



Date : 06/07/2006

## Strategic Planning for Developing Indian University Libraries into Knowledge Resource and Service Centers

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<b>Meeting:</b>	<b>133 Management and Marketing</b>
<b>Simultaneous Interpretation:</b>	Yes

WORLD LIBRARY AND INFORMATION CONGRESS: 72ND IFLA GENERAL CONFERENCE AND COUNCIL  
20-24 August 2006, Seoul, Korea  
<http://www.ifla.org/IV/ifla72/index.htm>

### **Abstract**

*With the ongoing process of globalization, growing competition and spurt in knowledge activities, the demand for information is growing in all spheres of economy. The knowledge based work environment demands problem solving information at greater speed and as per user convenience. Discusses what changes are taking place in the emerging knowledge society and what way the university libraries should respond to these changes. The current university library models in India are based on the functionality of document supply and information search assistance. This existing model to a large extent concentrated on developing broad based information resources providing flexibility to meet individual choices and information needs. The knowledge resource based model ensures pinpointed information supply to customers and teams and provides information prescriptions for solving problems at hand. This model focuses on unabated supply of refined and need based information for continuous learning and preparing the thinking minds to churn out ideas and information which may help in further extension and modification of existing knowledge. This paper discusses that for the university libraries to metamorphose into knowledge resource centers that facilitate true learning, these libraries will have to look beyond four walls to track institutional and individual knowledge repositories in a networked environment. These libraries will even help to establish person-to-person contacts and link information with information in the interest of creation of new knowledge. The evolution of the digital age and development of networked electronic information resources have provided necessary means for transition of Indian university libraries to knowledge resource centers. Through strategic*

*planning which provides speedy information access and ample learning opportunities for everyone and integrate information with the work process and everyday working life of information users, the university libraries can develop into institutions which facilitate learning and real time access to the desired global information resources. The advantage for university libraries is that they are already operating in a learning environment and they are not facing as much of bureaucratic and procedural barriers as in other government departments. Besides the implementation of ICT, the institutional initiatives for doing something better and quality improvement also have profound influence on development of library and information facilities. This paper depicts the impact of ISO certification of the University of Jammu on the strategic planning and development of its library. It describes how through environmental scanning and strategic planning, the University of Jammu Library restructured its physical facilities, automated its operations, implemented RFID technology and is moving towards the mission of developing a knowledge resource centre.*

**Keywords:** *Knowledge Society, Strategic Planning, Academic Libraries, India*

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## **Introduction**

In the present turbulent times and increasingly uncertain, complex and competitive world, the accumulation, processing and strategic use of cutting edge knowledge is playing predominate role for propelling growth and advancement in almost every sector of economy. In the last two centuries 'industrial production' determined the economic advancement of a nation. In the present century, generation of new knowledge, management and use of knowledge resources is becoming crucial in the creation of wealth. Knowledge and idea based companies such a Microsoft, Google, Amazon. Com, Tata-Consultancy are thriving on their knowledge assets and making the life and work easier for human beings around the world. Effective management of knowledge resources is now playing a key role in wealth creation and world's most strong economies are no more emphasizing on industrial production but rather becoming powerhouses of knowledge. In knowledge based society what one own is not as important as what one knows. A single patent embodying important ideas and potential applications may considerably enhance the economic power of the inventor or innovator.

An awareness of what is happening and what is important in a developing knowledge based society, can help information professionals to restructure their institutions, redesign their systems, ameliorate their operations, manage change and reorient their services to needs and conveniences of contemporary and anticipated future customers. Knowledge based societies have mainly been created by the information technology revolution and are fueled by the Internet. Because of globalization, growing competition and speedy access to vast global information resources, one can witness a spurt in knowledge activities and an enormously accelerating speed in work and action, "A generation ago, the average person had a 100,000 hours working life (40 hours x 50 weeks 50 years). To-day, we can do everything that person did in a tenth of time, a mere 10,000 hours. According to Peter Cochrane, Head of Research for British Telecom Labs, in the next generation people will be able to do that in 1000 hours"<sup>1</sup> In the knowledge based societies slow and steady loses the race and only fast and steady wins the race. It is because of speed of information accessibility information users now prefer to go for Google instead of browsing through the books and riffling through the microfilm reels.

