Managing Professionals for Successful IT Application in Libraries

Y Venkata Rao   M K Sinha

Abstract

In academia, the libraries have been emerging as knowledge resource centers by using latest information technology. The supply of right information to the right user at the right time is possible when right human resource employed and developed on continuous basis at par with on going changes. In this direction, this paper made an attempt to accentuate human resource development for information technology application in libraries. The paper covers HRD, IT, University Library system, Library and Advanced IT Devices, HRD and IT, HRD and Development of Digital Libraries, Training and Development for Library Human Resource Development , Information Technology Competency through Training and Development, Training and Development for Collaborative Workplace and finally paper ends with conclusion.

Keywords: Human Resource Development, Information Technology, Library Human Resource Development, Information Resources and Technology, Libraries

0.   Introduction

Knowledge is considered as most important component of society, especially in the emerging idea of knowledge society. Knowledge is the key factor in creating wealth and improving the quality of life (Venkatasubramanian, 2003). The major driving component of knowledge revolution is the various devices of the information technology. In academia, the libraries have been emerging as knowledge resource centers by using latest information technology (Raju, Laxman Rao and Sudarshan Rao, 1997). In global networking era, liberties as centers for acquisition, development and sharing of knowledge resources, have crucial role in both academic excellence and in development of super knowledge society.

In this critical juncture, information technology is master instrument of libraries for dissemination of right knowledge resources. The supply of right information to the right user at the right time is possible when right human resource employed and developed on continuous basis at par with on going changes. It is the time to think about what it means to be a librarian in the twenty-first century. What is the nature of the work in a networked world? What form will libraries take? What kinds of physical collections are needed when so many users gain access from remote, decentralized sources? What organizational structure makes sense in the new environment? What kinds of staff expertise will be needed when we move from providing information services to facilitating learning? What kind of leadership is required for a library that customizes learning resources rather than acquires collections? In this direction, an attempt has been made to accentuate human resource development (HRD) for information technology (IT) application in libraries.

1.   Human Resource Development (HRD)

The term, 'HRD' was defined by Nadler (1989) as learning experiences, which are organized, for a specified time, and designed to bring about the possibility of behavioral change. Rao T.V (1988) has described HRD in organizational context as a process by which the employees of an organization are helped in a continuous way to: acquire or sharpen capabilities required to perform various functions

associated with their present or expected future roles; develop their general capabilities as individuals, discover and exploit their own inner potentials for their own and organizational development purposes; develop an organizational culture in which supervisor subordinates relationships; teamwork, and collaboration among sub-units are strong and contribute to the professional well being, motivation and pride of employees. It reflects the organization's responsibilities in providing suitable conditions for employees. This definition is widely accepted by practitioners and academecians who considered it as basic source for description of HRD in India. However, Silvera (1988) felt that the HRD is a process, consisting of mechanisms and techniques, such as, performance appraisal, counseling, training and so on, used to initiate, facilitate and promote skills of employees in a continuous way.

2.   Information Technology (IT)

IT is a generic term that covers the acquisition, processing, storage and dissemination of information. It covers the application of computers, communication technology, and telecommunications in the tasks of information handling and information flow from the generation to the utilization levels. It is restricted to systems dependent on microelectronic-based combination of computers and telecommunication (Ramesh Babu, 1997).

During the last few decades, there has been enormous rise in the flow of information on the one hand and greater demands for information due to accelerated research and development activities on the other. IT through the convergence of computer with communications, digital imaging and full motion video and sound has become a powerful tool for information communication. The IT offers unparallel opportunity for instantaneous information communication through a number of services such as E-mail, online database search, CD-search, OPAC, Resource Sharing through Networking, Videotext, Telefacsimile, Computer Conferencing, Electronic Document and Delivery etc. These advances have contributed to the development of a new electronic information society (Rodriguez and Ferrante, 1996). These IT devices are widely used in developed countries and developing countries are also on the way to enjoy the similar benefits. The IT had influenced almost every human being in their endeavors either directly or indirectly and they are compelled to use it in their daily life and the libraries are of no exception.

