

# KNOWLEDGE MANAGEMENT : GENERALISATION TO SPECIALISATION OF SOCIAL SCIENCE INFORMATION DATABASES

**Dr. M M Koganurmath \***  
**Mr. Mallikarjun Angadi \*\***  
**Mr. C V Hiremath \*\*\***  
**Mr. Anand Bhandi \*\*\*\***

## Abstract:

*The modest objective of the paper is to present an overview as seen from the inside of the daily practice in social sciences documentation and communication networks in India and around the world. An effort has also been made to carry out a detailed study in depicting the impact of information technology on information acquisition and retrieval which has been increasing in recent past. The study results on the awareness and development of changing environments and adoption of information technology tools to libraries. The authors' approach is for knowledge management through application of technology and resources as the mechanics was including databases, hypertext linkages, full text search and networking technology. Social science information network in India is the central theme of the paper. Social Science databases today, however ancient the fields origins, the practical creations of databases are from three-four decades. Social science fields are highly tangible and objective with the tacit knowledge of imperative reconstruction of world arts and humanities. The realms of knowledge due to increasing specialisation of multi disciplinary nature of social science database framework has also been presented in the paper.*

## INTRODUCTION

Knowledge management is rapidly developing as a specific and planned management practice to capture and re-use organisational knowledge. This might sound familiar to librarians who think it is what they do now. Knowledge management is an increasingly important source of competitive advantage for organizations. Knowledge embedded in the organization's business processes and the employee's skills provides the firm with unique capabilities to deliver customers with a product or service. Knowledge management is a form of expertise-centred management which draws out tacit knowledge making it accessible for specific purposes to improve

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University Librarian, Tata Institute of Social Sciences, Deonar Mumbai-88.  
Information Scientist , Tata Institute of Social Sciences, Deonar Mumbai-88.  
Mr. C V Hiremath , Librarian, UTI Institute of Capital Market, New Bombay.  
Mr. Anand Bhandi , Librarian, National Institute of Fashion Technology, Mumbai.

the performance of organisations. Successful application of knowledge management practices involves understanding and constructively utilising information for organisational learning. Social Science institutions, Government and non- government organisations, etc. are knowledge intensive, and the use of advanced technology may transform these institutions and organisations in the future.

## **KNOWLEDGE MANAGEMENT**

Knowledge management has thus far been addressed at either a philosophical or a technological level, with little pragmatic discussion on how knowledge can be managed and used more effectively on a daily basis. An overarching theory of knowledge management has yet to emerge, perhaps because the practices associated with managing knowledge have their roots in a variety of disciplines and domains. Mechanistic approaches to Knowledge Management are characterised by the application of technology and resources to do more of the same better. The main assumptions of the mechanistic approach include:

- Better accessibility to information is a key, including enhanced methods of access and reuse of documents (hypertext linking, databases, full-text search, etc.)
- Networking technology in general (especially intranets).