In the agricultural societies power centered around the sword. In the industrial societies pen became mightier than the sword. In the knowledge societies the keyboard and mouse are more powerful than the pen because they lead to saving of time. Because everyone is trying to do and accomplish more and still more in a given time, life in knowledge society is guided by the calender and run by the cloak. Time management is like life management. Saving of time means finding opportunities to do something more. Thus people are spending a lot of money to save time and several products and services are being developed which find quick market acceptability because they save time. "In 2003, electronic journals linked through SFX saved Yale researchers, faculty and students 17,365 hours"<sup>2</sup> Some organizations are even allowing flextime and work performance from homes in the interest of improved work performance.

An individual simply cannot cope up with the fast pace of knowledge society. The concept that one person can do everything is no longer valid. In the cogllomorate of institutions and the Internet, strategic alliances, cooperation, collaboration on mutually beneficial areas and agreeable terms will help to achieve quick success. However, relationships will work on the principle of

‘symbiosis and not on the functionality of osmosis. Relationships will continue as long as interests and purposes are common, ethics are observed, transparency is maintained and benefits of work effort percolate to every human participant in the collaborative work venture. The young people particularly are now more strategic and setting up their own life missions, goals, objective and purposes. In the process of seeking their purposes, in everything, they are even getting alienated from their own families and their communities and getting connected to cyber communities. Collaborative learning, participative decision making, shared accountability, mitigating drawbacks and eliminating problems through knowledge sharing is getting greater attention in the knowledge society. “A three and a half page paper written by 371 authors affiliated to 44 institutions in 12 countries across the world indicates the growing extent of collaboration and coordination in the scientific and technical work in the world”<sup>3</sup>.

Information is recognized as important resource in the emerging knowledge societies and hence there is enormous growth of information. In ocean of information float abundance of ideas, which encapsulate essential knowledge. However, an idea is like a fish, if one do not hook it, it maybe hooked by someone else. Abundance of ideas have produced a variety of goods and services. The challenge now is to make right choices. To have quick access to facts and product information, quality, specifications and values before making choices is now also a part of work.

In the knowledge society, the hierarchical and bureaucratic management structures are getting dismantled and are being replaced by spatial management, because knowledge and expertise resides in every perceptible human mind and not a prerogative of high fliers. The knowledge seeker in fact is trying to find a connection between what already exists in his/her mind and what exists in his external environment. Continuing education and capacity building is therefore is very important in knowledge societies. Industrial society recognized learned men and women; the knowledge society places high value on learning men and women because human beings become obsolete as quickly as machines and require to be continuously equipped with new skills and competencies. However, it is not the machines but human beings who ultimately decide what information is critical for the organization and can give any context or meaning to the information received or communicated. Because of high competition, constant hunt for talent is the focus of knowledge societies. Organizations are trying very hard to employ the best possible persons with the belief that innovations will automatically follow once the best brains are hired.

### **India and the Knowledge Society**

India is not yet a knowledge society but there are very strong islands of it. Indian polity has recognized the need for developing India into a knowledge based society as country’s top economist is its Prime Minister and the best scientist is its President. A large number of Indian engineers and scientists have made their mark in India and abroad. A strong talent pool in science and technology exists in India and country is becoming a hub for R & D work of many multinational companies. About 200 MNCs have already set up their R&D facilities in India.