3.   University and Library

The five major functions of university are to: learning and teaching; research and generation of new knowledge; dissemination and publication of research results; conservation of knowledge and ideas; and extension service. The university is the place of learning where there should be ample scope for the generation of new knowledge and excellent scholarship. The collection in university library system will have to cater to the needs of teaching and learning, research, generation of new ideas, new knowledge and publications. The reading materials, which are acquired by the university library, shall also require its proper organization and management both in terms of their physical location and their representation in catalogue and indexes in order to provide quick retrieval and dissemination of information. University libraries support and help the university in achieving each of the objectives mentioned above. The major functions that are derived from these objectives are to develop, a collection of knowledge resources in a wide variety of subjects for learning, teaching, research, publication and so on.

The user community of university libraries includes undergraduate and Postgraduate students   of different subjects; faculty members, technical and non-teaching staff; research students working for M. Phil. or Ph.D. degree; post-doctoral research scholar working under different schemes of UGC, CSIR, ICMR, DOEn, DOE, ICAR etc; professors and experts guiding research projects and managing research activities of the university; members of the various academic and executive bodies of the university; the university management and; visiting fellows, scholars and others. The university libraries have different

categories of members and have a very big responsibility and an important role to play, in extending quality service to its reader communities for higher learning and research to meet other demands (IGNOU, 2000).

4.   Library and Advanced IT Devices

Within an academic institution/university, providing and supporting information and technology usually falls to a variety of groups. All these functions are termed as Information Resources and Technology (IRT). By providing these, the libraries are able to afford most effectively and efficiently for the academic, curricular, research and business support to the entire campus requires. In addition to normal services, the libraries can look a head in supply of IT based services like Technology Resources; Audio Visual Services; Cable Television; Computing; Distance Learning; Duplicating Services; E-mail Accounts; Computer Sales: Graphic Design Services; Instructional Technology; Assistance Center: Homepage; Electronic Newsletter; Photographic Services; Technology Help Desk; Video Production Services and; Voice Mail (www.johnstark.com).

5.   HRD and IT

Technology, people, e-workplaces: These are the elements that fast moving organizations use to meet the changing business requirements by using technology to invent new business processes, to re-align organizational structures, and to implement new management practices. Successful growing organizations have placed the combined development of information technology and human resources as their top priority. For that matter, universities and academic institutions are not exception in implementation of information technology. All levels of academic activities are under going radical change with the application of IT devices. The libraries have to take lead role not only in adoption and use of IT for their effective functions but also disseminate such IT devices to the entire community of the academia. Therefore, the human resources at library have to be developed as real knowledge resources. With the help of knowledge human resource, libraries must grasp the pertinent aspects of both user and technology issues to create an effective library services. These issues occur at the intersection of the disciplines of computer science, operation research, and human resource development.

6.   HRD and Development of Digital Libraries

There are three stages in development of digital libraries - infantile, adolescent, and adult. In the development process of digital libraries, there is an interrelationship between the abilities of library staff and the level of development of digital libraries. The infantile libraries are portrayed as experimental, opportunistic organizations that are set apart from traditional library services. They operate in a protected environment with soft money. They are known for being competitive and for their quest for killer applications, whether in data and metadata formats, network protocols, or systems and system architectures. The adolescent digital library, having acquired core competencies, focuses on integrating digital materials into the library's collections and on developing and supporting with core funding the requisite policies, technical capabilities, and professional skills to sustain its services. As the integration of new technologies begin to transform the library and to create new opportunities, the adolescent library realizes it must engage users and reassess their interests and needs. The adult digital library exists where the entire functions are in digital form. It can be reached when synergy state exists among human resource, technology and, user needs.

