

Future of Libraries and the Knowledge Society*

Dr. K. S. Raghavan

Professor

Documentation Research and Training Centre

Indian Statistical Institute, Bangalore – 560 059

ksragav@hotmail.com

“Recall the face of the poorest and the weakest man whom you have seen, and ask yourself, if the steps you contemplate are going to be of any use to him. Will he gain anything by it? Will it restore to him control over his own life and destiny?”

— Mahatma Gandhi

Abstract

Libraries were seen as essential, and cost-effective intermediary bridge institutions in overcoming the barriers linking information resources and end users of the information resources, thus enhancing access to information. But, beginning in the 1990s some systems seen by some users as alternatives to a library, have emerged resulting in a change in the value and utility of libraries. Citing the results of a survey carried out by the OCLC in 2005 to bring out the library users' perceptions of a library and the sources that they would rather depend on to identify and access needed information, the author argues that though some of the findings are solacing there are more distressing signals too. The finding that only a small proportion of library users considered library as something to go to or library website as something to visit when information is needed is an indication that the brand library is facing challenges from the Web and search engines. Based on the outcome of the experiments of the *Information Villages* project of M. S. Swaminathan Research Foundation, 'Grameen Gyan Abhiyan (Rural Knowledge Network) aimed at the establishment of knowledge connectivity in rural India and the Public Network Project started in UK, the paper conjures up the vision of the library of the future.

1. Libraries as Social Institutions

Institutions are complex social constructs that are created and shaped in response to societal needs, constraints and balances of power among the stakeholders. In this sense, libraries are social institutions. Institutions of all kinds generally provide stability because they are created to exist forever; they do not change quickly, even though a particular instance of an institution may change. The

emergence of the modern library as a social institution represents recognition by the society of the important role of the library in certain knowledge transaction activities. Libraries as social institutions strengthened and established their place in the society, especially within the scholarly community, following the phenomenon widely referred to and labeled as '*Information explosion*', which followed the World Wars. *Information explosion*,

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especially in the 2nd half of the 20th Century, resulted in major barriers to effective scholarly communication and access to scholarly literature. Libraries were seen as essential, and cost-effective intermediary *bridge* institutions in overcoming these barriers linking information resources and end users of these information resources thus enhancing access to information. This also marked a major shift in the objective of the library from being an institution charged with the responsibility of preserving information resources to an institution that played a pro-active role in knowledge transfer and communication. The library, especially the research library, got embedded in the broad social systems of information flow management: the production, distribution, access to and use of information resources by members of society. This iterative process among stakeholders became the foundation of knowledge creation and transmission.

The *Five Laws of Library Science* of S. R. Ranganathan are in effect precise statements of the goals of the modern library. The basic goal of the library & information profession has also been defined by these, viz; *to provide efficient, effective, convenient and cost-effective access to relevant information and information resources to those who are in need of it.*

Libraries worked in tandem with other groups and institutions engaged in complementary and supplementary roles in knowledge transfer especially the publishing industry, the database industry and the book trade. In the last quarter of the 20th Century we also saw libraries make effective use of the computer-telecommunication networks that emerged in enhancing access to information and data.

2. Perceptions of Libraries and Their Role

Libraries had, for reasons already mentioned in the preceding section, acquired an important place in supporting scholarly pursuits and scholarly

communication. However, major changes that began in the 1980s and gathered strength in the 1990s, have raised several questions on the future of the library as an institution, and even more so, as a physical space, including its continued relevance in the present and emerging contexts. In the emerging society labeled as the '*knowledge society*' what is the role of libraries? An optimistic way of looking at these changes is to see them as both challenges and opportunities. An institution, or for that matter, even a class of institutions, facing the challenge of losing its value, *brand* name and importance in the face of competition is not something new. We have had several examples in the corporate world in the recent past. In the year 2002, McDonald's, a popular restaurant chain, began losing its edge to new options, intense competition and changing consumer preferences. Similarly, the Discovery Channel, one of the most respected TV channels appeared outdated compared to "reality TV." In the 1990s IBM, the major IT firm, known for its mainframe computers began to lose to PCs. All these can be attributed primarily to structural changes that had taken place in the preceding years. It is not unusual for changing social, economic or technical trends to cause brands to lose appeal and to be seen as less valuable. Libraries also have been seen as an important link in the information and knowledge transfer chain for a very long time and suddenly, beginning in the 1990s, some systems seen by some users as alternatives to a library, appear to have emerged resulting in a change in the value and utility of libraries as perceived by information users. When there is a major change in the needs or constraints or power relationships on which an institution is based, unless the practices and behavioral patterns embodied in the institution are changed and modified to serve effectively the new requirements and needs, such conflicts are bound to arise. In the face of such changes in the external environment, institutions adapt and re-adjust their

functioning to suit the changed situation. However, institutions, because they comprise a web of social conventions, practices and structures take longer to adapt. During times of rapid changes in needs, slow institutional adaptation may lead to frictions and stakeholder frustrations. A survey carried out by the OCLC (2005) brings out the library users' perceptions of a *library* and the sources that they would rather depend on to identify and access needed information. The survey was conducted via Internet with respondents from Australia, Canada, India, Singapore, U.K. and U.S.A. The report provides the findings and responses about:

