-36. (M.L.I.Sc. Dissertation, Unpublished.)
- 18. Tapas Kumar Das, Ajay Kumar, Sharma Pritam (2009), 'Digitization strategies and Issues of Digital Preservation: An Insight view to Visva Bharati Library', E-Content Management, 7th International Caliber-2009, Information Library and Network, Ahmedabad, p. 35-40,
- 19. Venkatappaiah., (1990) *Indian Library Legislation*, Vol. I: Union Library Bills and Acts, Delhi; Daya Publishing House, P. 75.
- 20. Virkar, K. B. (1989) *The Little Modern Dictionary (Eng.-Eng.-Marathi)*, Pune: Anmol Prakashan, P. 173.
- 21. Newspapers used for clippings.
- 22. Editor, INDIAN EXPRESS, Mumbai, Maharashtra, INDIA
- 23. Editor, TIMES OF INDIA, Mumbai, Maharashtra, INDIA.

A STUDY OF NEWSPAPERS READING HABITS OF RESEARCH SCHOLARS, CHAUDHARY CHARAN SINGH UNIVERSITY, MEERUT

Devendra Kumar

Rajkumar Singh

and

Ruchi Nanda

ABSTRACT

The study analyzed the A Study of Newspapers Reading Habits of Research Scholars of Chaudhary Charan Singh University, Meerut. A total of 150 well structured questionnaires were distributed among M. Phil. Students, and Research Scholars of Chaudhary Charan Singh University, Meerut. The questionnaires were returned for analysis. The present study demonstrates and elaborates the various aspects of newspapers reading habits of university students like the mother languages; languages do you read; time spent for newspapers reading; sources of getting newspapers; users read newspapers daily which sections of newspapers like most. Further an attempt has also been made to highlights the findings of the study and a suggestion has been on the analysis of data. The statistical analysis of the data for the present study was done by applying simple percentage.

Key words: Newspaper; Reading habits; Newspapers sources; M. Phil. Students; Research Scholars; Chaudhary Charan Singh University; Meerut.

INTRODUCTION

India is a developing country and it has some serious problems based on their multicultural structure. It is trying to solve, especially the cultural adaptation problems of the ethnic communities to be able to live together. All these efforts to solve cultural adaptation problems should be multi-dimensional and long term. Reading and library use habits can be thought as the factors which have important roles in fulfilling the multicultural structure in a country. Affects of these habits to the cultural adaptation of students are usually seen through the agency of the educational achievements and language developments. As known, education and language are the main parts of a culture. In other words, culture is a product of the education and language.

Newspapers play an important role in influencing the entrepreneurship phenomenon, by creating a discourse which transmits values and images ascribed to entrepreneurship. News papers have collected information from all directions. It helps to improve reading habit, knowledge skills and current awareness about world. Most of the people wish they read more. It is an activity that is both fun and enlightening. It can help us be more knowledgeable and successful. However, it is an activity that many people don't engage in very much. Study habits as the way and manner a students plans his or her private reading out side lecture hours in order to a particular subject or topic. Study habits helps students their area of specialization.

Library using can have these functions in cultural adaptation:

- To develop the intercultural understanding and relationships.
- To facilitate the intercultural passing.
- To increase the cultural diversity. To provide social integration.
- To give an educational support to language development. (Mylopoulos 1985)

CHAUDHARY CHARAN SINGH UNIVERSITY LIBRARY

Chaudhary Charan Singh University (formerly, Meerut University) was established in 1966, to cater to the needs of higher education in Western Uttar Pradesh. The University celebrated its silver jubilee in 1991 and now it is one of the premier educational institutions of the country. It has a vast campus outside the city in a pollution-free environment which sprawls over 219 acres of land with vast playgrounds and experimental fields, botanical garden, rose garden with life-size statue of the late Prime Minister Ch. Charan Singh, gymnasium, indoor stadium, well equipped library, administrative block, spacious auditorium, guest house, community centre and medical centre. The various teaching departments under different faculties are housed in spacious buildings and have well equipped laboratories. It was the first University in the country to introduce the M.Phil. Programme. A distinct feature of the academic programme is the semester system and continuous evaluation of the students through quizzes, tests, and seminars.

The University library is housed in a four storied modular pattern building in close proximity to the teaching departments. It has more than 1, 50,000 books, 35,000 bound volumes of journals and more than 7900 theses on its shelves. Nearly 4000 documents in the form of books, theses and dissertations are added every year. It also subscribes to about 250 National and International journals in various disciplines, and 17 newspapers. The library invests Rs 50 lakh per annum on the acquisition of reading materials.

Library membership is open to students, scholars and faculty members of the university and for the teaching staff of the colleges affiliated to the University. Reference and Bibliographic services have been specially planned to meet the growing requirements of library members. Reprographic facility is also provided to the members. Online internet access on large number of terminals is available free to the faculty and on payment to the students/scholars of the university.

The library remains open throughout the year except on 11 closed days. It observes working hours from 8.00 AM to 12.00 Night on all working days and from 8.00 AM to 8.00 PM on holidays.

OBJECTIVES OF THE SUDY

- To find out the mother language of the research scholars.
- To find out language in which mostly students read newspapers.
- To find out how much time spend for reading newspapers.
- To find out the sources which the students get the reading newspapers.
- To find out that which is the mostly newspaper read by students.
- To find out the sections of newspapers mostly read by students.
- To find out the types of news read by students in newspapers.

METHODOLOGY OF THE STUDY

The problem of the present study is to "A Study of Newspapers Reading Habits of Research Scholars of Chaudhary Charan Singh University, Meerut". Questionnaire and personal interview methods were used for data collection. A total of 150 questionnaires were administered and 147 filled in questionnaires were obtained from the users.

A major objective for the "A Study of Newspapers Reading Habits of Research Scholars of Chaudhary Charan Singh University, Meerut" was to included all primary clientele initially; the user populations were defined as, M. Phil students and Research scholars.

DATA ANALYSIS AND INTERPRETATION

The Problem of the present study is "A Study of Newspapers Reading Habits of Research Scholars of Chaudhary Charan Singh University, Meerut." The collected data are organized and tabulated by using statistical method, table and percentage. The data analyses are given below:

Table 1: Size of the Sample

Users	Total Questionnaire Distributed	Total Questionnaire Received	Sample Population in %
M. Phil. Students	100	98	66.67
Research Scholars	50	49	33.33
Total	150	147	100

The above table shows that the size of distribution and received questionnaire from the students. Total numbers of questionnaire distributed among M.Phil students 100, and Research scholar 50. Out of these the responses from the respondents are M.Phil students 66.67%, and research scholar 33.33% from the total sample.

Table 2: Mother Language of users

Language	M.Phil Students	Research Scholars	Average %	
	Responses (%)	Responses (%)	of Users	
Hindi	96.94	97.96	97.45	
Urdu	3.06	2.04	2.55	
Total	100	100	100	

The above table shows that the average 97.45% students were used as mother language is Hindi, whereas 2.55% students were used as mother language is Urdu.

Table 3: Newspapers in Languages usually Do You Read

Languages	M.Phil. Students	Research Scholars	Average %
	Responses (%)	Responses (%)	of Users
English	64.28	71.42	67.85
Hindi	97.95	91.83	94.89
Urdu	3.06	2.04	2.55

Multiple responses allowed

The above table shows that average 94.89% of students are uses as Hindi languages for newspaper reading, whereas 67.85% as English, and 2.55% students are uses Urdu language for newspaper reading.

Table 4: Time spent for reading Newspapers

Time Spent	M. Phil. Students	Research Scholars	Average
	Responses (%)	Responses (%)	% of Users
Less than one hour	19.38	26.53	22.95
1 to 2 hours	62.25	44.90	53.57
More than 2 hours	18.37	28.57	23.47
Total	100	100	100

The above table shows that maximum average % of students are time spent for newspaper reading is 53.57% 1 to 2 hours daily. 22.95% less than one hour and 23.47% more than two hours spent time for newspapers reading.

Table 5: Sources of Getting Newspapers

Sources	M.Phil. Students	Research Scholars	Average% of Users
	Responses (%)	Responses (%)	
Individual Subscription	64.28	83.67	73.97
Library	31.64	12.25	21.95
Hostel	4.08	4.08	4.08
Total	100	100	100

The above table shows that for average 73.97% of students their sources of getting the newspaper are the individual subscription, for 21.95% students from university library, for 4.08 % hostel. It is clearly finds that the majority of respondents sources of getting the newspaper from Individual subscription.

12.75

M. Phil. Students Research Scholars Newspaper Average % of Users Responses (%) Responses (%) The Times of India 62.5569.38 65.97 Hindustan Times 27.55 44.89 36.22 The Hindu 13.26 22.44 17.85 The Indian Express 10.20 20.40 15.30 89.79 Dainik Jagran 92.85 91.32 Amar Ujala 62.24 61.22 61.73 Hindustan (Hindi) 65.30 64.79 64.28 Navbharat Times 13.26 18.36 15.81

Table 6: Read Newspaper Daily

Multiple responses allowed

Others

The above table shows that for 91.32 an average % of users read Dainik Jagran newspaper daily, while 65.97% reads Times of India newspaper, 64.79% Hindustan (Hindi), 61.73% Amar Ujala, 36.22% Hindustan Times, 15.30% The Indian Express, 17.85% The Hindu, 15.81% Navbharat Times, and 12.75% read others newspapers.

16.32

9.18

Newspaper	M.Phil. Students	Research Scholars	Average
Section	Responses (%)	Responses (%)	% of Users
Sensational news	70.40	34.69	52.54
Editorial	64.28	93.87	79.08
Advertisement	12.24	14.28	13.26
Letter to editors	11.22	8.16	9.69
Politics	59.18	75.51	67.35
Sport	80.61	48.97	64.79
Cinema news	23.46	22.44	22.95

Multiple responses allowed

The above table shows that for 79.08% of students their sections of Newspaper they like most editorial, for 64.79% like most sports news, 67.35% politics, 52.54% sensational news, 24.95% cinema news, 13.26% advertisement, and 9.69% letters to editors.