A strong base of artisans and semi skilled workers and abundance of traditional knowledge resources exist which can lead to innovations if properly exploited and utilized. For instance, scientists from Indian Institute of Technology (IIT), Delhi invented Mangal turbine to produce electricity between two to ten kw. This

device costs hardly Rs. 12000/- and design can be replicated by rural artisans. “The IIT team however owes a thank you to a farmer namely Mangal from Utter Pradesh for this device. While conducting a routine survey in Utter Pradesh in 1998 scientists met... Mangal, who showed them a water wheel he had designed of wooden blades to lift water from a river in his village Bhailoni Lodh”<sup>4</sup> A vegetable seller from Ratool village in Bhagpat Utter Pradesh, has developed a helicopter with the help of other vegetable sellers and friends. “This two seater, home made helicopter which if approved will be made available for just Rs. 100,000, claims an association of innovators”<sup>5</sup> Such artisans, other semi-skilled workers and progressive farmers if given little training and access to information can do wonders in product innovation and better contribute to the economic development of the country. “For 42 year old A.V. Narayanaswami, a coffee planter in Wayanad, it has been a labour of love to his vocation as a farmer and as a keralite concerned about the woes of the state’s farm sector. His huge data collection currently runs into over 1.5 lakhs web pages in more than 300 modules. The database covers the state’s farm potential, new norms of production, packaging and marketing”<sup>6</sup>

A lot of traditional knowledge is not in recorded form and remains confined to families and communities who are using this knowledge. Traces of traditional knowledge also exist in tribal communities, which never came out of their boundaries of their action. There is a fear of lot of traditional knowledge becoming obsolete because of lack of communication. “For example in medieval India the art of fine and film thin muslin was well known. The art died because the weavers were reluctant to share this art with others”<sup>7</sup>. This happened because transfer of work skills and traditional knowledge remained the individual privilege and was guarded by communities for centuries. On the contrary in the western world most part of knowledge was recorded and preserved. Nicholas Copernicus was born on February 1473, yet his great work Revolutions was only published in March 1543, two months before he died”<sup>8</sup>. Another example concerns Evariste Galois. “In 1830, Evariste Galois, a student in his first year at Ecole Normale, was killed in a duel at the age of 21. The night before, he wrote letter explaining his theory of the solution of algebraic equations. This was the foundation of entirely new branch of pure mathematics, the theory of groups, which has completely transformed our thinking about the nature of algebra and geometry”<sup>9</sup>. However there is a new hope of communication of knowledge recorded in some important manuscripts because such works are being digitized.

Government, learned societies and even corporate sector have started contributing towards the improvement of information sector and development of human resources. Government of India has set up NICNET which is largest government owned information network in the world. “The Indian Society of Agricultural Professionals aims to reach out to at least 100,000 agri-business professionals during the next five years and provide answers to questions like can olive be grown in India? Or is there a market for grafts from Maharashtra to remote Assam?”<sup>10</sup>. Tata Consultancy has offered a plan to help the country alleviate illiteracy and another company namely WIPRO is making contribution in computer literacy.

“In the telecommunication sector fierce price competition has resulted in Indian mobile telephony becoming one of the cheapest in the world; more than 47 million people had mobile phones at the end of 2004”<sup>11</sup>. By the end of this year, one in every 13 Indians will have a mobile phone, which will create an adequate environment for information sharing. India is though among the ten countries

having maximum number of the Internet users, but when we compare it with its demographic statistics the usage of the Internet and penetration of computers is very low. A large majority of population still cannot afford to buy computers. “For instance a PC in India costs around 24 months of average per-capita income as compared to China’s 4 months and the USA’s 12 days”<sup>12</sup>.

“India’s knowledge management problems are diverse because the country has a unique mixture of the best and the worst kind of situations. It has the fastest jet planes and also 6 million bullock carts. It still has steam engines but also super fast air-conditioned trains. It has pigeon post and speed post. The country has tribesmen who never made a phone call and never traveled in a train but also business executives moving in and out of aircrafts. The country has premier educational and research institutions but also primary schools without blackboards. The country trains world-class engineers in various fields but 45 percent of the population is illiterate”<sup>13</sup>.