- Library use
- Awareness and use of library electronic resources
- The Internet search engine, the library and the librarian
- Free vs. for-fee information
- The "Library" brand.

The findings are very important as:

- 96% of the respondents had visited a library
- 72% were library members
- 57% used a library several times in a year

The findings also serve as important pointers. Only a small proportion of library users considered

library as something to go to or library website as something to visit when information is needed as evident from Table 1.

Google	71%
Yahoo	64%
MSN Search	48%
Ask Jeeves	46%
AltaVista, Lycos (tie)	28%
Netscape	26%
Library Web Site	21%
Online librarian / "Ask a Librarian"	5%

Table 1

The Sources Used

However, libraries were generally rated higher both in terms of *trustworthiness* and the *quality* of information provided as can be seen from Table 2.

To the query on who provided worthwhile information, the responses were as given in Table 3. The users clearly appeared to prefer search engines to libraries or library websites and rated search engines higher in terms of reliability, ease of use, convenience, cost-effectiveness and speed of access to required information. *Library* is still largely seen as a place to find, read or borrow books from and, most users did not appear to associate libraries with access to electronic

Attribute	Libraries	Search Engines
Trustworthy/credible sources	60%	40%
Accurate, quality information	56%	44%
Reliable/always available	28%	72%
Cost Effective	25%	75%
Easy to use	15%	85%
Convenient	11%	89%
Fast	8%	92%

Table 2

Opinions on Attributes of Sources

Google	93%
Yahoo	85%
MSN Search	81%
Library Web Site	78%
Ask Jeeves	78%

Table 3

Value of Information Provided

resources. Evidently the brand *library* is facing challenges from the Web and search engines; this when the world is increasingly recognizing the importance of information and knowledge as major factors in socio-economic development.

3. Libraries in knowledge society

When we consider the library as an institution, an important issue that arises is whether we are seeing the library as a *physical space* or merely as a mechanism that facilitates enhanced access to information resources. Surely there are clear indications that the view of library as a physical space to visit when some information is required is losing ground. Increasingly end users – and this is much more pronounced in institutions of higher education and research, corporate houses and R & D laboratories – seek access to information from their workplaces / desktops. Repositioning the *library* brand will, therefore, necessarily involve certain activities designed to give it a new position in customers' minds. Information *per se* has not lost its value, far from that. In fact, in the emerging knowledge society *information* and *knowledge* are being seen as important capital assets. A requirement to usher in a '*knowledge society*' is to enhance the capacity of nations, organizations and individuals to create, utilize and apply knowledge and information in development-related activities. There can be no two opinions on the important role that libraries can play in ushering in

a knowledge society. What is required is to reexamine and re-define its role and functions in the changed circumstances.

The terms '*Information Society*', '*Globalization*' and '*Knowledge Economy*' are widely employed to highlight the transformations that have taken place in recent decades. '*Globalization*' as a topic of discussion probably had its origins in the context of economics of growth and development. The establishment of the World Trade Organization (WTO) in 1995 accelerated, and to some extent, streamlined the process of globalization. Among other things, the phenomenon of globalization is characterized by:

- Globalization of markets
- Globalization of work force for spatially distributed operations
- Outsourcing of Business and Knowledge Processes
- Recognition of the importance of new knowledge generation and continuous technological innovation
- Involvement in increasingly complex range of products, processes and services.

Globalization is both a challenge and an opportunity. Driven by the ICT revolution and the increased mobility of capital, globalization may have the potential to hasten the process of poverty reduction in emerging economies like India, Brazil, China, and South Africa. The recent developments affecting financial institutions across the globe in a serious manner also tell us about the negative aspects of globalization. Globalization also carries with it the danger of creating a market place in knowledge that excludes the poor and the disadvantaged, particularly households that do not have access to basic education and ICTs. In an increasingly knowledge-based global economy

there is the danger of a deepening marginalization within a rapidly growing economy. What is important is to shape and manage the process so as to ensure equity and sustainability thus maximizing its benefits to all sections of the society. Economists like Amartya Sen (2002) have suggested that:

... central issue of contention is not globalization itself, nor is it the use of the market as an institution, but the inequity in the overall balance of institutional arrangements—which produces very unequal sharing of the benefits of globalization. The question is not just whether the poor, too, gain something from globalization, but whether they get a fair share and a fair opportunity. ...