Table 8: Motives of the Reading of Newspapers

Motive	M.Phil. Student Research Schola		Average %
	Responses (%)	Responses (%)	of Users
To get information	58.16	59.18	58.67
To improve my general knowle	34.69	34.69	34.69
It is my hobby	7.15	6.13	6.64
Total	100	100	100

The above table depicts that 58.67% students was read the newspapers for getting the information, 34.69% students to improve the general knowledge, and 6.64% students for its hobby

FINDINGS

- The majority of students read newspapers in Hindi language English language is the second choice.
- The majority of time spends for reading newspapers is one to two hours and second is less than one hour.
- The majority of the students read newspapers primarily to get information and the second preference to improve their general knowledge.
- The main sources of getting newspapers are the individual subscription.
 The second is university library and the third is hostel.
- The most popular Hindi and English newspapers among the university students are 'Danik Jagran' and 'The Times of India' comes second.
- It is interested to the students prefer first to read 'Editorial'. Their second choice goes to 'Sports news' and third choice is 'Political news'.

CONCLUSION AND SUGGESTIONS

From the above study it is observed that newspapers have become the vital part of information for various needs. There have been a various Medias for the rapid communication of information, but periodicals have been considered as the best media for the rapid communication of information specially the newspapers. Therefore majority of library users first try to catch the newspaper to get the latest information about what is happening around, and then seek the other reading material available in the library. We should not hesitate in conveying the fact that it is only the newspapers which are responsible for creating and generating the reading habits among university students. Newspapers are the most important for the university students. But due to enormous explosion of information published in the form of newspapers in different languages in particular, it is highly impossible for libraries to subscribe all of them that are published at the national and international levels. Under these circumstances the best way of serving the users is by proper display of newspapers, notifying users from time to time about the published new information related to educational purposes in the newspapers. In library there should be adequate newspapers and related facilitate to accelerate reading habits. This study helps the librarian to know the importance of newspapers and it helps to improve the services related to newspapers.

The findings of this survey lead us to conclude that research scholars need to improve their reading habits. It will be beneficial to have a record of their reading habits in order to make predictions about their academic success in the research. Researchers concur that generally their expectations of their reading ability, have not been met. One of the steps taken to minimise reading problems

would be to incorporate study skills components within the courses or to make reading lists more manageable. Research scholars should be encouraged to use the Internet as a tool to tap valuable reading resources or participate in relevant discussion groups. This activity can assist in the promotion of autonomous learning and make students more independent and resourceful. We hope our research scholars will continue to read after graduation when the pressure to read is absent thereby helping to foster a reading culture in our society.

REFERENCES

- 1. Mulopoulos, Chryss (1985): **Trends in multicultural programming**. *Canadian Library Journals*, 42(1): 23-25.
- 2. Somsong, Sangkaeo (1999): **Reading habit promotion in ASEAN libraries**. 65th IFLA Council and General Conference Bangkok, Thailand. 28 August 1999.
- 3. http://www.ccsuniversity.ac.in

ONLINE JOURNALISM AND REGIONAL NEWS PAPERS: SPECIAL EFFECT TO MARATHI NEWS PAPERS FROM MAHARASHTRA

Dr. Deepak M. Shinde

If some one asks what is mean by Online Journalism, The simple answer is, of course, journalism as it is practiced online. Journalism is any non-fiction or documentary narrative that reports or analyzes facts and events firmly rooted in time (either topical or historical) which are selected and arranged by reporters, writers, and editors to tell a story from a particular point of view. Journalism has traditionally been published in print, presented on film, and broadcast on television and radio. "Online" includes many venues. Most prominent is the World Wide Web, plus commercial online information services. Simple Internet email also plays a big role. Also important are CD-ROMs (often included with a book) linked to a web site or other online venue, plus intranets and private dial-up bulletin board systems.

Online Journalism is defined as the reporting of facts produced and distributed via the internet As of 2009, audiences for online journalism continue to grow. In the year 2009, for the first time, more people reported getting their national and international news from the internet, rather than newspapers and audiences to news sites continued to grow due to the launch of new news sites, continued investment in news online by conventional news organizations, and the continued growth in internet audiences overall, with new people discovering the internet's advantages for convenience, speed and depth However, the professional online news industry is increasingly gloomy about its financial future. Prior to 2009, the industry had hoped that publishing news online would prove lucrative enough to fund the costs of conventional news gathering In 2009, however, online advertising began to slow down, and little progress was made towards development of new business models. Despite the uncertainty, online journalists are cautiously optimistic, reporting expanding newsrooms. They believe advertising is likely to be the best revenue model supporting the production of online news.

Online Journalism is no limitations for area and space. Marathi News Papers mainly published from Maharashtra. Language News Papers have limited area for circulation as against English and Hindi News Papers. The population of Marathi Language spoken peoples are limited as against Hindi and English Language.

About Maharashta:- Maharashtra is considered as advanced and developed state in Country by all means, to other states in Industry, Education, Trade, Information Technology. The state enjoys Twin capital cities. Mumbai is its capital and Nagpur is the states deputy capital city. Beside these cities there are metropolitan cities like Pune, Nashik, Aurangabad, Kolhapur, Sholapur, Amravati, Thane ,these cities are overcrowded about 10 lacks population. The total population of Maharashtra State is 9,68,79,000 with around male of 5 crore 4 lacks and Female of 4 crore 64 lacks. The Urban population of the state

is 43.93% and rural population is 57.57%. Total area of the State is 307713 sq k.m. with 35 districts. The literacy rate of the state is around 80% as compare Nations literacy rate this rate is good for developed state. The Nations literacy rate is around 64.82%. This information is important because the readership is based on states cultural, educational and social environment. (readership survey of India). As per the data available from RNI there are 11807 total registered dailies from Maharashtra from 20-01-1994 to 27-7-07 out of which Marathi After reading the, Annual Statement submitted by the dailies are 5272. Publishers for the year 2007-08 there are 26 Big dailies Published from Maharashtra their circulation in either 1 lacks or Near by One Lacks. Out of them 15 dailies are Marathi Language dailies and others are Hindi, English, Guajarati Language Dailies. Total Number of Medium dailies published from the State are 52 and out of them 22 ware Marathi Language dailies. As per available data from RNI there are 101 Small dailies published from the state out of them 62 dailies published in Marathi Language, other are Hindi, English, Bengali, Tamil, Urdu, Multilanguage, Telgu, Kannada, Guajarati, Language News Papers. It indicate that the 50% of the total registered newspapers are Local Language Newspapers.

The state has strong Educational, Social and Newspaper background. Sawitribai Phule, Jyotirao Phule, set foundation of Education in the State., State had long History of social activities after independence Bal Gangadhar Tilak, Chatrpati Shahu Maharaj, Dr. B. R. Ambedkar, etc. has established social foundation of State. Because of this News Paper industry experiencing a boom during the last decade Because of educational and social awareness newspaper industry has also been experiencing a boom during the last decade. Number of newspapers published from the state has gone up and its circulation is also gone up. Number of newspapers published not only in English and states principal language Marathi. The stat enjoys promotions facilities and policies for education for the increase of literacy rate.

Begning of Marathi News Paper: - As all of we know that the Mumbai is the Financial capital of the country and its population is above one crore. Mumbai city absorb all religion and cast people, that's why this city is Cosmopolitan city. So many language news papers are published from Mumbai. It is surprising to know that the first News Paper of Marathi was Published from Mumbai and it was published after 10 years of Guajarati News Paper from Mumbai. Darpan is the first Marathi News Paper published from Marathi Language, before Darpan there was Marathi news paper published from Mumbai named Mumbapur Wartman. But there was no details available about this News Paper. Darpan was started in the year 1832.

Number of newspapers published not only in English and states principal language Marathi but also other languages such as Hindi, Guajarati Urdu, Tamil, etc., Cities like Pune, Nagpur, Kolhapur, Aurangabad have recorded growth in this area over the years. As per the data of RNI The total number of registered News Papers, in India as on 31st March, 2006: is 62,483. The number of new newspapers registered during 2005-06: 2,074 Percentage of growth of total registered publications over the previous year: 3.43%

The largest number of newspapers & periodicals registered in any Indian language (Hindi): 24,927

The second largest number of newspapers & periodicals registered in any language (English): 9,064

The state with the largest number of registered newspapers (Uttar Pradesh):9,885

The state with the second largest number of registered newspapers (Delhi): 8,545.

The largest circulated News Paper: Ananda Bazar Patrika Bengali, Kolkata.: 12,34,122

The second largest circulated Daily: The Hindu ,English, Chennai (Printed from 12 different Printing Press):11,68,042

The third largest circulated Daily: Hindustan Times, English, Delhi: 11,36,644

The largest circulated multi-edition Daily: The Times of India, English(six editions):25,42,075

The second largest circulated multi-edition Daily: Dainik Jagran, Hindi, (fifteen editions):21,11,316

The largest circulated periodical: The Hindu, English, Weekly, Chennai (Printed from 12 different Printing Press):11,02,783.

Following is the list of online Main News Papers & weekly's published From Maharashtra---Asian Age (Mumbai-English), Aurangabad Times (Mumbai-Urdu), Bombay Samachar (Mumbai-Gujarati), Chitralekha (Mumbai-Gujarati), Daily Deshonnati (Akola-Marathi), Daily Pudhari (Kolhapur-Marathi), Daily Aikya (Satara-Marathi), Dainik Bhaskar (Mumbai-Hindi), Dainik Sanatan Prabhat(Mumbai-Marathi), Dalal Street (Mumbai-English/ Hindi), Desh Doot(Mumbai-Hindi), Divya Bhaskar (Mumbai-Gujarati), DNA (Mumbai-English), Economic and Political Weekly (Mumbai-English) Economic Times (Mumbai-English), Esakal (Pune-Marathi), Express Computer (Mumbai-English), Financial Express (Mumbai-English), Fortune India (Mumbai-English), G2 the Global Gujarati (Mumbai-English), India Times (Mumbai-English), Indian Express (Mumbai-English) Indian Time (Mumbai-English), Inquilab (Mumbai-Urdu), Jam-E-Jamshed (Mumbai-Gujarati), Lokprabha (Mumbai Marathi), Loksatta (Mumbai-Marathi), Maharashtra Times (Mumbai-Marathi), Mid Day (Mumbai-English), Mumbai Mirror (Mumbai-English), Razaac (Mumbai-English) Roznama Urdu Times (Mumbai-Urdu).

