RANGANATHAN'S APPROACH TO KNOWLEDGE ORGANISATION AND ITS IMPACT ON MODERN LIBRARY AND INFORMATION SERVICES

Analyses the basic approach to knowledge organisation. Identifies the basis of analytico-synthetic approach of Ranganathan. Delineates this approach in relation to information seeking, information science, information resource management and information dissemination and retrieval. The analysis further leads to the professional expertise in knowledge base communication and education for the same. Ranganathan’s approach moves in from fundamental to empirical analysis.

KNOWLEDGE ORGANISATION

Knowledge is a mental entity. It is the totality of ideas that are evolved out of human mind from different times and climes. It is the preserver of human civilisation and culture. Knowledge results from the interaction of human beings with the nature and surroundings. The natural basis of knowledge is extended by the human observation power. Knowledge by itself does not have any shape. It is the human intellect which organises itself into different modules for absorption and use at different stages. Recorded knowledge is given in modules convenient for absorption by the human mind. For the purpose of learning, teaching and utilisation, knowledge is given specialised structure so that concentration is bestowed on problems in an intensive manner. The learning, teaching, research when it becomes mission-oriented becomes integrative and fragmented in a variety of manner. The variety of ways in which knowledge can combine is dexterously turned to advantage for creativity by individuals or groups of individuals.

FEATURES OF KNOWLEDGE ORGANISATION

Knowledge organisation (=KO) thus connotes a kind of logical separation and yet integrates with whole of knowledge. It is a kind of progression in which a person concentrates on a spot of thought in the context of whole knowledge. It may be an area or a system, or an environment or anything. It is the study of an object or a concept in relation to its surroundings. KO plays to focus many things to satisfy specialists. Ranganathan said that “periods of rapid and extensive development of a discipline are frequently periods of loose thinking about its foundations. The recognition of the need for a catastrophic change of the foundation emerges rather slowly. Such was the case of mathematics in the eighteenth century and with biology in the nineteenth. So, it is today with classification at the levels of idea and notation alike. With a sort of perverse professional modesty, many evade facing the problem by insisting that they classify in relation to the particular set up of their respective libraries without too intimate a reference to the happenings in the field of knowledge either in the superficies or at varying depths’ [4].

Ranganathan thus emphasized the role of classification in organisation of knowledge. Such structures depend upon models of thought. Just as in trying to restore a multi-dimensional object a number of projections must be combined, so in dealing with anything as complex as human society we have simultaneously as many different kinds of models as possible. These must cover the whole gamut commencing from examining how much we are the prisoners of our decisions. Different models provide different decision-support. They generate alternative modelling of information. The key to geting a variety of models is producing scientific groups of subjects related horizontally such as chemistry, biology, physics or mathematics or even subjects such as economics, politics, and sociology. However, in the real life situation there is a criss-crossing of scholarship which may work in different directions. This leads to an axiom that knowledge is one. Its division into subjects is a concession to human weakness and strength. It leads to intellectual team work.

On this, Ranganathan says "the cooperation between philosphers and physicists, which has emerged from the physical thesis of quanta and fundamental particles, is remarkable testimony to the cooperative intellectual work which has now come into vogue. The process of cleaning, dress-
ing and distilling has called for great changes in the auxiliary disciplines of logic and epistemology. Indeed the amount of new thought which is being forged by large teams of workers in the field of logic is amazing. General semantics and logical syntax are the result of teamwork among Polish and American thinkers on that subject" [2].