It is therefore extremely important to minimize the risks of exclusion of certain sections of the society so that the *information society* does not lose sight of the human dimension. This could prove to be a crucial issue. The Information Literacy Meeting of Experts (Prague, Sept. 20-23, 2003) organized by the US NCLIS with support from UNESCO, representing 23 countries from every continent proposed, among others, the following basic information literacy principles:

- The creation of an Information Society is key to social, cultural and economic development of nations and communities, institutions and individuals in the 21st century and beyond.
- Information literacy, in conjunction with access to essential information and effective use of ICTs, plays a leading role in reducing the inequities within and among countries and peoples
- Governments should develop strong interdisciplinary programs to promote Information literacy nationwide as a necessary step in closing the digital divide.

It is important to realize that these can be brought about, carried forward and sustained only through the efforts and involvement of governments at the national, state and other levels. Government policy formulation and implementation forms the single most important factor and it is unlikely that a nation will be able to realize the positive impact of globalization without major structural changes initiated by the Government. Two of the key issues that are being addressed by every country – developed and developing, and even large organizations are: ‘how to adapt and transform to meet the challenges of *globalization* and how to derive maximum benefit from this’. It is not therefore surprising that countries around the world are reviewing and restructuring their laws, regulations, operations and functioning to steer themselves on the path to becoming a knowledge society. This move, visible around the world is, in effect, an explicit recognition by governments and policy makers at the highest level of the importance of empowering ordinary citizens with access to information to meet the demands of and benefit from the knowledge economy. Singapore is pursuing the *Intelligent Island* programme, Japan the *Info-communications for the 21st Century* and the European Union (EU) the *European Information Society* programmes. The Government of India constituted the NKC (National Knowledge Commission, 2005) with the following terms of reference:

- Build excellence in the educational system to meet the knowledge challenges of the 21st Century and increase India’s competitive advantage in fields of knowledge
- Promote creation of knowledge in Science & Technology laboratories
- Improve the management of institutions engaged in intellectual property rights

- Promote knowledge application in Agriculture and Industry
- Promote the use of knowledge capabilities in making government an effective, transparent and accountable service provider to the citizen and promote widespread sharing of knowledge to maximize public benefit.

The NKC represents a continuity of the initiatives of the earlier government, which had set up the National IT Taskforce. The IT Taskforce itself could be seen as a follow-up of initiatives by earlier Governments headed by Rajiv Gandhi and P.V. Narasimha Rao. One would certainly see these as healthy developments representing continuity and a certain level of agreement among political parties in an area vital to national development.

What is the relevance of libraries to all these is the important question. The NKC constituted a Working Group on Libraries, which has come out with some suggestions and recommendations. India is a land of diversity, paradoxes and imbalances. With the historic 73rd Constitutional Amendment of 1992 the stage was set for a significant change especially in rural areas by imparting de facto powers to Panchayati Raj Institutions. This marked a major shift from a *top-down* approach to a *participatory approach* involving people at the grassroots level in the development process. The extent to which the objectives of this legislation have been realized is another issue. Participatory communication approaches are required at the grassroots level to enable the villagers to take control of their own lives and environment by providing relevant development communication services. Paulo Freire, one of the most important 20th Century thinkers on education, calls this process 'empowerment'. Several experiments have clearly established that access to information will have a positive impact on the quality of life of

even ordinary people. The '*Mission 2007: Every Village a Knowledge Centre*' had been conceived by M.S. Swaminathan based on the experience of the M. S. Swaminathan Research Foundation in implementing the MSSRF-IDRC *Information Villages* project (M. S. Swaminathan Research Foundation, 2008). By 2005 this programme had over 200 partners (including such agencies as Microsoft, NASSCOM, ITC, with support from both national (including government) and international agencies. In 2007 this network was converted into a movement called 'Grameen Gyan Abhiyan (Rural Knowledge Network)'. 'The Mission 2007 aims to convert the provision made under the Bharat Nirman Programme for knowledge connectivity in rural India into a reality. The *knowledge revolution* envisaged under Bharat Nirman will enhance human productivity and creativity in all its dimensions'. The programme plans to extend the benefits of ICTs to nearly 600000 villages across the country. Stating its objectives, M. S Swaminathan hoped that:

"Village Knowledge Centre or Gyan Chaupal movement will gather further momentum and will achieve its goal of ensuring the provision of a demand driven package of dynamic and generic information to children, women and men in our villages at the right time and place."