Indian Newspaper of Marathi Language is Published mostly from Pune, Mumbai, Kolhapur, Nashik and Aurangabad in Maharashtra. It needs to be realised that the online editions are not to be registered with a single authority, unlike the print editions that are legally required to be registered with Registrar of Newspapers for India. There fore, I collected data form online edition after searching the web and interacting with the publishers. The online News Papers available in Maharashtra is as follows------

1. Saamana- http://www.saamana.com/---The Saamana is a Daily Marathi Language Newspaper owned by the Shiv Sena, a right wing Hindu party in Maharashtra, Shiv Sena Supremo Balasaheb Thakery is the editor of this paper. It published from Mumbai ,Pune and Aurangabad.

- 2. Daily Kesari: http://www.dailykesari.com/ -A leading Marathi Daily The newspaper, edited in the initial years by Lokmanya Bal Gangadhar Tilak, was in the forefront in the freedom struggle. It is published from Pune with editions from Pune, Solapur, Sangli, Ahmednagar and Chiplun editions in Maharashtra. daily Kesari launched its web edition, the first in the state, in 1997 Kesari was the first Marathi newspaper that entered the cyber era.
- 3. Surajya Daily This News Paper is published from Sholapur with editions in Pune, Sangli, Osmanabad,Latur, Vijapur, Gulbarga, Beed, Bidar. The web site is www.surajyadaily.com
- 4. <u>Daily Deshonnati</u> The leading Marathi daily provide national, international, sports and entertainmentnews.-Deshonnati published their editions from <u>Nagpur</u>, <u>Akola</u>, <u>Yawatmal</u>, <u>Washim</u>, <u>Buldhana</u>, <u>Amarawati</u>, <u>Nanded</u>, <u>Hingoli</u>, <u>Parbhani</u> <u>Aurangabad</u>, <u>Beed</u>, <u>Jalna</u>, <u>Jalgaon</u>, <u>Dhule Nandurbar</u>, <u>Bhandara</u>, <u>Gadchiroli</u>, <u>Chandrapur</u>, <u>Gondia</u>, <u>Wardha</u> the web site is -http://www.deshonnati.com/
- <u>Daily Pudhari- http://www.pudhari.com/</u> Pudhari is a leading Marathi newspaper published from Kolhapur, Southern Maharashtra. It has editions published from Satara, Sangli, Solapur, Mumbai, Pune, Ahmednagar, Goa, Belgaon, Ratnagiri, SindhudurgOnline Edition of Marathi Newspaper Pudhari from Kolhapur.
- 6. <u>Dainik Aikya</u> Daily Newspaper from Satara in Marathi. http://www.dainikaikya.com/ is the largest read Marathi language newspaper from Satara, Aikya, meaning "unity" in Marathi was founded by Shri Raobahaddur Kale in 1924 as a weekly. The online version of Aikya was launched in 1999 and was one of the first Marathi newspapers to go online.
- 7. <u>Dainik Sanatan Prabhat</u>- This Paper is run by The Sanatan Sanstha, Sanstha is established in October 2002, during a meet of activists of the 'Parivartanvadi Vichaar Manch', Hindu deities were blasphemously criticized. One Hindu strongly objected to their deplorable act. These activists beat up the Hindu. With a view to protest against this attack, all Hindu organizations came together and the Hindu Janajagruti Samiti (HJS) was established on the 13th October 2002 by initiative of seekers of Sanatan Sanstha. The News Papers headquarter is in Pune.
- 8. <u>Sakal</u> http://www.esakal.com/ Sakal Papers International Marathi Daily Newspaper from Pune published in 1932 Its editions are published from Mumbai, Kolhapur, Nashik, Jalgaon, Aurangabad and Nagpur, West Maharashtra, North Maharashtra, Konkan, Vidhbra, besides the main edition brought out from Pune. The web edition was launched on January 26, 2000 and is edited at the Pune office.

- Gavakari- Published from Nashik in 1938 with editions from Mumbai, Thane, New Bombay, Ahmednagar, Dhulia, Jalgaon, Aurangabad, Delhi.
- 10. Loksatta-://www.loksatta.com/ Indian Newspaper of Marathi Language from Mumbai, Nagpur, Pune & Ahmednagar in Maharashtra covering all the news from India.
- 11. <u>Maharashtra Times</u> http://www.maharashtratimes .com Maharashtra Times A Maharashtra news paper in Marathi language providing regional news with astrology, stock market updates etc. Indiatimes is part of India's largest media and entertainment house, The Times Group. One of the most respected business houses in India, the 168-year-old group is a market driver across all media platforms. The group's brands include: The Times of India ,Economic Times, Navbharat Times and Maharashtra Times, Magic Bricks, Times Jobs.com, film Fare, Femina, Times Now, Zoom ,Planet M,Radio Mirchi and Mumbai Mirror, the newspaper is a part of the Times of India group of newspapers and the website belongs to a separate entity, the portal www.indiatimes.com. The editorial department of the web edition has a content editor who is assisted by sub-editors. The edition was launched in March 2000.
- 12. <u>Tarun Bharat Daily</u>- http://www.tarunbharat.com/) (www.tarunbharat.net)The web edition was launched on 26 September 1999. There is no dedicated editorial staff for the web edition. The person in the system department looks after uploading of the contents of the print edition onto the web site. Belgaion edition of Tarun Bharat started in 1919. In 2002 tarun bharat started its Digital Delivery.
- 13. Deshdoot http://www.deshdoot.com/ Deshdoot Provides Online Marathi news. Deshdoot is a leading marathi news paper in Maharashtra State. It published from Nashik, Jalgaon, Dhule, Nandurbar, Ahmadnagar Dist.s. Deshdoot is the leading newspaper from North Maharashtra Launched in the year1969 Daily Sarwamat, which is a sister publication, is published from Shrirampur, also in the district of Ahmednagar. Deshdoot Times is an English Daily of the Group published from Nashik.
- 14. Lokmat- www.lokmat.com/ Lokmat is the leading Marathi newspaper, headquartered in Nagpur with multiple editions in major cities and towns in Maharashtra. These centres include Mumbai, Pune, Aurangabad, Nashik, Kolhapur, Sangli, Solapur, Jalgaon, Ahmednagar. Akola, Goa, Satara, for Lokmat Marathi Newspapers offers News features, Greetings, Opinion poll, Sports and more for Maharashtrians world wide global media and global marathi people The web edition was launched on July 02, 1998. It has an Online editor, with his headquarters in Pune. He edits the contents and supervises the uploading carried out from 14 centres. The online edition has achieved direct telecast, direct videocast, videoclips and podcasting of bulletins of important news stories that can be heard if the readers so desire. The former Prime Minister of India, Pt. Jawaharlal Nehru formally

inaugurated Lokmat as a daily publication in 1958 at Yavatmal and on 15th December 1971, the first full fledge edition was started from Nagpur, the winter capital of one of India's largest and most affluent states - Maharashtra. Lokmat Group Pulblished News Papers in English and Hindi also.

PROBLEMS AND FACTS

Journalists in Marathi newspapers face difficulties in mastering the skills in typing in Marathi (Devnagari) script, compared to those who work in English newspapers. The problem is with the keyboard layout, which has not been standardized by producers of the application software. Journalists in most rural areas do not have access to computers and Internet. They still write their stories by hand and fax them to their newspaper offices where these are keyed in the DTP system some time they use Mobile or Phone etc. Photographs are similarly sent by courier, although in many cases, journalists use digital or mobile phonecamera to take snaps and mail them through cyber cafes. I think that this scenario is same with most newspapers in non-English newspapers or Regional News Papers in India. As far the reports collects that web newspapers have not appointed reporters exclusively for web editions. When it is done, perhaps these reporters would provide special coverage for the audience of the web editions. Most publishers have not appointed staff to procure advertising either.web advertisement is the best practice in advertisement section though Language News Papers were not responding this. The staff in the advertising department of the parent print edition is expected to work for the web also.

The Available Marathi daily newspapers with web sites are as follows:

Name of Newspaper

Dainik Aikya

Deshdoot

Deshdoot

Deshonnati

Kesari

Lokmat

Loksatta

DurkL / Web Site Address

http://www.dainikaikya.com/

http://www.deshdoot.com/

http://www.deshonnati.com/

http://www.lokmat.com/

http://www.loksatta.com/

Maharashtra Times http://www.maharashtratimes.com

Pudhari http://www.pudhari.com/
Sakal http://www.esakal.com/
Saamana http://www.saamana.com/
Tarun Bharat http://www.tarunbharat.com
Surajya www.surajyadaily.com
SanatanPrabhat http://www.sanatan.org

From Maharashtra following popular and well circulated Major News Papers were published

Daily Aikya, Daily Kesari, Deshdoot, Deshonnati, Goa Times, Gomantak, Govadoot, Lokmat Loksatta, Konkan Darshan, Konkan Vaarta, Mahanagar, Maharashtra Times, Mumbai Chaufair, Mumbai Sandhya, Nava Kaal, Navprabha, Pudhari, Ratnagiri Times, Saamna, Sakal, Sanatan Prabhat, Sandhyakaal, Sandhyanand, Samrat, Tarun Bharat, Zunjar Neta, Mahavidarbha, Punyanagari.

REFERENCES

- 1. "http://en.wikipedia.org/wiki/Marathilanguage_newspapers -30th and, 31st Dec.2008
- 2. News papers.IndiaGrid.com—25,28,31 Dec-2008 and 1st,2nd,3rd Jan.2010
- 3. <u>www.pib.nic.in-20th,22nd</u> -25th, 27th, 30th Dec.2008 and 2nd, 3rd Jan.2010.
- 4. Online Indian Newspapers: Marathi 12th,15th,20th,Nov.,2 nd,4th, 10th, 25th,28th, 30th,Dec.2008.
- 5. World Association of Newspapers.url, 22nd, 26th, 29th NOV. 2008.
- 6. Allindianewspapers.com-25th,27th,28th,30th,Dec.2008.
- 7. Print media in India Wikipedia-Daily in the months of Aug., Sept., Nov., and December 2008.
- 8. Web India .com.-Daily
- 9. Marathi Vratpatracha Itihas by Laeley R.K -publisher- Contental Publisher Pune..

-IInd Edition200 (Pages-1165)

- 10. Mass Communication in India by Keval J Kumar-Jaico Publication House.

 -37th Impression2009. (Pages-407)
- 11. History of Journalism by Saptrishi Aruna -Dominat Publishers & Distributors Delhi.