7. Training and Development for Library Human Resource Development (LHR)

It is no longer a question of whether we want to develop our human resources or whether we should develop our human resource. It is a matter of survival for emerging trends in the IT and library management that we have to develop human resources. Training and Development is the most essential instrument of LHRD. In the earlier days when training and development was introduced, people thought it was not relevant. Now training and development has become an integral part of every one to cope up and sustain with constant change in day-to-day life (Desai, 1998). In fact Training and development begins with specific learning activities that shall best assist in the learning process, ultimately resulting in relatively permanent change in behavioral potentiality. Etymologically, the verb 'to train' is derived from the French word 'trainer' which means 'to drag'. Training now encompasses activities ranging from the learning of a simple motor skill to the acquisition of complex technical skills (Thomas, 1971). Thus the training and development is an important tool to provide desired level of LHRD for successful application of IT in the libraries.

8. Information Technology Competency (ITC) through Training and Development

The ongoing development of electronic competencies of library staff is a high priority. Learning technology skills and acquiring knowledge in appropriate areas is vital in keeping library staff informed and effective in performing job tasks. There are three levels of information technology competencies.

- Level I : Basic Electronic Competencies: Library expectations for job performance require that all staff must be uniformly trained within the first six months of employment. Supervisors, therefore, can expect that staff will demonstrate competence in the basics, as defined at this level. Training in the basics, such as workshops on file handling, email and the electronic calendar, are offered each semester. Supervisors should encourage all new staff to attend these sessions.

  All staff should demonstrate competence on this level within the first six months of employment. Supervisors will assess whether competency is reached or not. The competencies like general awareness of computer systems and applications used throughout the libraries to perform staff functions   as well as services to library users; basic Windows functionality, such as formatting disks, back-up, and word processing basics, ability to print documents; familiarity with the Library Website, including the Library Staff Toolbox; ability to use Outlook, including Calendar, Email and public folders. Virus awareness is essential; ability to search SUS Libraries holdings by author, title, keyword, subject and call number; ability to interpret holdings screen (includes Web Luis. Internet basics: what it is, basic navigation); ability to use web browser and; familiarity with net search tools, such as Yahoo and Alta Vista, to retrieve information from remote sites.

- Level II : Electronic Competencies by Function: The second level of competency is based on job function. It is defined in individual position descriptions, annual assignments and discussed with the supervisor. Training opportunities, whether offered online, in house, or campus wide, provide staff with the knowledge and skills to carry out assignments effectively and gain working level competence. Percentage of time to take advantage of these opportunities should be written into annual assignments and negotiated with supervisors. LHR are expected to acquire electronic competencies required to successfully meet performance objectives as related to the position description. Supervisors are responsible for ongoing evaluation of such specific electronic competencies to be addressed in the annual performance evaluation. In this level, the competencies are: to demonstrate working knowledge, effectively utilize the tech-mode; workstation skill: use of software applications, as required in annual assignment (i.e. Excel, Word, desktop etc.) and; familiarity with file transfer protocols, and ability to design web pages.

- Level III : Electronic Expertise : the third level of competency goes beyond a mastery of one's job in acquiring expertise, sharing expert knowledge and participating in teaching. As appropriate to each

assignment, staff may be expected to perform at an expert level in one or more level two competencies, i.e. serving as a resource for the staff and providing training and/or assistance. This commitment to training should be considered during the annual performance evaluation process.