On the basis of these premises Ranganathan developed an analytico-synthetic approach. According to him "The unprecedented atomisation of thought-mass being brought about by intellectual teamwork has emphasized the need for invoking the aid of a faceted, phased, structurally expressive, analytico-synthetic classification in the area of reference service. The onslaught of atomisation which threatened to break down communication even among persons engaged in the same piece of intellectual teamwork was being pursued. Subject specialists were, therefore, put in charge of research records, which are what records embodying atomised thought amount to. No doubt some relief did come by this remedy - but not full relief. This is because the correct etiology is not that the library staff did not have specialised knowledge but that its tool to facilitate communication viz., classification was not sharp enough to do the job. Once this is recognised the need for research within the domain of classification in communication will be realised" [3]. Thus, analytico-synthetic approach provides a multi-dimensional object analysis for a knowledge communicator. The basic structure of this approach may be further delineated as follows:

**Analytico-synthetic approach**

1) Focusses attention of an observer on a field of knowledge, however broad or narrow it may be. The knowledge may be over an object, a property of it, or an action or its environment. It helps an observer in intensive probing of a field of knowledge. It assists in filtering the relevant from the non-relevant.

2) Integrates in a manner conducive to human thinking any broad or narrow field to its related field of knowledge. It presents a semantic mapping of knowledge centering round any one piece of knowledge. It helps in browsing and contextual interpretation of knowledge.

3) Sets a pattern of arrangement of ideas to facilitate the formation of consistent structuring of subjects. This helps in precise communication of knowledge.

4) Provides for a kind of symbol manipulation for representation of concepts, for ease of arrangement of ideas and their ensembles in a helpful sequence. This catalyses the process of information retrieval.

5) Provides for guidelines for the presentation of ideas in a goal-oriented or target audience oriented presentation of information. This catalyses the process of assimilation of relevant information.

This analytico-synthetic approach provides a classificatory language and a frame for knowledge organisation. Such an organisation of knowledge should be empathetic to information seeking, access, dissemination and use.

The activities are different aspects of a communication process. Classification that is representation of knowledge is a lamina in this communication. Classification assists any communication process. It provides a frame of reference to any person for the study of information and communication environment. The new role of classification in information transfer is to act as filter for information flood. In other words, it organises and integrates the incredible rich body of information representation such as visual image and audio tape. Creative process in fusion with flexible classification process can produce knowledge of high utility value. It dowers a personality. Classification synchronised with human personality will trigger a dynamic structure of knowledge. Prof. Ranganathan talks about the "dowering with life energy". "Any how mechanised things are dependent upon the use for beauty. A turbine at work is a thing of wonder and beauty; but out of use, it is dearer than it was before its elements were taken from earth. Because of this need for redeeming use, the multitude of mechanisms, surrounding us may justly be regarded as appealing objects making persistent demand upon us. May, because of their inanition, they threaten us with the sense of death unless they are continuously dowered with our own life energy" [5].

Speaking about the human agency to redeem, Ranganathan wrote, "Hence the need for introducing a human agency to redeem everything else by putting them to active use. When the reader comes amidst the library, there must be some one to say, "Take my hand; for I have passed this way. And know the truth". ....... If such a human personality is not provided, the potentially great works in the holdings of the library of today will be nothing but a mockery. Indeed the
problem in libraries is no longer one of scarcity in a sense, except that of scarcity in the human converter of the potential energy of books, mouldering on shelves, into kinetic energy of use by readers. This, in its turn, is due only to scarcity of initiatives in high places and of understanding generally. "... So far as knowledge is intuitive or hereditary, the need for reference service will not be seen. But with our present insistence on equality of opportunity for information, knowledge and inspiration from the sublime thoughts of men of genius, reference service becomes essential to national progress and efficiency through democratic methods. There can be no true democracy without reference service." [5]. Classification provides a structural basis for dynamic reference service.

EMERGING DIMENSIONS

In the context of information seeking, access and retrieval, the emergent dimensions of library and information profession are as follows:

1) Scientific approach concerned with the theories and experimentations dealing with communication, information and information systems and processes in the systems;

2) Technological approach with the application of information technology to handling of information;

3) Professional approach (applied, Pragmatic), concerned with information system/services/networks/use/utility and user needs/demands, etc.

These problems were further accentuated by a set of new developments, particularly from the seventies.