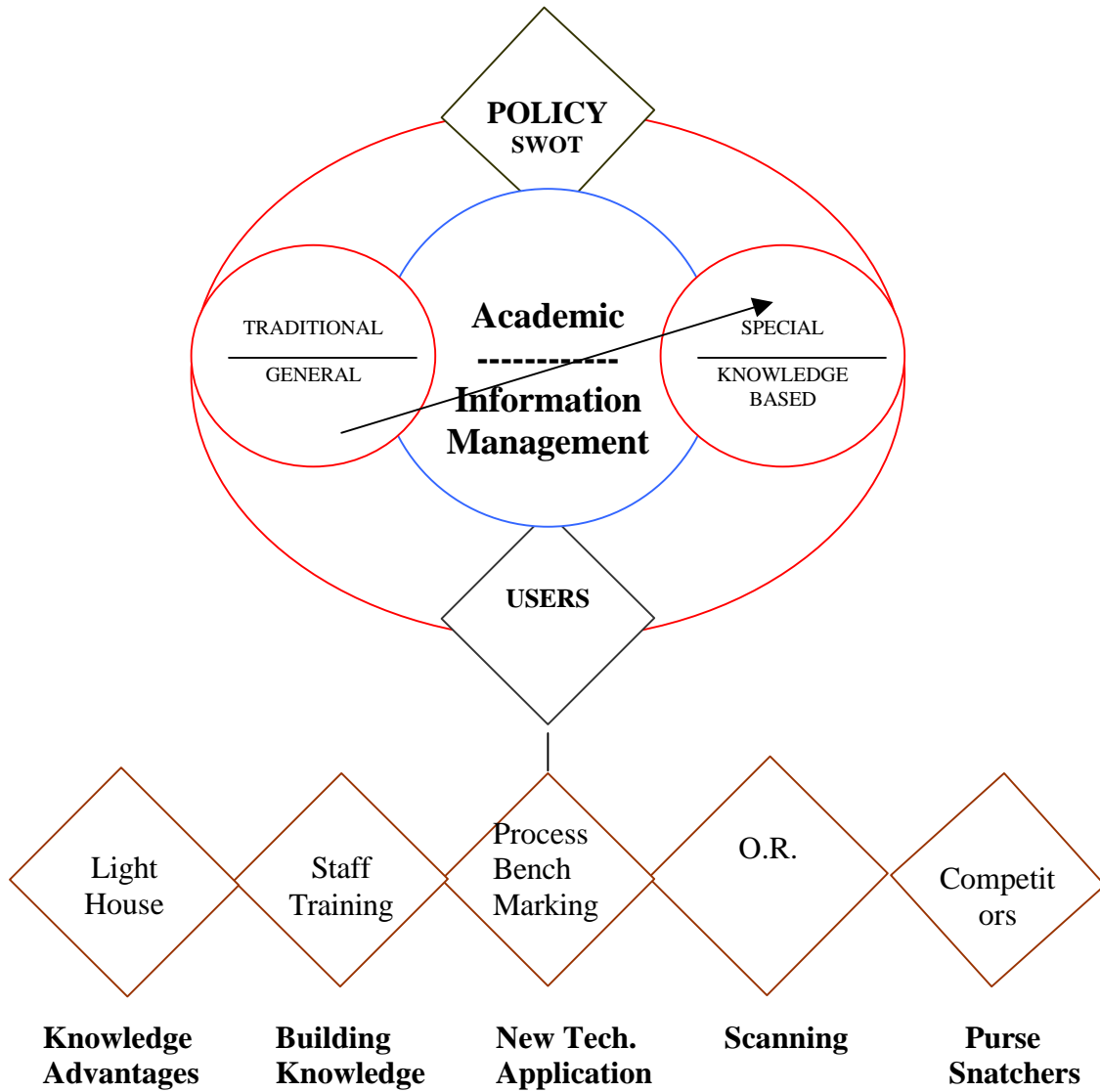
According to Nonaka and Takeuchi, explicit knowledge is stored and publicly available, such as the designs stored in CAD files at Hughes. Tacit knowledge, on the other hand, resides in people such as the judgment that makes an engineer choose one design over another. "Knowledge is created between the interaction of explicit and tacit knowledge," says Nonaka, the Xerox Distinguished Professor in Knowledge at the Haas School of Business at the University of California, Berkeley. Knowledge management draws from a wide range of disciplines and technologies.

- Cognitive science. Insights from how we learn and know will certainly improve tools and techniques for gathering and transferring knowledge.
- Library and information science. We take it for granted that card catalogs in libraries have been on quantitative analysis rather than qualitative analysis, and on tools for managers rather than everyone in the organisation.

## **KNOWLEDGE MANAGEMENT MODEL**

Figure 1 is intended as a summary of the processes that contribute to information processing and the creation of knowledge. Knowledge management as a discipline must be concerned with the management of all of these processes. Some of these processes are performed by individuals, whilst others are performed by organisations, or, in some cases, information professionals on behalf of organisations. Libraries and Information Centres in India are preparing not only databases of institutions, projects and experts but also of technology, data case studies and other resources. Thus Knowledge management using IT is rendering the boundary line between traditional library and information services and value added services less sharp. It is also note worthing that some of the basic ideas of concepts categorisation and knowledge organisations developed in the domain of library science are finding use in designing knowledge based systems for social science research.

# KNOWLEDGE MANAGEMENT APPLICATION



## INFORMATION=KNOWLEDGE=WISDOM

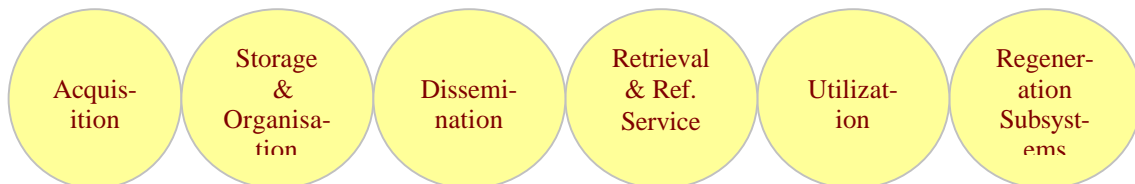


Figure-1. Knowledge Management Model.