-Ist Edition 2005.(Pages-457)

12. Marathi Vratpatre aani Samajik Andolan by Dr. Patel, D.H. - Swabhiman Prakashan Aurangabad.

-Ist Edition 2004. (Pages-334)

13. Mass Media and Information Technology by Singh J.K. -Mangal Deep Publications Jaipur.

-Ist Edition 2001(Pages-284)

14. Art of Modern Journalism by Shahzad Ahmad-Anmol Publications Pvt. Ltd. Delhi.-

Ist Edition 2005.(Pages-382)

15. Hindi Patrakarita by Sinha Anil -Kanishka Publishers Distributors Delhi.- Ist Edition 2005.(Pages-197)

- 16. Electronic Media & The Internet-by D'SOUZA Y.K.— Dominant Publishers.- Reprint 2001(Pages 270).
- 17. Development of Journalism -by Sharma Seema, Anmol Publications Ltd Delhi

- Ist Edition 2005. (Pages-381)

18. Communication Today, -Jully-Sept.2008 (Pages-80), Oct-Dec. 2008, (Pages-68) an.-March2008 (Pages-98).

Some interesting Marathi websites is also available and there URL are --

- 1. http://nachiketprakashan.wordpress.com
- 2. http://gamabhana.com
- 3. http://www.tukaram.com
- 4. http://bmmonline.org
- 5. http://www.marathimanoos.com
- 6. http://www.killa.in/
- 7. http://www.raanvata.com,
- 8. http://www.teachersofindia.org
- 9. http://zagmag.net
- 10. http://www.marathishabda.com
- 11. http://www.sahityabharati.com
- 12. http://www.myemagazines.com
- 13. http://www.apkpublishers.com
- 14. http://www.marathiworld.com
- 15. http://www.apalimarathi.com
- 16. http://www.antaraal.com
- 17. http://marathimanus.net/links.aspx
- 18. http://marathi.webdunia.com
- 19. http://www.ePrasaran.com
- 20. http://www.mahavrutta.com
- 21. http://www.vidnyan.net
- 22. http://www.mykolhaour.net
- 23. http://www.mysangli.com
- 24. http://www.sanskritdeepika.org
- 25. http://www.mr.upakram.org
- 26. http://www.mymarathi.com
- 27. http://www.marathiasmita.org/
- 28. http://www.maraumashma.or/
- 29. http://www.maayboli.com/
- 30. http://www.maanbindu.com
- 31. http://quillpad.in/marathi/
- 32. http://www.calaaonline.com/
- 33. http://www.marathipustake.org
- 34. http://www.myemagazines.com
- 35. http://www.MarathiMati.com
- 36. http://www.mahanews.gov.in/
- 37. http://www.NashikDiary.com
- 38. http://www.MARATHIPATRA.com
- 39. http://www.PUNEPRIME.com
- 40. http://www.MAHARASHTRAPRIME.com

LIBRARY RESOURCE SHARING: A BRIEF REPORT

Sambhaji G. Patil

Dr. Shamkant Deshmukh

and

Dr G N Panchal

ABSTRACT

The paper deals with the need and importance of Resource Sharing Network. The objective of this network is to develop resource sharing. Resource sharing in the library is a very important area of their management, which not only enhances the use and utilization of library resource and services but also ensures optimum benefit to their users in the utilization of library resources of all kinds. It serves not only the effect economy in the terms of time and money but also ensure much better services to the users.

INTRODUCTION

Libraries engage in resource sharing because no single library can meet all of the needs of its community nor can it make available all of the resources and information required by its customers. Libraries need access to the larger range of information available through

INFORMATION RESOURCE

The concept of information resource is often not defined properly. The documents held by a library provide information sought by users and hence called information sources and more precisely documentary information sources. But such documents are also referred to as information resources. That is, the terms 'information sources' and 'information resources' are used interchangeably. But it is to be noted that an information source only provides information, but a resource is one, which like capital or labor, gives rise to something new. As a library generates all its services on the basis of the information sources available with it, such sources are called information resources. Libraries have so long been procuring information resources in traditional printed format. But today these resources are available in various other formats, such as audio-visual, digital, etc. However, resources in electronic format i.e. e-resources have become more popular these days, because of their distinct advantages.

DEFINITION OF RESOURCE SHARING

The Concept of 'Resource Sharing' involves two word resource and sharing.

- Resources mean wealth or available assets.
- Keeping the above in view, if we now try to define resource sharing, it
 will not merely mean mutual sharing of information sources available
 in different libraries, it will mean utilizing the information sources of
 one library for generating services by another library.
- Sharing mean giving, to have or use with others. Thus resource sharing means sharing once assets with others.
- Resource sharing in libraries we mean sharing material, or function or services; any of the two; or all (Kant, 1974)
- Resource sharing is comprised of transactions by which a library makes its materials or copies of its materials available to the clientele of another library upon request (ALS, 2009)

RESOURCE SHARING AND THEIR BREAKDOWN

Library resources, we mean the libraries materials, functions and services. Library materials are of two types documentary and non-documentary. Documentary materials are those which are in the form of document that include books, periodicals, reports, patents, standards, thesis, and so on. Non documentary materials include audio-visual aids, microforms, machine readable databases, computers etc. The terms functions connote acquisition, processing, storing, retrieving, maintenance, etc. 'services' mean the activity which the library offers to its user & include, among others, lending of document reference service, documentation service, reprographic service, etc. Expertise and experiences of professional staff are also considering resources taken together, we can that material person, money of a library including its functions and services constitute its resources.

Library Resources

1)	Personnel	
	1.1)	Experience
	1.2)	Expertise
2)	Materials	
	2.1)	Books
	2.2)	Periodicals
	2.3)	Patents
	2.4)	A/V aids
	2.5)	Equipment

3)	Materials	
	3.1)	Acquisition
	3.2)	Processing
	3.3)	Storage
	3.4)	Retrieval
	3.5)	Maintenance
4)	Services	
	4.1)	Lending
	4.2)	Reference
	4.3)	Documentation
	4.4)	Reprography
	4.5)	Translation

FORMS OF RESOURCE SHARING

Acquisition:

Libraries acquire books, periodicals, and other materials from publishers, booksellers etc. situated in an outside the country. Acquisition, apart form document selection involves placing order, reminding the suppliers, passing of bills and few other activities.

Cooperative and Centralized Cataloguing:

Cooperative Cataloguing is part of union catalogue. The benefit of corporate cataloguing will be uniformity in cataloguing and in classification and there will be uniformity in Standardization, which will save the time for classification, cataloguing, and standardization. Corporative cataloguing and classification is done only for the benefit of participating libraries.

Cooperative Storage:

Most of our libraries suffer from the chronic problem of space. The possessive mentality of libraries and the cumbersome procedure of weeding of books result in the piling up of old and less used material in the library. As a result, at times, new acquisition finds their place on the floors rather than on shelves, or shelves become to jam packed for easy retrieval.

Sharing of Equipments:

Nowadays, libraries use different types of equipments for carrying out various jobs. The most widely used once are computer and reprographic equipments. The cost of personal computers has come down considerably and University libraries, Libraries of big organizations or even smaller libraries can afford these machines.

Inter-Library Loan:

Inter- Library Loan is the most common and age-old from of resource sharing, prevalent among most of the libraries in the world. In this, a library gets a book or any other document form another library on loan for a certain period. The transaction takes place only between libraries. ILL or inter-library activity certainly save the time of the user to gate his/ her information and document. Due to financial constraints, no library can process pr purchase all the documents published. Thus one has to depend other collection.

CONCEPT & SIGNIFICANCE OF RESOURCE SHARING

Generally, the concept of Library Co-operation emerged for rendering better services to user's community through borrowing & lending of documents in formal manner. Library Resources is the term that applies to personnel, material, functions or activities available in a library for satisfying the human needs & demands to acquire their desired knowledge. Library co-operation is a very old concept and a form of resource sharing. The new object of resource sharing has changed the old concept due to multi-dimensional growth of published documents through R&D activities in recent past, cost of the information, advancement of newly invented technologies for information processing and dissemination, etc. Resource sharing entails apportioning, allocating, distributing or contributing something on a voluntary basis for mutual benefits among a group of libraries with a view to achieving best utilization of resources by the ultimate users at a wider level. For better utilization of resources, participating libraries should come together and cooperate in two broad areas: (a) developing the collection on shared basis; and (b) improving services for exploiting such collection. The conventional library is seriously affected by some barriers of information communication, such as indifference of the lending library, conservative attitude, distance, language, cost, time, etc. for inter-library loan. And there are also several constraints to resource sharing in the print environment as it existed till recently: (a) open access to shared resource is not possible; (b) service depends upon library performance; (c) access to shared resource at a cost; (d) access to shared resource by price hike and devaluation in rupee value; (e) availability of library financial resources not possible; and (f) authenticity of collected information resources on Internet. The development in information science and technology (i.e. computer technology and telecommunication technology) is the only panacea to overcome all the barriers of resource sharing program.

Due to the exponential growth and the increasing cost of information resources, it is difficult for a library to acquire all the documents, which are required by the user of a Library. A library Collection could be classified into two groups — one satisfy the core interests of the institution to which the library belongs, and other serving peripheral interest.

Faced with financial crunch, while a library could restrict acquisition of materials in the peripheral areas, it tries its best not shed anything from its core acquisition list. Therefore in a collective development situation, it is logical for a library to look up the other institutions for meeting its peripheral interest. Even

in this situation a library can drop an item from the core item to the same ensured by another library in the neighborhood. To achieve aforesaid objectives various library and information center networks were emerged. A number of resource sharing networks has been observed at local, regional, national and international levels. Normally three levels of Library networks are seen in India include Metropolitan Library network (MAN), Country wide Network like INFLIBNET (For University libraries) and sectoral networks like BTISNET, ENVIS, and FOSTIS etc. These Networks are working according to their objectives of providing information resources to its member libraries rationalizing acquisition and utilization of information resources providing current awareness services helping to automate their member libraries.

Information is considered as a vital resource for communication/ dissemination of knowledge of one individual to another from the very early stage of human civilization to till today and thereby has become an inevitable element of all human activities and developments. The rapid progress of information technology through R & D activities all over the world now tries to satisfy the information need of the human being in diverse manner. The explosion of information, in multidimensional form and voluminous development has urged the libraries to adopt new philosophies and technologies for collection development and reduce the costs of information. Today, most of the librarians are faced with economic problems, especially in developing countries to collect all the new generated information and to satisfy the high degree of aspiration for knowledge of the users. The main task of a librarian is to adjust the input resources with the desired output by adopting various alternatives for taking effective decisions and extending the services smoothly. As the information demand of the user to a greater extent is beyond the control of the capacity of librarians much of the exercise rests on the input resources.