1) The spectacular advances in microelectronics, telecommunications, media technologies, and their application to the information field and the resultant political, social and legal implications.

2) The concept of information society where in the axial principle is the centrality of codified theoretical knowledge as a determining key factor for innovation and policy formulation.

3) Information needs in different contexts, such as policy-making, planning, decision-making in a variety of situations, specialised needs for information for industry, energy, environment, health, etc.

4) Problem-solving, which demands the integration of scientific, technical and technological information with societal information.

5) The development of information industry, the related problems of economics and sociological aspects.

The discipline of library and information science concerns itself with

1) Generation and growth of information in different environments;

2) Collection, storage, organisation and processing of information and facilitating its access and use;

3) Dissemination, Diffusion and transfer of information in different user environments;

4) Use, abuse, and impact of information on individuals and groups in different contexts;

5) Design, development and management of information systems and services - manual and machine-based;

6) Social, economic, political and legal features of information and information systems; and

7) Education and research in information generation, publishing, marketing and use.

These studies lead to further impact on information systems.

IMPACT OF INFORMATION SYSTEM DEVELOPMENTS

The impact of information system development can be classified as positive and negative as projected in Table 1.
Table 1
Impact of Information Systems Development

<table>
<thead>
<tr>
<th>Positive</th>
<th>Negative</th>
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</thead>
<tbody>
<tr>
<td>1. Higher quality information</td>
<td>1. Increased information channels. Ex: 3-dimensional overload graphics</td>
</tr>
<tr>
<td>2. Increase of &quot;narrowcasting&quot; with higher quality messages</td>
<td>2. Increased manipulation of information sources, (transmission of sophisticated messages and channels and targeted information) in order to control the individual</td>
</tr>
<tr>
<td>3. Enhancement of interpersonal</td>
<td>3. Frequent surveillance exchange, including improvement and loss of privacy of transmission capacity, through accumulated quality, economy of transmission records or live media and geographic range</td>
</tr>
<tr>
<td>4. Increased equity of information</td>
<td>4. Fragmentation of access useful special groupings, by isospecific needs of various information audience</td>
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<tr>
<td>5. Increased equity of information possession</td>
<td>5. Inequitable distribution of information processing skills, as processing skills required to use high-level media escalate</td>
</tr>
<tr>
<td>6. More flexible access and capacity to manipulate information</td>
<td>6. Inequitable distribution of information</td>
</tr>
<tr>
<td></td>
<td>7. Inequitable access to information, through statute, conspiracy or purchasing power</td>
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</table>

INFORMATION RESOURCE MANAGEMENT

The balance between the positive and the negative aspects of information systems and their impact has to be controlled on the basis of information resource management. It is a process of efficiently and effectively identifying, acquiring, integrating, and applying information resource to meet the current and future information requirements. In particular, information resource management should aim at the following clusters:

1) Intellectual technology - that is, the capability to organise information and data of any type in any format for any purpose;

2) Information technology - that is, the knowledge of telecommunication, computing, printing and related hardware, including the ability to evaluate and cost the relevant equipment and systems;

3) Awareness of the potential role of information in varying environments, i.e. research and development, management, policy-making, decision-making, etc.;

4) Knowledge of managerial principles, i.e. personnel, accounting, financial, organisational behaviour, etc. and

5) Ability to communicate effectively both orally and in writing.

The main objectives of information resource management are to:

1) Reduce the information processing burden on the public and private sectors by the development and implementation of uniform and consistent information policies and practices,

2) Increase the availability and accuracy of current data and information,

3) Expand and strengthen information flow,

4) Establish focal points for information consolidation and transmission of relevant information to the end users and,

5) Facilitate quick and easy transfer of information to the target audience using multi-media data bases.
Table 2.
Interactions among Various Disciplines