There is thus other side of the picture too. The use of information in India by a large majority of population is tardy and in several cases bureaucracy helps only to delay access to information. In some cases even blocking and clogging of information has remained a characteristic of work for finding means of out performing others. At some places conservative attitude of handling and holding information do not let the information reach upto their prospective users. There is a greater emphasis on generation and accumulation of information and lesser emphasis on dissemination and use. “According to latest National Sample Survey Organization report, 60 percent of farmers in India have no access to agriculture technology. Disturbed by this report the Union Agriculture Ministry is now considering a proposal to revamp Indian Council of Agriculture Research (ICAR)... in a bid to bridge the gap between technology generation and technology dissemination”<sup>14</sup>. Wherever public sector fails to make the mark, the private sector steps in. “ITC one of India’s largest exporters of agricultural commodities has launched e-choupal in June 2000. “ITC’s e-choupal has already reached 3.1 million farmers and is expanding into 30 new villages a day-making it Corporate India’s most ambitious rural initiative ever”<sup>15</sup>. Choupal means a village square where elderly villagers meet for discussion of topics of importance. E-choupal is infact Internet based agricultural information service through which villager can access agricultural information of their concern, buy seeds, fertilizers etc, and sell their agriculture produce.

Making available the need based information right into rural areas is essential. However, people’s capacity building to facilitate most effective use of information is equally important. The execution of mental abilities of an information user to grasp relationships directly depends upon the availability of relevant information. However, information users can perceive, interpret and draw relationships of information within limits of their own knowledge and level of education. In India, we are not able to make most effective use of potentialities of our manpower because a little less than half of the people are illiterate. We are also not able to make use of full potentialities of our literate manpower because of problems such as unemployment, underemployment in some cases and lack of information literacy. Lack of information literacy hampers access to right information may leads to inappropriate action and hence underutilization of people’s potential. To solve all such problems the Government of India constituted a National Knowledge Commission to the Prime Minister on June 13, 2005. This commission is functioning under the chairmanship of Sam Pitroda and has following terms of reference.

- a) Build excellence in the educational system to meet the knowledge challenges of the 21<sup>st</sup> century and increase India's competitive advantage in the fields of knowledge.
- b) Promote creation of knowledge in S&T laboratories .
- c) Improve the management of institutions engaged in intellectual property rights.
- d) Promote knowledge applications in agriculture and industry.
- e) 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.

### **Converting Indian University Libraries into knowledge Resource and Service Centers.**

Most Indian University Libraries are presently based on the model of providing access to organized collections, assist the users in information search and circulate documents within the stipulated period of time. Some have automated their operations for greater efficiency and provide additional facilities for use of the Internet and e-journals. These services are not enough to meet the information service requirements of emerging knowledge society. Moreover, university libraries now have no monopoly for providing academic information, as alternatives are available for accessing academic information. University libraries are thus also facing fierce competition from alternative information services. In such a situation what strategies we should have in place for converting them into knowledge resource and service centers?

Though every university library functions and undergoes changes according to its own mission, objectives, environmental scanning, funding, leadership and staff, there are some common developmental strategies which can be adopted for metamorphosis of these libraries into knowledge resource and service centers.

1. University library is often referred as the heart of institution or nerve centre for various activities. "However, when viewed from a senior management perspective from an industrial age corporate mentality- they often have been classified as overheads unable to demonstrate visible contributions to the productivity and profitability of the enterprise"<sup>16</sup>. University library system thus should not be considered a peripheral service but one of the core unit of the institution central to the knowledge activities of the university.
2. University libraries should develop quality control methods and criteria to strictly evaluate and acquire print and e-information resources which the academic community may use. In addition to this, these libraries must jointly evaluate the open access Internet information resources and create virtual libraries for rendering just in time information. Libraries even must go beyond these efforts to collect information and index useful blogs and thus create expert databases for providing referral service to establish person to person contacts and link information with information in the interest of generation of new knowledge. They should also encourage cross disciplinary communication of information among related fields.
3. Under the INFLIBNET programme, the UGC must set up a monitoring and review committee to speed up the process of retro conversion of catalogue records in Indian Universities and set time targets for this so that online union catalogue of Indian university libraries is made available for

the identification and location of collections. Libraries not having adequate staff for this purpose must get this work done through outsourcing. UGC may stop funding such libraries that are not making a steady progress in this direction.