## **SOCIAL SCIENCES RESEARCH DATABASES IN INDIA**

Social sciences, a discipline of study, has made steady progress in this country during the past 50 years or so. Because of their vital role in economic development and social change, the Social Science institutions have received fairly good recognition, support and encouragement from the government and other public as well as private organisations. They have now expanded as centres of excellence for teaching and research, manpower development and as professional organisations. An idea about their present status in the country can be obtained by looking at different indicators such as the number of post-graduate teaching and research departments, of doctoral students, of research institutions, publication activity, social science manpower, etc.

Although statistics about these indicators are somewhat sketchy yet on the basis of the available information it can be estimated that the number of post-graduate departments in social sciences in universities alone exceeds 3,000 with an annual enrolment of doctoral students being around 10,000. Percentage-wise, total enrolment of students for post-graduate studies in social sciences is estimated to be about 60 per cent of the total enrolment in colleges and universities and the number of doctoral students is around 40 per cent. In addition to the colleges and universities, there are about 600 institutes engaged in research, training and counseling work in social sciences.

**Indian Council of Social Science Research ( ICSSR)** was established in the year 1969 by the Government of India to promote & sponsor social science research in India. In turn ICSSR has established NASSDOC, India's Leading Information Centre for Research and Innovations in Social Sciences, in the year 1969. NASSDOC is engaged in providing information support to social scientists, policy makers and others working in academia, government sectors, business and industry etc. Following are the major databases developed by ICSSR.

### Directories

- Directory of Social Science Libraries and Information Centres in India
- Directory of Social Science Research and Training Institutions in India
- Directory of Asian Social Science Research and Training Institutes/Organisations in India

### Retrospective Cumulative Indexes of Indian Social Science Journals

- Indian Education Index
- Index to Indian Periodicals : Sociology & Psychology(1886-1970)
- Index to Indian Periodicals : Economics
- Index to Indian Periodicals : Political Science
- Index to Indian Periodicals : Geography, History, Indology etc. (In Progress)

### Union Catalogues

- Union Catalogue of Social Science Periodicals and Serials in India

- Union Catalogue of CD-ROM Databases in Social Science Libraries in India

#### Bibliographies

- Bibliography on India in 2000 A.D.
- Mohandas Karamchand Gandhi : A Bibliography
- Area Study Bibliography
- Aged in India : An Annotated Bibliography

#### Library Databases

- Database of Research Projects Reports and Ph.D Dissertations available at NASSDOC
- Inter Library Resource Centre : Holdings of Periodicals
- Social Science Research Resources in Microform in NASSDOC : An Inventory

Source: < <http://www.icssr.org/> >

### **TATA INSTITUTE OF SOCIAL SCIENCES LIBRARY DATABASES**

To support the research work in the institute from time to time library has created bibliographic databases which are available both in print and machine readable forms. Following is the list of the databases developed in the library.

- Future of Sociology
- Qualitative research methods
- Social work education in India
- Youth in India
- Ageing in India
- Capacity building
- Social Gerontology
- Combating domestic violence
- Counter images : a resource guide of Videos & Films on Movements & Campaigns
- Women's reproductive health and sexuality
- Elderly in India: Healthy? Happy? Helpless? Respected? Rewarded? Rejected?
- Urban Health
- Towards people-centred development

These databases are the most important in providing the need based information. The development of these databases will give a birds-eye-view of the knowledge management from traditional and general fields to specialised knowledge based database creation.

## **SOCIAL SCIENCE INFORMATION NETWORK IN INDIA**

The recognition of the vital role LISS (Library, Information Systems and Services in India ) could play in the educational, scientific, industrial and over-all socio-economic development of India began to receive acceptance only after Independence in 1947, when the government embarked upon several programmes of national development and reconstruction. The need for developing these systems and services became all the more essential because of certain factors such as: (i) vast proliferation's in the, universe of information and knowledge, and the resultant document/information explosion in the world; and, (ii) the varied and complex needs of users for information in R&D activities, educational and research programmes and various other fields of human activities. As a result, a fairly large infrastructure of LISS has been developed in the country during the past five decades or so. Though much remains to be done in this field yet the achievements already made can largely be considered as commendable providing an optimistic basis for the future. Besides the developments in different types of libraries, documentation/information centres, bibliographical services, etc.; library and information networks at local level such as DELNET and CALIBNET, and at the national level such as ENVIS, NISSAT and INFLIBNET and others are being developed. Access through information networks such as NICNET, ERNET, SIRNET, INDONET and several others is being utilised in the LISS in the country for services such as CAS and SDI. INTERNET facilities are being used in many libraries and information systems for benefit of the users.