<table>
<thead>
<tr>
<th>Discipline</th>
<th>Connectivity with Information</th>
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</thead>
<tbody>
<tr>
<td>1. Mathematical Sciences</td>
<td>Formulating models, equations and statistical indices of growth, diffusion, transfer and organisation of information</td>
</tr>
<tr>
<td>2. Physical Sciences</td>
<td>Developing analogous of movement and diffusion, structure, communication and entropy in information field</td>
</tr>
<tr>
<td>3. Biological Sciences</td>
<td>Developing analogous of growth and ageing of information phenomena; genetic epistemology, modes of knowledge/discipline formation; neurophysiological and biocybernetic aspects of information processing and flow</td>
</tr>
<tr>
<td>4. Linguistic Sciences</td>
<td>Expressing, structuring, coding, communicating ideas and information identification of roles of ideas in an expression.</td>
</tr>
<tr>
<td>5. Behavioral Sciences</td>
<td>The study of human behaviour in the generation, search, acquisition and use of information.</td>
</tr>
<tr>
<td>6. Social Sciences</td>
<td>The study of the sociology of information production and distribution. The economics of socio-political, legal, cultural and management aspects of information availability and utilisation.</td>
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INFORMATION SCIENCE: ITS CONNECTION WITH OTHER DISCIPLINES

Knowledge organisation is the focus of information science. The issues of concern presented here call for interactions among a variety of disciplines as illustrated in Table 2.

Thus the wherewithal for rendering efficient and effective library service is a multi-disciplinary operation. However, all these fields of knowledge emphasise a user-oriented approach to information handling, because the only real value of information is in its use. The cohesion of the team in any cooperative endeavour lies in information flow from one to another. This information-flow covers:

1) A range of objects and events,
2) A distinctive memory-storage capacity,
3) A set of operations and transformations,
4) Specific principles that arrange formulation and communication of information effectively.

Media change occur continuously. The development of technological media for storage and transmission of messages can be traced throughout the human civilisation. Speech was man's revolutionary medium from 10th to 100th millennia; writing a few millennia; printing for a few hundred years; and the recent electronic computing and processing for a few decades; micro-computing and telecommunication technologies within a decade.

PURPOSE-COMPLEX OF LIBRARY

It is obvious that knowledge holds the key to progress and survival of humanity. New knowledge is a prime requirement for researchers and industrialists if they are to contribute to economic progress; scientific and technical information, the medium for its transmission is the life-blood of this progress. Today, the need for such flows of information is no longer confined to science and technology; all decision-makers, whether in the public or private sector, want their options based on a wide assortment of data. For this purpose, research and development on information sys-
tems have tended towards improved access to scientific and technical documents by specialists in order to keep the communication system within scientific community in good health. Though this is important, it does not compare with seriousness of the day-to-day problems faced by community leaders and individuals as non-specialists; and with which information systems could perhaps be expected to help. Much of knowledge and understanding they need or got is not scientific. All these factors suggest the value of library and information service in harnessing the flow of knowledge to variety of key persons, namely, policy-makers, planners, decision makers and achievers of target missions in economic, political, and social systems, besides the science and technology domain. For this purpose, free library service should organise itself to meet with five focal mission:

1) To provide a knowledge-base and work-situations for adults providing for their self-utilisation in professional, educational, and other spheres of their activities.

2) To provide for reading and media centres for young people for their self-education, learning and discussing their cognitive and behavioural needs, besides socio-economic needs.

3) To provide for people's university or distance education and open university programmes for educational and learning materials, planned in the central and distributive networks.

4) To provide for small adult material centre activities for the local communities tailor-made to meet their local interests.

5) To provide for informational and referral centre activities for the city and its communities located at the central library and supported by a central data bank.