4. There is no place for stand alone libraries, university libraries must get connected to various library networks. In addition to this, they must integrate and establish synergetic relationships to other information institutions to provide outreach services and make still greater contribution for dissemination of knowledge. For instance agricultural university libraries may collaborate with rural public libraries for dissemination of agricultural information and transfer of agricultural technology in rural areas. Similar arrangement can also be made with association of agro based industries, for mutual sharing of information. The NML, USA has sponsored projects for public libraries for health literacy.
5. There is a gap between users' knowledge of information resources and services and ongoing developments in the information world. Because of this gap even the existing services such as ejournals made available under the Infonet are not adequately used. University libraries therefore must organize information literacy classes to convert human beings into human resources. At the national level, the UGC must develop a policy document to integrate information literacy with the courses of study. This will also help to bridge the digital divide.
6. There is also a gap between the existing knowledge of library personnel and skills and competencies required to handle newly emerging information tools and technologies. A continuing education program for library personnel should be in place for greater contribution of library personnel. When the staff is trained new technologies and methods of handling information automatically get integrated in their work culture. As library professional role is no more limited to merely classification and circulation of documents, they should also take initiatives to continuously learn to improve their skills and competencies to stay competitive and stay ahead.
7. University library personnel should share ideas to develop innovative library and information services. They should continuously find ways to counter delays in information access, lower costs, increase service. "The common knowledge database projects at Rutgers' University allows reference librarians to share resources and strategies for serving academic library patrons"<sup>17</sup>.
8. University libraries should also introduce large scale administrative reforms and do away with rigid rules in favour of flexible provisions which helps everyone. They should metamorphose into performance oriented libraries and not procedure oriented libraries. If some procedures are inevitable, they must save users time and should not be inconvenient for users.
9. University libraries should devise services, which may help in work processes and work flow of the institution. For this, the university library may even collaborate with other units of the institution. For instance, the library may collaborate with faculty to develop e-content guides for various courses of study, develop a online database of ongoing research projects, develop information products and tools urgently required by the institution, etc.
10. University libraries should have strategies in place to deal with new technological advances and developments. Universities must have strategies to use every development in IT to their advantage. An IT cell be

set up which constantly keep watch on the developments in the IT and see what is relevant, cost effective and latest hardware and software for the university library system. Latest knowledge management tools and techniques and useful databases should also be evaluated for their usefulness for the university.

11. Users are hard pressed of time and no more visiting the university library to spend their leisure or read any document. They are mostly visiting the library with a purpose and when they are looking for information, they are trying to solve their problems. Professionals must help them in a sympathetic way, guide them through wit and skill and ultimately seek reflection of satisfaction and smile on their faces. Every university library must have its website to keep them informed. Users are now facing the challenges of info stress and hence they should not be loaded with information but provided most relevant and pinpointed information.
12. The ultimate emerging in house operation in the university libraries is quality filtering and trafficking of information so that the right information reaches the right person at the right place. The ultimate role of university library professionals is to act as consultant to solve users problems at hand through information prescriptions and provide referral services and thus build their capacities to make them more effective, productive and successful in their work.
13. An average user is facing the double challenge of fast pace of knowledge society on one hand and an ocean of information on the other hand. Users generally have no time to find what is best for them in a given situation. Here lies a great opportunity for university libraries to become knowledge resource and service centers. University libraries however, should constantly research what more they can do to serve the user communities, add value to library services and add convenience to the lives of user communities and save their time. A knowledge resource and service center will succeed in its mission only when its users start succeeding in achieving their objectives. As the information is getting unbundled, these centers must provide information-packaging service and facilitate on demand customization of information packages. They should constantly improve quality of their service and achieve zero defects between information asked and information supplied.
14. While facilitating metamorphosis of university libraries into knowledge resource and service centers, every care should be taken that these centers do not largely commercialize their services. Their services should be free and fast because for millions of poor Indians they will be oasis for knowledge. Their services infact should be rendered in a humanistic way.