Another major policy initiative by the Government of India is to start 100,000 Common Service Centres (CSCs), broadband-enabled computer kiosks that will offer a range of 'Government to citizen' and 'business to customer' services, besides providing access to the Internet. These were expected to begin to serve India's 600,000 villages by March 2008. It is not clear as to how much of progress has been made in this regard. All these experiments and programmes

clearly underpin the fundamental idea that access to information and ICTs is an essential requirement for empowering ordinary citizens. Having said this, it is useful to identify appropriate mechanisms for realizing this. An interesting initiative outside India that may have important lessons for India is the People's Network (PN) of U.K. PN is the IT-based network of public libraries and its significance lies in the fact that it explicitly recognizes the role of the public library in moving the society to the knowledge era. The public libraries are connected to the Internet and to a host of online services. In India probably with the exception of NKC, none of the other major initiatives of the Government has touched on the role of the public library in the efforts to transform our society to a knowledge society (2006). As on today only 13 of the 28 States and 7 Union Territories of India have passed public library legislation. It is important to realize that an adequate and well-established network of public libraries is an essential requirement and probably constitutes the most efficient and effective way of reaching the benefits of the IT revolution to the common man. It is the library where information and community converge. Changing the library's image in the marketplace, however, must start with changing perceptions. Any organization exists to provide value. If in the perception of the consumers of the products and services of the organization, that value is not in tune with their needs, the perceived value of the organization will be minimized. Significant transformations have affected consumer choice and preferences about information creation and access.

Frey (2009), Executive Director of the DaVinci Institute, has identified certain key trends that are affecting the future of the library:

- Communication systems that are continually changing the way people access information
- The new era of Global Systems

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- Transition from a product-based economy to knowledge-based economy.

As information users gain more and more access to information from a growing number of sources, in a variety of formats, packages and contexts, the library will find it difficult to remain an important player in knowledge transaction if its present brand image as a provider of "books" continues. Libraries need to change this image. Giving library users a desirable experience they can't get elsewhere can do this. For example, free Internet access, reading programs for children, book clubs, community information, or 'meet the author' events, etc. The notion of what constitutes a library, especially a village public library, has undergone fundamental changes and in a programme such as the one envisaged by the NKC, it is necessary to adopt a broad-based 'holistic' approach that would integrate the activities and programmes of different agencies engaged in knowledge dissemination using ICTs. In U.K. in the years before PN, many people, particularly young people had distanced themselves from public libraries. But the networked public library system changed this perception. It is now seen as a gateway and an opening to the networked society. PN is also employed as the channel for delivering official government information to citizens, and for interaction between the citizens and the government departments. PN has clearly shown that it is possible to transform the public library as an interface between the people and information providers including e-resources on the Net, government departments, etc. In the academic world, real scholarship will continue to depend on libraries. Perhaps the single most important role of the library will be to serve as a portal / knowledge gateway to evaluated quality information resources – both in-house and distributed network resources. This will be a major

requirement given the problem of information overload and the limitations of available search engines in directing end users to quality information resources. The library, especially the research and special library, should also emerge as a portal / gateway to the outside world for the scholarly information generated within the organization. This requires that the library should play an active role in creating and maintaining institutional repositories and in developing effective search mechanisms for these to both showcase and provide access to scholarly research output of the organization. In the corporate sector, it is likely that more and more organizations will create parallel systems for knowledge sharing (Knowledge Management Systems).

The process of democratization of access to knowledge began in the middle of the 15th Century with Gutenberg unveiling his printing press to the world. This printing revolution was responsible for getting over 500,000 books into circulation before the end of that Century. Libraries have, since, tried to build large and comprehensive collections of books and other materials, and have largely been funded and maintained by the state or other institutions. We have moved far away from the situation where information was scarce and precious. Today vast amount of information is freely and readily available. A considerable amount of the information for which people had to visit libraries earlier is now available online. As a result a vast majority of people with specific information needs no longer visit libraries. Of course, there are those who read for pleasure who will continue to patronize the public library and the scholar who continues to depend to a significant extent on the resources of the research library. A recent study (Rich, 2009) by the US National Endowment for Humanities has reported an increase in reading!

Libraries of all kinds need to restructure themselves and, indeed they have a very important role to play in ushering in the *Knowledge Society*.

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