A holistic approach in this regard was proposed by Ranganathan for the library service. This is what he said about a library:

"A library is a social institution. It is a multi-purpose social institution. Some of the many purposes in its complex are:

1) To serve as a social memory; for this purpose,

2) To assemble, organise, preserve, socialise and serve all expressed thoughts embodied as manuscripts, book, periodicals; these constituent documents, however minute, and every other similar document produced as a means for communication, and by this means,

3) To help in the transmission of knowledge of the earlier generations to the later one; and by this means,

4) To help in the cumulation and the further building up of knowledge from generation to generation; and in a similar way,

5) To help in contemporary development of knowledge without any wastage in the building of knowledge, by the unintended and purposeless repetition of effort and the consequent wastage in the research potential of humanity; and further,

6) To conserve the research time of humanity by the separation of literature search from positive research; and also,

7) To help in the perpetual self-education of one and all; and further,

8) To collect together all available recorded information, particularly in the form of reference books and to socialise and serve freely all such information to each according to his needs at the moment; and by all such means;

9) To increase the economic resources of humanity to the extent necessary to maintain the ever-increasing population, in comfort and free from want of any kind; and also,

10) To help in mutually understanding, mutually cooperating and mutually tolerant peaceful coexistence of individuals, communities, and nations, and further,

11) To help in the elevating, self-dependent, use of leisure with the aid of freely served books, pictures, sound records, and other similar materials; and also

12) To help in increasing the opportunity for the spiritual awakening of one and all of the members of the humanity. Ranganathan further delineated, "one personal help of a reference librarian, with an abundance of flair, is often necessary to make the library achieve its complex of purposes, social and individual. The true engineer of a library and information system is a librarian" [6].

Thus knowledge organisation is the base for achieving different purposes of a library system."
INFORMATION DISSEMINATION

Today, the information dissemination takes place in a variety of environments, between diverse people and through diverse media. The diverse people may be the invisible college, the communication link among peers, the interaction between scientists in the laboratory and those practising in the field - e.g. the technicians on the shop floor, the entrepreneur, the farmers, the health workers, the politicians etc. - the intersectoral information flow; and transaction between these groups on the one hand and the common man busy coping with the daily chores and problems of life on the other. Besides the conventional media of documents and documentation services, the radio, the television, the audio and video cassette, and the satellite are becoming familiar objects even among the less sophisticated sections of society. Person-to-person dialogue, counselling, demonstration, exhibition, get-together, open-house, and a host of other methods are increasingly used for information exchange and technology transfer. Communication takes place from individual to individual, from individual to groups and from one group to another. Further, each medium and method of communication has its advantages and limitations and poses its special problems. In addition, societal characteristic; such as culture, language, political ideology, legal sanctions, and levels of development between communicator and communicatee can make or mar the information flow.

The tremendous potentialities of information technology resulting from the integration of communication technology and computer technology and its impact on business and industry, on government, education and health services, consumerism, political sociology, etc., are impressive and pervasive in all socio-economic activities.

While information explosion is prevalent all over, the needed information at any moment appears to be diverse and diffuse. It needs to be processed, that is, analysed, synthesized and tailor-made for easy assimilation. Thus, the capacity to handle and channel information to appropriate targets is important. The latter capacity is more valued one than mere abundance of information. Therefore, it is noteworthy that the capacity to handle information has become the means of access and source of power and potential for material wealth as a society tends towards technological and industrial growth. Knowledge organisation acts as a fabric for this growth.

STRUCTURE OF INFORMATION SYSTEM

Information systems have the following basic features in relation to the knowledge base.

1) They have a "control channel" and a "content channel", that is, knowledge-package.

2) They are "historical or current", that is time dimension of information and its conversion to knowledge.

3) They are "remote" or "local", that is, space dimension of information and knowledge.

The parameters of an information system are:

1) Its users;
2) Information sources; and
3) Technologies.

The users part calls for:

a) identifying the information needs, and
b) usage patterns and ease of use.

The information part calls for:

a) Information transfer mechanism (carrier media: paper, electronics or optical);
b) Information storage - memory;
c) Information retrieval techniques - classification/cataloguing/search;
d) Information resources - documents, institutions, human beings; and
e) Communication - mode and media.