### **Case Study of the University of Jammu Library**

Up to the year 1997, the university of Jammu Library System was almost in an anarchic state. The library had no properly counter, the staff stopped classifying and cataloguing documents, collections were not organized and some users placed them in cabinets and almirahs and locked them for their exclusive use. Because of this situation, faculty members never returned books that they got issued from the library. University's efforts to negotiate and appoint a full time professional librarian always failed as no one ever wanted to take over in such a library situation. Library and vendor conflicts, user staff conflicts, conflicts even among users were often witnessed and conflict management was almost the full time job of its manager. The library had no money even to replace a window pane broken due to users' violence.

The Inlibnet grant provided by the UGC to set up Inlibnet Lab was not utilized for years. The workforce was highly demoralized and had not enough motivation for work except to perform the assigned duties. No meeting of library committee was held for more than ten years. No training programme was ever organized for library staff. Because there was no property counter, users starting taking their own belongings and books inside the library. Under such a background the authorities resolved to modernize the university of Jammu Library systems and skeptics doubted whether a library which is not even rendering the traditional services will ever be modernized.

A library monitoring committee was constituted in 1998 and environmental scanning started to identify the problem areas. The major problem areas identified were senior library staff members stagnation, lack of funds, age old statutes, lack of concern, resistance to change, etc. It was noted that in past few years some senior staff members including the Deputy Librarian in charge were concerned for their promotions, as they have been stagnating at the same position for more than a period of quarter century. The Deputy Librarian in charge retired but for rest of the senior staff members revision of grades and promotions were recommended. At the same time process of promotions of rest of the staff was also initiated. This led to a turn around situation in the library. A substantial change was noticed in staff's attitude towards development of the library and staff's positive participation in this process. The Inlibnet Lab was set up and the technical processing work began again in 1998. A property counter was established and collections were arranged with the help of concerned staff. Two more floors were added to the library building and age old rules and statutes were revised as a part of the process of administrative reforms. A new reference facility was set. By the time the National Accreditation and Assessment Committee (NAAC) team visited the library, all the sections of the library were functional and a new service entitled 'Documentation on the J&K' was also started. An Internet lab was set up in 2003 and work for the complete automation of the library was started. Initially a decision was taken for bar coding of documents and later on it was decided to take the library ahead of present times and hence decisions were taken in favour of RFID technology. The process of internal restructuring of the Library was also started to improve work flows and make the library most inviting and peaceful place for study and information search.

In the next phase of development, the process of library development was integrated with organizational development as the university applied for ISO certification. As a part of this effort the library developed its mission statement i.e. 'To provide need based library and information services which facilitate convenience to users and exceed expectations of users'. Objective statements were quantified and targets were set for retro-conversion and complete automation of the library. A library development fund and a local fund were instituted to meet the additional financial requirements of the library.

The staff was trained in handling machines and in the use of Lybsys software. University of Jammu Library is now a most peaceful place for study and information search and no conflicts are now noticed. The university authority helped to remove all hurdles for the all round development of the library. While the university got ISO certification, the inbuilt mechanism of ISO certification helped the university of Jammu Library to develop into the most

modern library in Northern India and it is now moving ahead towards its mission of developing a knowledge resource and service center.

The development model of the university of Jammu Library can be helpful for the development of other university libraries in India. From this model conclusions can be drawn that development of organizations and employees go hand in hand. To ensure optimum performance and development, organizations must care for their employees. Inbuilt mechanisms and procedures of NAAC and ISO not only help the organizations to achieve quality but also set the pace for their further development. A turn around in the university fortunes is often attributed to a hero at the top. Leaders bring about change through strategic use of institutional resources and by winning the hearts and minds of the workforce.

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