PROBLEMS OF RESOURCE SHARING

- The sharing of resources is no remedy when resources are generally in adequate at the local level.
- It is hard to establish national standards
- Local libraries do not have the necessary staff expertise to handle the services and product of new technology
- The lack of public knowledge about the location and usage of available resources as well as the benefits thereof.
- Copyright has affected the continuing development of cooperative programme.

NEEDS OF RESOURCE SHARING

There are some reasons

- 1. for better information resource and services
- 2. Ability of new technologies to provide quick access to information

- 3. Information resources are becoming too expensive to acquire
- 4. Financial allocations are not adequate to develop adequate collections
- 5. Foreign document delivery services are too expensive
- 6. Present resources cannot meet the needs of our clients
- 7. Limited use of some journals and databases does not justify subscription
- 8. Limited number of professional staff

BENEFITS OF RESOURCE SHARING

- 1. Improve services offered to the users
- 2. Increased user satisfaction
- 3. Save efforts and time by preventing duplication
- 4. Expand library collections
- 5. Save money being spent on requesting documents from outside sources
- 6. Increased use of library materials
- 7. Overcome budgetary constraints

PRINCIPLES OF RESOURCE SHARING

- 1. Resource sharing supplements local services and resources and is not a substitute for local development.
- 2. Public libraries share their resources through an organized system to assist them in meeting the needs of their customers. The resource sharing network allows for a diversity of participants with all libraries considered an integral part of the network.
- 3. Resource sharing among public libraries in Alberta includes sharing of materials, information, and staff expertise, and allows for other cooperative arrangements.
- 4. Resource sharing is based on the recognition that libraries exist within a larger information continuum, occurs within a multi-type library environment and is not limited geographically.

CONCLUSION

Current resource sharing activities among these libraries are at the minimal level and there is no formal resource-sharing set-up at the national level. Library automation is also less than satisfactory. The systems being implemented do not inter-operate with one another and there is no unified access to library holdings.

REFERENCE

- 1. Jackson, Mary E. 2005. Re-examining the Future of Resource Sharing. *Interlending & Document Supply*, 33(4), p. 212-13.
- 2. ALS 2009. Resource Sharing. http://www.amigos.org/?q=node/565 Accessed on 10 Apr, 2009.
- 3. Dhiman, A. K., and Yashodarani 2005. Learn Library And Society. New Delhi: Ess Ess Publication
- 4. Kent, A. (1974). Resource sharing in Libraries. New York: Marcel Deckker.
- 5. Murthy, T A V. 2002. Resource sharing and consortia for India. Information Management in e-libraries. *Proceedings of National Conference on Information Management in E-libraries, Kharagpur*, p. 14-15.
- 6. Narasimhan, G.N. 2002. Resource sharing focus on history ILL and document delivery, cooperative collection development assumptions, problems, solutions. *Proceedings of National Conference on Information Management in E-libraries, Kharagpur*. p. 556-564.
- 7. The Concise Oxford dictionary of current English. 1966. Oxford, Clarendon Press. p.260

PRINT VERSUS WEB JOURNALISM: Examining Two Media through the Lenses of Reader's

Dr. Rachita Shrivastava

Back Ground

The newspaper has been the most important tool in shaping the growth and development of any society in the modern world. In the last ten years the journalism scene in India has changed rapidly. Nearly every news paper split between the two separate media of print and online editions.

PRINT MEDIA

The history of Print-Media in India about 200 years old. The first news paper meant for Publication was announced in 1976 by William Bolts. But is not until James Augustus Hicky dared to start his Bengal Gazettle in 1780 that the case of Journalism dawned in the country. The pioneers of Indian language journalism were the serampore missionaries with Samachar Darpan and other Bengali periodicals and Raja Ram Mohan Roy with his Persian newspaper miratool Akbar. The Uddant Martand appeare in 1826 as first Hindi newspaper.

The Number of News paper is increasing day by day. The total number of registered newspaper as on 31st march, 2008 is 69,323. The Number of newspapers registered during 2007-08 is 41,332. The total circulation of Newspaper is about 20,71,08,115.

Web Journalism:

Web journalism entered India about ten years. Ago initially it had to cape with the pressure posed by the liberalization era. The Hindu of Chennai is the first Indian newspaper that launched on internet edition in the country in 1995. Web Dunia is first Hindi Portal that launched in Sept.1999.

The web revolution started soon thereafter with newspaper launching their internet editions. Foreign major like yahoo and Jagran to initiate a portal could be an important milestone in the history as well as the future of web journalism. By 2006-07 almost all major dailies and most of the established news magazines and television channels of India have their net edition.

REVIEW OF LITERATURE

According to the internal and mobile association of India the internet user base will grow from 39 million in 2006 to 100 million in 2007. Five net connectivity is also improving. All these are helping in generating more news center websites and more journalists opting for web journalism .Fiabian and Guerra (2006) there are three main reason why people follow news –

- 1. Search for specific information
- 2. Search for updated news.
- 3. Leisure –entertainment.

Conboy and steel 2006 online newspaper may seem to be naval for printed newspaper but they may also be necessary supplements for the continuation of the usage and popularity of printed newspaper. Chatterjee Mrinal(2006) written in his paper about 60 percent that is A"Shovelled A" from the print to the web edition. Internet has provided opportunity to ordinary people to disseminate in formation and their views and comments to the entire world. Sinha (2007) online versions of Indian newspaper are read in 62 countries. In India 67 percent readers are from smaller towns. Proportion of female readers is considerably smaller than male readers- only.

Accordingly to most recent COM score statistics (2009) The times of India online is the most visited newspaper website in the world. These results leave the Times of India as the worlds largest selling English language print newspaper and the most popular online paper sixty five percent of TOI online readers were recorded from outside India.

Objectives:

Following were the objective of the study:

- To find out the percentage of Internet users.
- To compare the attitudes of reader's towards newspaper (print and online).

Hypothesis

The investigator formulated the following hypothesis –

- 1. There will be significant difference between percentage of Internet uses on the basis of demographic variables.
- 2. There will be significant difference between the attitudes towards print and online news papers of male readers.
- 3. There will be significant different in attitudes toward print and online newspapers of female readers.
- 4. There will be significant difference in view toward print and online newspaper of professional student.
- 5. There will be significant difference between the view towards print and online newspaper of Non professional student.
- 6. The Attitude of University professor will show significant difference toward print and online newspapers.
- 7. The Attitude of college professor will show significant difference towards print and online newspapers.

SAMPLE

In the present study the student studying in different courses and professors teaching in different university and college. The Present study comprises of a sample of 200 readers. Out of the 200 readers out of the 200 readers 100 were professors and 100 were student. The study is delimited to the college and

university professors and student of Raipur only. The investigator used stratified random sampling technique for selecting the sample.

TOOLS

Self made questionnaires to measure attitudes and interviews with readers.

RESULTS AND ANALYSIS OF DATA

In the present study the relevant data collected. The data were analyzed employing suitable statistical techniques to arrive at meaningful conclusion.

1. Percentage of Internet users:

Form table 1 it is clear that out of 200 readers only 74% readers are internet user. Percentage of professional student is high and female non-professional student is very low.

Table 1: Percentage and Frequency of Internet users.

N=200

Demographic Variable	M	ale	Female		
	Frequency Percentage		Frequency	Percentage	
Professional Student	25	100	22	88	
Non Professional Student	16	64	08	32	
University Professor	24	96	23	92	
College Professor	20	80	10	40	

2. Comparison of Attitudes of male readers toward print and online newspaper:

The scores obtained for attitudes towards print and online newspaper were subjected to the test of significant of mean difference. The data and results are given in table 2.

Table 2: Mean Standard Deviation and t-value for attitudes of male readers toward print and online newspaper.

N=40

S.	Dimension	Print		Online		t-Value
No.		Mean	SD	Mean	SD	
1	Reading Habit	4.62	.62	3.57	1.10	5.32 ·
2	Material	4.45	.67	4.0	1.10	2.22 _x
3	Conservation of Information and Articles	3.57	.90	4.9	.30	8.98 _{x x}
4	Access to News	3.6	.84	4.2	.79	3.37_{xx}

Note: x - significant at .05 level,xx - significant at .01 level

3. Attitudes of Female Readers:

From the table 3 it is clear that female reader's attitude is differ for print and online newspaper.

Table 3: Mean, Standard Deviation and t-value for attitudes of Female readers toward print and online newspaper.

N=40

S.	Dimension	Print		Online		t-Value
No.		Mean	SD	Mean	SD	
1	Reading Habit	4.35	.83	2.67	1.16	7.53_{xx}
2	Material	4.4	.77	4.07	.99	.42
3	Conservation of Information and Articles	3.47	.98	4.3	.72	4.39 _{x x}
4	Access to News	3.67	.76	4.15	.86	1.14

Note: xx - Significance at .01 level

4. Attitude of professional course student:

Table 4 show significance of difference between mean value of attitude towards print and online newspaper of professional course student.

Table 4: mean standard deviation and t-value for attitudes of professional course student toward print online newspaper.

N=20

S.	Dimension	Print		Online		t-Value
No.		Mean	SD	Mean	SD	
1	Reading Habit	4.55	.60	3.55	1.23	3.28 _{x x}
2	Material	4.15	.74	3.8	1.15	1.15
3	Conservation of Information	3.35	1.0	4.8	.41	6.04_{xx}
	and Articles		3			
4	Access to News	3.25	.85	4.1	.85	3.17 _{x x}

Note: xx - Significance at .01 level

5. Attitude of Non-Professional Course Student:

Table 5 indicate significance of difference between mean value of attitude towards print and online newspaper of non-professional course student.

Table 5: Mean, standard deviation and t-value for attitudes of Non-professional course student toward print and online newspaper.

N=20

S.	Dimension	Print		Online		t-Value
No.		Mean	SD	Mean	SD	
1	Reading Habit	3.6	.75	2.1	.71	7.5 _{x x}
2	Material	4.25	.85	3.55	1.27	2.05 _x
3	Conservation of Information	3.25	1.0	4.35	.74	3.06 _{x x}
	and Articles					
4	Access to News	3.9	.91	3.75	.85	.54

Note: xx - Significance at .01 level

x- significance at .05 level

6. Attitude of University Professor:

Table 6 present a data for significance of difference between mean value of attitude towards print and online newspaper of university professors.