Document Delivery Through:
Reprography including reprographics.

The technologies part includes:

a) Computer systems;
b) Telecommunication systems; and
c) Reprographics and micrographic equipment.

PROMOTIONAL ACTIVITIES FOR INFORMATION FLOW

The flow of information is an important factor for organizational management. This leads to the concept of information management. It is a process concerned with the design, development, monitoring and evaluation of cost effective systems to fulfil the objectives of a particular organization by providing an efficient flow of information to those who need it, when they need it and in a manner in which they need it. The information flow processes involve the following steps:
1. Information communication
   a) The interpersonal communication; and
   b) Telephone conversations.

2. Information product
   a) Document creation;
   b) Document storage and retrieval;
   c) Internal databases; and
   d) External databases.

3. Information analysis
   a) Research support systems;
   b) Decision support systems;
   c) Statistical analysis and operations research;
   d) Financial analysis; and
   e) Modelling and forecasting.

4. Information transfer
   Document transmission and dissemination.

5. Activity management
   a) Schedule and calendar management;
   b) Directories - addresses and telephone numbers; and
   c) Tracking of items and information.

Following types of activities in R & D laboratories can be specified:

1. Project Task Information
   Information related to the work to be done for a customer or a client; contact specifications; research proposals; schedules and deadlines, costs; resource availability, etc.

2. State-of-the-art Information
   Information related to the general specific scientific and technical capabilities.

3. Research Laboratory Technical Information
   Information related to the success or feasibility of different kinds of research and laboratory techniques.

STATUS OF LIBRARY AND INFORMATION SERVICES

Compared to the information flow activities delineated so far, the library and information activities indicate a spectrum of information transfer services. The origin of libraries can be catapulted to the origin of recording of knowledge in the form of documents. The collection of documents become a library. The form in which the document is recorded has an impact on its organization. If it is in the form of a rare document, the library will strive to preserve it for a larger interest. Library acts as a conservator; for, a manuscript is the only record. If it is a printed book available in multiple copies, the library would provide access to it and even lend it for regular use by its clientele. If it is in the computer-readable form, such as, magnetic tapes/disks, floppies, etc., it is made accessible through display media, such as television monitors and arranged for remote access.

The spectrum of change from library to information centre, wherein documents of every form coexist, is also referred to as the thought-content of documents. The greater the volume and variety of information, the deeper would be the need for information processing, organisation and dissemination.

In this context, the library and information profession has to concern itself with broadening as well as widening the flow of information right from the generation of information to its use. It has the following implications in respect of human resources development in library and information science.

a) The form of library is changing significantly and rapidly. While new forms of documents are springing up the old ones remain to coexist with the new;

b) New types of library and information systems keep evolving; to quote Ranganathan “Library is a growing organism”;

c) However, the basic needs of information seekers have not changed; they have tendencies to broaden their intensity and become multipronged;

d) Information itself is being generated in a variety of forms, and is often not oriented to specific needs and not very cohesive in its generation. It also tends to have a short half-life;

e) Therefore, it is necessary to improve the collection, organization, retrieval and dissemination of information. In general, access to information packages should be improved;

f) For the effective management of library and information resources, flexible tools and techniques may be adopted; in short there must be an amorphous information technology as a base.
The application of information technologies for operations and services in libraries has been increasing steadily over the last two decades. In addition, with the development of online databases, database vendors, such as ERIC, DIALOG, ESRIN, etc., librarians, specialists, even the Governments themselves, exhibit keenness for adopting modern information technologies.

All these aspects lead to the following conclusions:

1) Information technology, particularly relating to computer communication and micrographic technologies, has increasing impact on library and information services.

2) Storage, retrieval, dissemination and access of information are based on flexible devices.

3) Standards for interchange and exchange of information for customised services are being evolved.

4) The present type of techniques for processing and accessing of information may not be in vogue for long. Newer processing methods and access facilities are to be evolved, transferred and disseminated.