The development in teaching and research in social sciences certainly emphasizes the need for well stocked libraries and information centres with proper library and information services and manned by well qualified staff. The total number of libraries in social sciences either as part of the universities, government departments, autonomous or semi-autonomous organisations or institutions can be estimated to be around 850. The document collected in an average social science research library (excluding the university libraries) ranges between 15,000-25,000 volumes, with-the number of the current journals being received may be 150-250. Most of them are managed by well qualified professional staff. Most of them, however, including the university libraries suffer from Brick of the required financial support with the result that they in general are not in a position to update their document collection. Most of these libraries are organised on traditional lines and continue to provide the conventional services to their clientele. However, some of them have recently started using computers and CD-ROMs for their services. With the development telecommunications and information networks in the country, a few. of these libraries have started getting access to different databases at the national and international level. Management Information System (MIS) is an integrated information system which provides the information for making decisions regarding the integration of the organisation through the process of management. For this, MIS can be defined narrowly as the automating of routine and structured tasks to support decision making. It supports decision-making at all levels of management processes. MIS are made of people, computers, procedures, databases, interactive query facilities and so on.

## **ONLINE SERVICES AND CD-ROM DATABASES**

Electronic communication & technologies had greater impact on the activities of social scientists- This new technology facilitated maximum information retrieval, information

exchange & discussion among social scientists and dissemination of information through electronic publishing.

The technological content within which library operates has been changing rapidly. The information revolution is well documented. Much more information is being produced in variety of forms, led to the concept of paperless society. In this context of electronic publishing, libraries are becoming more electronically based. This has led to the emergence of electronic journals that provides unique opportunity in the form of low cost delivery mechanism for full text documents with graphics & the economy in storage. Users gain instant access to current & archival issues of Journals through various access points available either on CD-ROM format or WEB.

In 1980's majority of databases on different disciplines covering world literature available on-line as well as CD-ROM format. CD-ROM has a capacity to store 550 MB of information equivalent to 2,75,000 pages (A4 size) of information- These CD-ROM's has considerably reduced the size of library- Information available on books, Journals are covered by CD-ROMs with a greater retrieval efficiency.

Major information providers Includes dialogue information-service, Palo Alto, California; Datastar, Switzerland, Silver Platter, etc. all involved in launching databases both online as well as CD-ROM's. For instance, dialogue information services provides access to more than 700 databases while silver platter has a collection of over. 220 bibliographic & full text databases that cover wide range of subject areas.

#### MAJOR DATABASES IN SOCIAL SCIENCES

Sr.	Title	Coverage Data	Type	Updation	Subject No.
1.	Ageline	1978-date	Bibliographic	Tri-annual	Ageing, Economics, Gerontology, Health Science, Psychology Social Sciences, Sociology
2.	Current Contents (5)	1990-date	-	Weekly	Social & Behavioural Sciences - 6 (Social Services)
3.	Econlit	1969-date	Bibliographic	Quarterly	Business Economics, Finance, Statistics Welfare
4.	Psych.	1967-date	Bibliographic	Monthly	Business, Education Information, Medicine, Psycholog, Social Information

5. Social Science Abstract	1994-date	Bibliographic	Monthly	Anthropology, Economic laws, Public Administration Social Science
6. Social Science	1983-date	- do -		
7. Social Work Abstract Plus	1977-date	-	Semi-Annual	Acquisition, Alcohol Abuse, Clinic, Eco. Psychology, Gerontology, Social Science
8. Sociofile	1974-date	Bibliographic	Tri-Annual	Acquisition, AJM, (equivalent in print is sociological abstracts)
9. Social	1972-date		Weekly	Social Science (ISI)
10. Suchak	Summer 1996	Bibliographic		
11. Emerald	1989-1996	Full text		
12. Distance Education	1994-to date	Directory		
13. Popline	1970- to date	Bibliographic		
14. Seminar	1988- to date	Full text		
15. Business India	1995-to date	Full text		
16. World Development Report	1978-1996	Full text		
17. Economic Development Information Network		Online		Business, Capital resources, Govt, Income, Labour force Agriculture
18. Indian Census Data		Online		
19. Statistical Abstract		Online		Sociology, Economics
20 India World		Online		Computers

Sources:

- a) Silver Platter Director, 1998
- b) <http://www-silver platter.com>



## Conclusion

Information sources and databases are produced in digital form in many institutions and organisations in India. Yet the level of awareness about their availability to access and retrieval are very low, which hampers their optimal utilization by the users concerned. Mechanisms to alleviate these information problems, such as digitization, product standardization and marketing of information are fewer and weaker in India. All these databases are required a very sophisticated network for access and use of databases. Recognition of network and resource sharing trends have already resulted in visionary and actual designs of the electronic libraries of the future. "Our vision be the networked information society as a panacea for all ills of the present society".

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