Table 6: Mean, Standard Deviation and t-Value for attitudes of university professors toward print and online newspaper.

N=20

S.	Dimension	Print		Online		t-Value
No.		Mean	SD	Mean	SD	
1	Reading Habit	4.95	.22	3.25	1.01	7.39 _{x x}
2	Material	4.45	.68	4.35	.74	.45
3	Conservation of Information and Articles	3.55	.88	4.7	.57	4.49 _{x x}
4	Access to News	3.9	.64	4.55	.75	2.96 _{x x}

Note: xx - Significance at .01 level

7. Attitudes of College Professor:

Table-7 reveals significant difference between the two media.

Table 7: Mean Standard Deviation and t-Value for attitudes of university professors toward print and online newspaper.

N=20

S.	Dimension	Print		Online		t-Value
No.		Mean	SD	Mean	SD	
1	Reading Habit	4.85	.36	3.1	.96	7.67 _{x x}
2	Material	4.7	.57	4.45	.98	1.26
3	Conservation of Information	3.7	.86	4.55	.98	3.21 _{x x}
	and Articles					
4	Access to News	3.5	.60	4.3	.65	4.06_{xx}

Note: xx - Significance at .01 level

The results of the questionnaire indicate that on the whole the hypothesis. All readers like to read online newspaper them print on the basis of some dimension. Reader do read more regular print newspaper them online. But material point of view all reader keep same attitudes toward both newspaper except male. All groups of readers gave more positive response for online news paper for conservation of information and articles in comparison to print. All readers have more significantly positive attitude for online on than print on dimension access to news. But female attitude do not differ on this dimension.

FINDINGS

The results confirm the existence of positive attitudes of readers toward web journalism. Major finding are given below:

 Percentage of female internet user is considerably smaller than made user.

- Professional student have more positive attitude toward online newspaper than non-professional
- University professor more positive attitude toward online newspaper than college professor.
- Male readers have more positive attitude toward online newspaper.
- Readers read regularly print newspaper as compare to online.
- Readers attitudes do not differ in print and online on the materials point of view.
- Information and article can be save easily from online newspaper.
- Attitude toward online newspaper have found more them print in relation to access to old and new news.

VALUE OF THE STUDY

This research is one of the most important studies that analyses attitudinal behavior of print and online newspaper of Indian readers.

REFERENCE

Day, Simon (2009) Times of India online world's most visited news paper, assai media, 14 July 2009.

Guilford J.P. and Fruchter, B (1978). *Fundamental statistics in psychology and education*, sixth edition, Mchrawhill Kogakusha Ltd.

Singh Devvrat (2007) Bhartiaya Electric Media Prabhat Prakashan, Delhi.

Website:

www.allindianewspapers.com

www.indiapress.org

www.orissamatter.com/2006/07

www.slideshare.net

NEWSPAPER LIBRARY USERS AND THEIR INFORMATION NEEDS

Naveen Kumar Srivastava

Vijetacharya Malviya

and

Rajesh Kumar Gupta

ABSTRACT

The dramatic changes in technology and society are having a considerable and sensitive effect on libraries and their services. These changes have created an urgency to teach and guide to user how to become more effective manner with efficient, and independent in searching their information need. There are various tools are available in library to search the information but the newspaper is a most common & most popular one of themp.

From ancient period to modern era newspaper is working continuously as a mirror of society. So we have to most emphasize on the newspaper documents for the need and satisfaction of newspaper library user Newspaper could be consider as 'Daily Update Encyclopedia' for a common people as well as any specific intellectual group of society. Libraries and public print & broad casting media – newspaper face an extraordinary challenge in the coming century. A surge of new expectations has placed an added goal and target of demands of information through newspapers. The newspaper has assumed a wide popularity and ability to reach the society across urban and rural conveniently and comfortably. The mission of Newspaper library is to acquire, produce and deliver cultural, educational and information delivering to the needy person. Newspapers are still a major means of communication today with a little care, maintenance that are important in our life today can be around you future generation's information banks to co-ordinate between the culture of old era & modern period. The Library and JISC-Commissioned report information behavior of the researcher of the future (Information Behavior, 2008) outlines the enormous changes taking place in the information land-scape that are transforming teaching and learning scholarly communication and the role of 'traditional' research library services. The news become history because the greatest part of general information today is found in newspaper which is converted in to factual part of past. So it can be refer as to look the newspaper as archives. In reality, the direction of information needs and libraries points to more emphasis on library user education.

This paper attempts to offer a frame work which will helps in understanding how such way newspaper library user can benefited and to access their information requirement to aware and update himself/herself and get observe the positive approach to developing the society and country.

It is a simple reality that library and important document as newspaper has to be necessarily conceiving information tools for a user on the premise of each of their assets and liabilities

Key Words: Newspaper, Digitization, Information, Library, News, Information Access.

INTRODUCTION

We are living in a society which is absolutely surrounded by Information and Communication Technology. Information is the lifeblood of competitive markets and improvements in information technology are transforming the whole economics into fast moving information intensive economics and globalizing production and competition in many industries and services specially newspaper industries, publishing work and online resources centers. So based on I.C.T. (i.e.-Information Communication Technology) system library users turning to their desktop computers for getting information, that's why libraries are also grooming their role as adapted by technically assumed services.

It has been found that there are so many newspapers and newsgroups exist online in society. So users can not only be aware of the current news but if required, abundance information can be obtained from old archives of papers and on line newspapers thus the establishment of online newspapers library is must for any strongest organization. So they can be happy to share their views on their topics of interest and simultaneously others can be benefited from their experience. It is to be seems that trends of getting news and information scenario is changing rapidly. A user don't want to waste his/her time to turning the page by page of newspapers, but they wants to get the news electronically online.

Because of newspaper is very widely used medium for transmitting news and information in today's society, therefore some published information could be very important for future and need to be kept for future reference. We always keep the information of newspaper as cutting / clipping as well as retrieve from the cutting is a tedious process. A library newspaper cutting system was developed at Nanyang technological University, Singapore.

So as users need point of view be must go through the online newspaper section for developing the indexes of newspaper based information.

CATEGORY OF USERS AND THEIR NEEDS

There are various category of users on the basis of searching of information. These are as follows -

- 2.1- Visitors (casual & specific)
- 2.2- Staff members including sisters concerns and branch offices
- 2.3- Research students
- 2.4- Members who want to subscribe the informational data base
- 2.5- Attached organization and institutions.

Access of library references and utilization depends on the assignment and the time available at their disposal. The queries by user should be refined, that's why they can obtain the pinpoint information. User always used a variety of highly successful strategies for performing quick lookups of information and finding specific known items. The most common goal of information seeking for the user is to support his/her research work as well as to update himself/ herself. For this purpose we have to need the discussion of components of a user education programme and the rethinking and reorganize the library system. The purpose of user education is the enable data on users to be collected in a systematic and routine manner. The aspects of user information needs are: subject, nature, function viewpoint, authority, quantity, quality place of origin, speed of delivering, and processing.

As more news consumers throughout the world have access to the internet, profound changes are occurring in the way people receive their news. It has been found that sources of new ideas for both press and public agendas. There are a lots of information available in libraries, but how can reached to the user, it is challenging. The usefulness of this information in a library can make most effective through new technologies. These techniques as internet online libraries can also have a profound impact in business, development, entertainment, education and other areas.

ROLE OF LIBRARY & LIBRARIAN

Library always plays a vital role in the society to improve the quality of education and awareness. Libraries which hold newspaper collections and provide services based on them, and users wishing access to newspapers and their contents have been experiencing times of change for some years and will continue to do so in future. The development of new technology increased & improved the information access activity. So this is the time for reviewing that how much traditional newspaper library & computerized library is useful to the users. Some basic facts are as follows:-

- 3.1-Even libraries have the documents in abundance; some of them are as follows.
- 3.1.1- Newspaper
- 3.1.2- Journals & Magazine
- 3.1.3- Books
- 3.1.4- Research Reports, Proceedings
- 3.1.5- Reports
- 3.1.6- Electronic Resources.
- 3.1.7- Database, CDs etc.
- 3.2-Besides these collection libraries does provide many services as follows –
- 3.2.1 Circulation
- 3.2.2 Inter loan.

- 3.2.3 Reference Services.
- 3.2.4 Resources sharing through developing a group.
- 3.2.5 CAS & SDI services.
- 3.2.6 Newspaper clipping services.
- 3.2.7 Periodicals Indexing Services.
- 3.2.8- Membership Services.
- 3.3 The advent of the Internet and other online services has changed the library from a more entity to an information system. So we are moving to global information resources for our need.

According to James Michael

Following blue print should have a library –

- 3.3.1 Inter connectivity- Networking, uniformity of data storage and location, etc.
- 3.3.2 Interoperability Several computers taking to each other.
- 3.3.3 Integration Internal and external resources into one single user interface.
- 3.3.4 Intermediation Reference services, guided research assistances and instruction for user.
- 3.3.5 Interdepency Resource sharing and information exchange, because one library cannot have every thing that might be required by users.
- 3.4- National Newspapers: To get the update news we can go to digital libraries of prominent Indian newspaper group some of them are as follows –

Asian Age – offers daily India and south Asia news.

Asian News International (ANI) – Providing news coverage from India and south Asia.

Business Line – Business daily from the Hindu group of publication

Business Standard – Major financial newspaper.

DNA (Daily New & Analysis) - Online newspaper from Mumbai.

Economic Times – Daily business newspaper from Times of India.

Express India – News portal publishing several major Indian newspapers.

Financial Express – Provides financial and industrial news, stock market reports.

Hindu – National daily newspaper, based in Madras.

Hindu Group of Publication – Online presentation of many Indian newspapers and magazines.

Hindustan Times – Major daily newspaper from Delhi.

Indian Express – Delhi based daily.

Mid-Day – Mumbai Daily.

Milli Gazette – Newspaper for Indian Muslims.

Telegraph – Calcutta based National Daily.

Statesman – One of the oldest newspapers of India.

Radiance views weekly – India's oldest Muslim English weekly.

There is so many other important newspaper of India & its State are publishing and nourishing the information needs. So we see that any type libraries which work as information centre also always ready to delivery the information of its user whether they use traditional system or modern techniques. As we have assumed in previous that the newspaper does work as 'Daily Update Encyclopedia' to its user. So we shall take the aggressive step ahead for maintaining to its infrastructure & responsibilities, that's why we can preserve our culture & most needful newspaper and as well as other documents.