5) The library is going to provide costlier services on wider scale by adopting online storage, telecommunication and view technology.

6) The skills in manipulating and handling of information call for greater technological competence.

PROFESSIONAL SKILLS NEEDED FOR LIBRARY AND INFORMATION SERVICES

One should not consider that these changes have impact only at the post-graduate level; much of the impact would be felt even at the graduation and diploma levels. A live information profession, demanding more formal and operational skills than tool-oriented, is emerging.

In short, the impact of information technology has significant implications for the educational system in library and information services.

The library and information profession should inculcate knowledge and skill of a variety which is particularly useful in delivering the information to users. The features required for obtaining such a skill are as follows:

Professional competency analysis required for current day-to-day operations and future needs may be grouped as follows:

A. Essential features for most of the posts in library and information system

1) Knowledge of library philosophy;
2) Knowledge of library history and the socio-economic contexts;
3) Knowledge of methods of organizing information;
4) Knowledge of library automation theories and practices;
5) Human relations skill;
6) Knowledge of collective development theories and practices;
7) Knowledge of computer programming;
8) Statistical skills; and
9) Knowledge of foreign languages.

B. Features important for positions of specialists in libraries:

1) Knowledge of specialized reference materials;
2) Specialized analytical skills and techniques;
3) Knowledge of library automation theories and practices;
4) Knowledge of cost-effective and cost-efficient techniques;
5) On-line retrieval skills;
6) Supervisory skills;
7) Counselling skills;
8) Knowledge of policy-making aspects;
9) Knowledge of document reproduction technologies;
10) Knowledge of cost-effective and cost-efficient techniques;
11) Knowledge of binding; policies, methods and issues;
12) Knowledge of conservation methods for library materials;
13) Knowledge of information consolidation techniques; and
14) Knowledge of teaching and research skills.
The professional trends indicate that a variety of professional competence is required in job market as follows:

1) The overall scope for jobs in library and information system, at present, appears to be bright. But there is scarcity of competent persons in spite of there being a large number of library schools.

2) Specialists in information handling and management are needed in increasing numbers in other than library environment, such as banks, industries, etc.

3) Few skills are necessary to adapt library and information techniques to non-library situations. But basic techniques of library science provide capabilities for use in other situations.

4) Industrial information environment also calls for professional managers. However, they should be very well acquainted with the technology, tools and methods of delivery of information, possibly in various repackaged formats.

5) The information industry itself calls for skills which are akin to those library and information comprising the skill of the technical presentation, the physical presentation, providing aid to readers and information users, formatting and indexing of information, etc.

In short all these activities hinges upon the skill for knowledge organisation which in turn depends on knowledge seeking, knowledge generation and knowledge use by a clientele. It calls for a framework flexible enough to meet the demands.

CONCLUSION

Towards this objective, Ranganathan devised his approach cohesively to meet the intellectual frames of individual. He did this through an analytico-synthetic approach, in which he combined elemental approach to a relational matrix and provided a multi dimensional object analysis. He further organised them in the context of a discipline or mission. He said "classification can illumine the field of knowledge. It can even be prophetic. To make it fit for this new type of foundation and built in a new way". Ranganathan thus believed in classification as a flexible intellectual tool for organisation. He felt that "it is only an analytico-synthetic scheme that can uncover thought content in such a holistic way". These form the basis for promotion of knowledge base and its utilisation by the end users. According to Ranganathan an analytico-synthetic classification is a search light. He said "the traveller will be helped much more, saved many wrong turns and attracted to the home more easily, if the light put up by the host is a search light which not only acts a beacon but also lights up the region through which he has to walk. Then will not merely the goal be glimmering but every inch of the way will be illuminated. The formula of facets and phase will serve the purpose of such a light to the classifier".[1]. Thus, Ranganathan had defined the purpose of knowledge organisation to trigger light and knowledge in the minds of an inquirer or researcher, or classifier.

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