Libraries which had newspaper collections and provide services based on them, and user wishing access to newspaper and their contents have been experiencing times of change for some years and will continue to do so in future. As access point of view, the limitation of traditional approaches should be well known to the library in-charge and involved to the research users group of newspapers.

Therefore today the access of news & views is so most important for the different categories of user and it is challenging of it's maintenance for any kind of library. So library and its supporting hands should perform the responsible duties and well familiar to the different rule regulations concerning different act, tools etc. for the sharpening the library services.

PROVISINS OF THE ACT OF GOVERNMENT OF INDIA NATIONAL LIBRARY KOLKATA

As you know, under the Delivery of Books and Newspapers (Public Libraries) Act, 1954, the National Library, Calcutta is entitled to receive a copy of every publication brought out by anyone anywhere in the country. As per instruction by the delivery of Books (Public Libraries) Act, 1954: No. 27 of 1954, as amended by the Delivery of Books (Public Libraries) Amendment Act, 1956: No. 99 of 1956- few facts about newspaper and books are given as follows-An Act. to provide for Delivery of Books to the National Library, Calcutta, and other public libraries.

Be it enacted by Parliament in the Fifth Year of the Republic of India as follows:-

1. Short title and extent. -

- (a) This Act may be called the Delivery of Books 'and Newspapers' (Public Libraries) Act, 1954
- (b) It extends to the whole of India

2. Definitions. - In this Act, unless the context otherwise requires, -

(a) "book" includes every volume, part or division of a volume and pamphlet, in any language, and every sheet of music, map, chart or plan separately printed or lithographed, but does not include a newspaper published in conformity with the provisions of Section 5 of the Press and Registration of Books Act, 1867 (XXV of 1867);

"(aa) 'newspaper' means any printed periodical work containing public news or comments on public news published in conformity with the provisions of Section 5 of the Press and Registration of Books Act, 1867;"1

(b) "Public libraries" means the National Library at Calcutta and any three other libraries which may be specified by the Central Government in this behalf by notification in the Official Gazette.

3. Delivery of books to public libraries. -

- (1) Subject to any rules that may be made under this Act, but without prejudice to the provisions contained in Section 9 of the Press and Registration of Books Act, 1867 (XXV of 1867), the publisher of every book published in the territories to which this Act extends after the commencement of this Act shall, notwithstanding any agreement to the contrary, deliver at his own expense a copy of the book to the National Library at Calcutta and one such copy to each of the other three public libraries within thirty days from the date of its publication.
- (2) The copy delivered to the National Library shall be a copy of the whole book with all maps and illustrations belonging thereto, finished and colored in the same manner as the best copies of the same, and shall be bound, sewed or stitched together, and on the best paper on which any copy of the book is printed.
- (3) The copy delivered to any other public library shall be on the paper on which the largest number of copies of the book is printed for sale, and shall be in the like condition as the books prepared for sale.
- "3A Delivery of newspapers to public libraries. Subject to any rules that may be made under this Act, but without prejudice to the provisions contained in the Press and Registration of Books Act, but 1867, the publisher of every newspaper, published in the territories to which this Act extends, shall deliver at his own expense one copy of each issue of such newspaper as soon as it is published to each such public library as may be notified in this behalf by the Central Government in the Official Gazette."1
- (4) Nothing contained in sub-section (1) shall apply to any second or subsequent edition of a book in which edition no additions or alterations either in the letter-press or in the maps, book prints or other engravings belonging to the book have been made, and a copy of the first or some preceding edition of which book has been delivered under this Act.
- 4. Receipt for books delivered. The person in charge of a public library (whether called a librarian or by any other name) or any other person

authorized by him in this behalf to whom a copy of a book is delivered under section 3 shall give to the publisher a receipt in writing therefore.

PENALTY

Any publisher who contravenes any provision of this Act. or of any rule made there under shall be punishable with fine which may extend to fifty rupees and, "if the contravention is in respect of a book, shall also be punishable with fine which shall be equivalent to"1 the value of the book, and the court trying the offence may direct that the whole or any part of the fine realized from him shall be paid, by way of compensation to the public library to which the book or "newspaper"1 as the case may be ought to have been delivered.

COGNIZANCE OF OFFENCES

- (a) No court shall take cognizance of any offence punishable under this Act save on complaint made by an officer empowered in this behalf by the Central Government by a general or special Order.
- (b) No court inferior to that of a presidency magistrate or a magistrate of the first class shall try any offence punishable under this Act.

APPLICATION OF ACT TO BOOKS AND NEWSPAPERS PUBLISHED BY GOVERNMENT

"This Act shall also apply to books and newspapers published by or under the authority of the Government but shall not apply to books meant for official use only." I

POWER TO MAKE RULES

The Central Government may, by notification in the Official Gazette, make rules to carry out the purposes of this Act.

GAZETTE OF INDIA, Pt. II, Sec. 3, dated 19-3-1955 MINISTRY OF EDUCATION, National Library, Calcutta, New Delhi, 11th March, 1955-

- S. R. O. 587. In exercise of the powers conferred by Section 8 of the Delivery of Books (Public Libraries) Act, 1954 (27 of 1954), The Central Government hereby makes the following rules, namely:-
- **1. Short title**. These rules may be called the Delivery of Books (Public Libraries) Rules, 1955.
- 2. Definitions. In these rules, unless the context otherwise requires :-
 - (a) "the Act" means the Delivery of Books (Public Libraries) Act, 1954 (27 of 1954);
 - (b) "Librarian", in relation to a public library, means the person in charge of such public library, and includes any person authorized by him in

this behalf to discharge all or any of the functions imposed on him by or under the Act;

- (c) "Section" means section of the Act; and
- (d) All words and expressions used but not defined in these rules shall have the meanings respectively assigned to them in the Act.
- **3. Mode of delivery**. Subject to the provisions of section 3 a copy of every book published by a publisher shall be delivered by him to the librarian of each public library either by registered post or through a special messenger and the librarian to whom the copy is so delivered shall forthwith acknowledge receipt thereof in the Form annexed hereto and send it to the publisher by registered post and such receipt shall be conclusive proof of the fact that a copy of the book has been duly delivered to the public library of which he is the librarian.
- **4. Prosecution of a defaulting publisher. -** Where a copy of the book published after the 20th day of May, 1954 has not been delivered to a public library within a period of thirty days from the date of its publication, the officer empowered under sub-section (1) of section 6 may at any time after the expiry of the said period make a complaint to the court against the publisher of such book for his failure to deliver a copy to the public library named in the complaint and such complaint shall be inquired into and tried by the court according to the procedure laid in the Code of Criminal Procedure, 1898 (Act V of 1898):

Provided that before a complaint is made to the court, a notice thereof may be given to the publisher by the librarian stating that he has failed to deliver a copy of such book within a period of thirty days of its publication and that if a copy is not delivered within a period of thirty days of the receipt of the notice he shall make himself liable to a penalty under section 5.

- **5. Information regarding the correct date of publication**. The publisher of every book shall affix on the copy of the book delivered to every public library a stamp bearing the date of the publication of the book and specifying that "the copy delivered is pursuant to the Delivery of Books (Public Libraries) Act, 1954."
- **6. Memoranda of Books**. The publisher of every book shall furnish to the librarian a statement containing (so far as may be practicable) the following particulars, that is to say, -
 - (1) the title of the book and the contents of the title page, with a translation into English of such title and contents, when the same are not in the English language;
 - (2) the language in which the book is written;
 - (3) the name of the author, translator or editor of the book or any part thereof;
 - (4) the subject;
 - (5) the place of printing and the place of publication;
 - (6) the name or firm of the printer and the name or firm of the publisher;
 - (7) the date of issue from the press or of the publication;
 - (8) the number of sheets, leaves or pages;

- (9) the size;
- (10) the first, second or other number of the edition;
- (11) the number of copies of which the edition consists
- (12) whether the book is printed or lithographed;
- (13) the price at which the book is sold to the public; and
- (14) the name and residence of the proprietor of the copyright or of any portion of such copyright.

In a cyclic process through which authors take their ideas and put them into viewable form. This includes all forms of publication, from initial research reports, to articles posted on websites and the commonly recognized newspaper, magazines & books. We can consider mainly the newspaper and magazines under publication process. Because the newspaper is the more public and common type of publications, so this is one of the most types of print publications. These are used at many levels such as small towns, college campuses, and regional or national levels.

So a library & it's staff should maintain and promote the use of newspaper library section among user .Even there are various category of publications are available as Research Paper, Conference Paper, Journals, Articles, Books, Encyclopedia, Online publications like Blogs, Forum, E-books, Websites, Tutorials, Corporate Website etc. but Newspaper article is so much important because most commonplace publication, that people think of. They are the main source of recent, up to date information that affects everyday life. These types of media are generally published from a day to week after the event being reported on occurred. As per observation of different things we find that the role of library and librarian is so much important to develop the reading habits in users, to develop the effective newspaper library usually as per need of information seeker.

FUTURE NEEDS, PLANNING & DEVELOPMENT OF DIGITAL ACCESS NEWSPAPER LIBRARY

Newspaper which is to be a mirror of any period of past time, so we need to safe these valuable document of library. Newspapers are detail sources of how people lived, dressed, thoughts and ate; even reflex the whole customs of a society. In the academic & intellectual research work, newspaper does work as guide and tools to make the perfect base for creating new ideas of a creator or user of information centres. Therefor we have to need the establishment of digitized newspaper library system in our library. The changing needs of the researcher, the majority of titles currently produced by newspaper publishing industry are now created in digital format and printed in full colour. Today's researcher wishes to access rich digital content in a structured manner that allows them to move from the Library catalogue to the particular item of interest as quickly as possible. Hard copy and microfilm, whilst being excellent resources, do not enable such flexibility.

The Library and JISC-commissioned report *Information Behavior of the Researcher of the Future* (Information Behavior, 2008) outlines the enormous

changes taking place in the information landscape that are transforming teaching and learning, scholarly communication and the role of 'traditional' research library services. Many of these changes have been brought about by technology and the explosion of electronic 'content' made possible by electronic publishing, mass digitization projects, and the internet. Library users have rapidly become information consumers who can switch instantly between commercial search engines, social networking sites, wikis, bookmarked resources and electronic services provided by their library to satisfy their information needs. Library users demand 24/7 access, instant access at a click, and are increasingly looking for a particular format: a newspaper, a research monograph or a journal article, for instance, so they can scan, flick and 'power browse' their way through digital content, developing new forms of online information.

The Library has adopted this digital trend and has seized many of the opportunities new technology offers to inspire our users to learn, discover and innovate. The Library is a trusted and independent source, both in cyberspace and through its vast printed collections. The Library has a strategic need and desire to bring the newspaper collection into the digital world as well as to preserve it as part of our legal mandate.

A Vision for Long-Term Storage, Preservation and Access

'The Library should offer an integrated newspaper service based on digital surrogates with hard copy stored to help preserve it for future generations. To meet the future demands of the reader and satisfy the preservation demands for protecting hard-copy newspapers, the library must change the existing storage and access model in the form of digital formats.

To achieve this, the strategic aim is to:

- Creates temporary access to hard copy newspapers in the reading room
 of reader requests for access to the news-paper collection can be
 reached through surrogacy build a dedicated new ongoing storage for
 historic and contemporaneous hardcopy newspapers
- Creates a facility to enable the ingest of legal deposit and non legal deposit newspapers
- Providing the digital infrastructure to enable the collection of both digitized and born digital newspapers library system. Digitized newspapers should be from either existing hard copy or microfilmed newspapers. Born digital newspapers are those provided by publishers and vendors as electronic digital files
- Move to digital as a preservation medium when reliable storage standards come into existence
- Integrate the newspaper, serials and periodicals with the rest of the library collection, with low access documents that is why frequency of use can increase among users.
- House all historic and contemporaneous microfilm surrogates together with access to future digital surrogates.
- Create a newspaper reading room to provide long-term access of documents.

- Build a new newspaper storage building at required place.
- Create a digital production facility for content ingest at Boston Spa and to prepare Newspapers for direct digital delivery onto the Library'.
- Disaggregate the collection to separate newspapers from serials and periodicals
- store high-use serials and periodicals in library
- Store low-use documents.
- Create a newspaper reading room.
- Move all access microfilm assets for storage and access.
- Create future access to the newspaper collection through microfilm and digital surrogacy.

Future Storage and Preservation

The Library needs to obtain the most dense storage possible consistent with equal levels of accessibility for all stored collection items. As the demand rate is low compared to books, the speed of available handling systems can be used to perform complex moves to retrieve items from dense storage while using handling technology that is much simpler than that employed in the mainly book store that is currently being built. The basis of the store will be two sizes of totes that will both accept the different sizes of newspaper and form palletized stacks of consistent unit loads.

Digital Library System for Preservation and Access of Newspaper:-

This is the process acquiring print to acquiring digital information sources. This type of system should be created to design, plan, develop and implement a secure, reliable and scalable management system for the Library's digital content assets. The resulting DLS will provide a single location to ingest, store, preserve, manage, discover and provide controlled access to digital content assets. A well planned and complete system for digital objects should be established which contains the various user facility.

- Storage and preservation the document in any type of digital format.
- Access of these materials should be allowed by competent authority.
- Confirmed that the material is easy to search or not.
- Observe that users can access & read the material with contemporary applications or not.
- Must be ensure that users can, where possible, experience material with the original look-and-feel. Such activity makes the user friendly with new technology.
- If possible arranges the digitized files of published document for the best use of digital document as well as print form.

Creating a Sustainable Digital Access Newspaper Strategy

The Library already has a number of digital projects underway and has considerable experience in creating digital newspaper sites around the world.

Digital technology has enabled newspaper publishers to transform production processes. All national and regional daily newspapers and an ever growing number of weekly newspapers should be produced digitally with an output in PDF format. As per study and review the literature, it has been found that within five years, the entire UK and Irish newspaper publishing industry will be produced using digital technology. This, together with the growth in colour presses, has enabled newspapers to increase the number of pages and products that they offer.

If the lifetime of storage for the newspaper collection is to be extended, ways have to be found to migrate away from the collection of space-hungry, hard-copy newspapers. The newspaper industry already believes that digital is an acceptable long-term storage and preservation medium.

It is likely that in forthcoming decades the Library will end microfilming as a process and will utilize digital technology as a one-stop-shop for digital preservation, storage and access. To maximize access, the Library must look at having the existing historic collection together with digital content.

Four potential routes are available for the Library in acquiring an enhanced collection of digital surrogates:

- Automatic ingest of PDF format copies of contemporary newspapers direct from publishers, initially by voluntary agreements and then by Legal Deposit legislation;
- Systematic digitization of historic newspapers, in partnership with publishers and content aggregators, both in-copyright and out-ofcopyright; as can deal.
- Digitization-on-demand by the user of other material not accessible via hard copy or microfilm;
- Purchasing of existing digital licensed collections and documents.

Newspaper publishers generally see no competition in providing a digital version for page level, read-only access in the reading rooms or in entering into a mutually beneficial online revenue sharing partnership by which readers would access their searchable and purchasable online databases via an e-commerce platform.

Digitization of historic newspapers

Content aggregators are also seeking agreements with other publishers to digitize their archive content and to provide access through their discovery platforms. They should promote the digitization of maximum historical documents in easy access form. Although in India and abroad are working in this field.

For the JISC/Burney newspaper digitization projects, Cengage Gale has provided its infrastructure development, service delivery platform and ongoing product development in return for a license to commercialize the content. The defining principles for any library should that we do not wish to damage newspaper publishers' interests, but rather wish to work with them to provide access to digital newspapers in reading rooms and develop a significant digital

archive of newspapers for saving the knowledge news, view, culture and overall socioeconomic development with intellectuality of mankind on the earth.

FINDING & CONCLUSION

The study has shown that, the newspaper library user and their information needs are tightly linked-up to each other. It has to be assumed that, firstly we observe the information seeking behaviour of users and to satisfy them by reviews of our library services including reading, circulation, reference and specially newspaper based information services like clipping, online availability of newspaper etc. Due to growth & demands for access to digital document reveal the need for a digital content management system. We took the system analysis approach that allowed us to identify the problem. We shall make over a newspaper based indexing services for the user, even we can displays the newspaper content subject as most valuable resources.

Implementation of IT facilitates for libraries is not receiving adequate support from their parent body. As tempting as it may be hope that online availability of current newspaper will lead to simplified or streamlined structures of bibliography control.

The results confirm the existence of positive significant relationship between motivation related to the knowledge of current news, search for specific information and search for up-date news, with the search for specific matter and other news with the favourable attitude to digital newspapers. However, entertainment as a motivation for reading impacts negatively on the users' attitude. Also habit as a motivation is more and most positively associate with the attitude towards the digital press of newspaper library.

Following conclusion can easily be drawn, with the help of above study:

- The future of newspapers has been widely debated as the industry faces new trends & challenges.
- The establishment of online newspaper library is very essentials for libraries and tries to do best effort to convert the documents in digitized form.
- It is also very helpful for users to learn other information literacy basics.
- The study of various projects undergone newspaper libraries does shows the sustainability of libraries particular when objective of libraries are changing in the new environment.
- Ensuring the newspaper based library system which requires the combined efforts of the Government, Publishers, aggregators, vendors and information professional.
- This paper also concludes that how the government bodies/organization can correlate to each other in presences sharing paradigm.
- As the documents become older, the value of document increases. This
 implies that the documents especially newspaper is becoming famous
 with the passage of time.

 Librarians find themselves expected to manage increasingly technical projects to achieve their goal of delivering valuable information to their even increasing user base.

REFERENCES

- 1. BL Stock Condition Survey, 2004, Library Collection Care.
- 2. Bender, David R (1998) "What's Special about Special Libraries?" In: *INSPEL* (International Journal of Special Libraries) Vol. 32 no.4
- 3. Bean, Carol & Green, Rebecca (Ed) (2001), "Relationships in the Organization of Knowledge" in Information Science and Knowledge Management, Vol.2. Kluwer Academic Publishers.
- 4. Fleming Patrick &Phil Spence, (2008) "The British Library Newspaper Collection: Long Term Storage, Preservation and Access" *Liber Quarterly* 18 (3/4), December, www.emraldinsigh.com. (Access on 01/02/2010).
- 5. GOVERNMENT OF INDIA, NATIONAL LIBRARY, BELVEDERE KOLKATA 700 027: A GAZETTE OF INDIA. www.nlindia.org, (Access on 01/02/2010)
- 6. Hui, S.C. & Goh, A. (1996) "Incorporating abstract generation into an online retrieval interface newspaper cutting system", Publisher: MCB UP Ltd *Aslib Proceedings*, Vol.48 (issue no.11/12), pp.259-265, available at: www.emarldinsight.com (accessed on 25/01/2010).
- http://macfadden.mit.edu/webgroup/userneeds/index.html (Accessed on 25/01/2010).
- 8. *Information Behaviour of the Researcher of the Future*, Centre for Information Behaviour and the Evaluation of (CIBER) at UCL, January 2008.www.emraldinsigh.com. (Access on 01/02/2010)
- 9. McCarthy, Richard C (2000), "Designing Better Libraries; Selecting & Working with Budding Professionals". Highsmith Press.
- 10. Mann, Thomas (1998), "The Oxford Guide to Library Research", Oxford University Press.
- 11. Newspaper Society Research (2007): GB TGI 2007 Q3 (April 2006–March 2007).
- 12. Nicholas, David & Helen, Martin, (1997), "Assessing information needs: a case study of journalists". Publisher: MCB UP Ltd, ASLIB Proceedings, Vol. 49, Issue no. 2. pp. 43-52. Available at: www.emarldinsight.com (accessed on 29/01/2010).
- 13. Prepared by: *SFX/Verde subgroup* for User Needs Assessment, Maggie Bartley, Darcy Duke, Tracy Gabridge Millicent Gaskell Nicole Hennig, Christine Quirion, Stephen Skuce, Amy Stout and Ellen Finnie Duranceau, (2006), "User Needs Assessment of Information Seeking Activities of MIT Students spring 2006" pp.18-39.
- 14. Rajesh Kumar, (2008) Proceeding of the AIM National Conference on-"Recent Technological Trends in Management and Library System: Issues and Challenges", 4 & 5 January, 2008, pp. 356, &177.
- 15. www.wikipedia.com (access on 1&2 feb.2010).

- 16. www.google.com (access on 1&2 feb.2010).
- 17. www.world-newspaper.com (access on 1&2 feb.2010).
- 18. www.emraldinsight.com (access on 25 Jan to 2 Feb, 2010).