9.   Training and Development for Collaborative Workplace

Libraries today require a workplace where everyone is willing and able to work together in new and collaborative ways in tech-based work environment. Collaboration positively impacts productivity, quality, customer expectations, and overall success of library functions. In teamwork climate everyone is able to cooperate, share ideas, and work together for a common purpose. It also helps to develop a strong network of relationships at every level of the library functions. By imparting following skills among LHR through appropriate methods, collaborative climate at workplace would be developed.

a. Coaching (bringing out the best in others): By applying coaching skills in the workplace, LHR can motivate, guide and support one another in working toward-and achieving-top performance. This orientation helps participants to recognize daily opportunities and provides them with the coaching skills they need to bring out the best in everyone.

b. Conducting Performance Review, Constructive Feedback and correcting problems: It prepares employees-and themselves-for a review, how to manage expectations during the discussion, and how to create an atmosphere that encourages both people, to be open about their concerns and plans for the future. Both individual and organizations benefit from honest, objective feedback and about how things are going. Problems come to the forefront before they get out of hands, information that can improve performance gets to the right people at the right time, and people build strong working relationships. The emphasis is on maintaining a spirit of openness and mutual respect. It also provides a process that leaders can use to get an individual's performance back on track to correct and to build motivation for continual improvement.

c. Giving Recognition: In today's cross-functional work environment, everyone, not just senior and supervisors, must learn to give recognition to peers and even to those outside the organization in order to create and sustain a productive workplace. People typically acknowledge only dramatic, visible accomplishments, but an environment where individuals also recognize small, everyday successes encourages risk-taking and initiative. Positive reinforcement inspires people to think beyond their immediate well-being and to focus on the concerns of the group and the library as a whole. The library turn reaps huge dividends in user-friendly services. Participants who involves in this type of training programmes discover that recognition is a powerful tool where everyone can use to build better working relationships to encourage others.

d. Managing Change: Rapid change, flatter organizational structures and cross-functional duties mean employees today must assume greater responsibility for managing their own tasks. To achieve that successfully, they need to handle competing priorities, shift gears smoothly, coordinate and negotiate responsibilities, schedules and resources with others. The activities in this module provide the awareness and skill participants need to make better decisions about their daily work. Participants learn techniques that help them to deal with complex interpersonal interactions, build strong work relationships, and increase their overall productivity, where changing priorities are a daily reality.

e. Managing our Priorities : This provides the awareness and skills to the participants to make better decisions about their daily work and increase their overall productivity. As work grows more fast-paced and demanding, people need skills that help them shift gears smoothly, handle competing priorities, and communicate effectively to master the complex interactions and hand-offs that are required to do their work. This training helps participants build strong, supportive work relationships that increase overall productivity.

f. The Basic Principles of Teamwork: Teams are constantly faced with new situations that require quick and decisive action. The degree of success with which a team can respond depends upon the values, which its members shares. The Basic Principles are a set of shared values that can help, guide actions of team members as they work together to face the challenges of a rapidly changing work environment.

10. Conclusion

In the given condition of the library system, it would proceed methodically to develop a strategy for the future. At the same time, libraries must be transformed. Hiring new professionals for the old jobs will not be sufficient. More than ever, libraries must consider what education and training is to be offered to their staff. In addition, it needs to find effective means of providing continuing education for librarians so that their skills can be renewed as technology changes and organizations evolve. The skills needed to be effective in the new environment are likely to be found in an aggregation of professional talent. Thus when libraries address clear roles, organizational structure, education, and training for LHR, IT application in libraries can be successfully achieved.

11. References

1. Desai, Ashank, (1998), "The Case of the Training Center", *Business Today*, Vol.7, No.24, December 22, 1998 – January 6.

2. IGNOU (2000), Course Material for BLISc, IGNOU, New Delhi

3. Nadler Ed,D., Leonard (1989), "Corporate Human Resources Development Management Tool", Van Nostrand Reinlhold Company, New York, P.5.

4. Raju .A.A, Laxman Rao.N, and Sudarshan Rao.S, Information Technology and its impact on LIS Education and Library Management (Edt.), Delta Publishing house, Hyderabad, 1997

5. Ramesh Babu. B, Impact of Inforamtion Technology on LIS Dissertations, A paper submitted in a national seminar organized by Osmania University, Hyderabad, 1997.

6. Rao T.V (1988), "Recent Experiences in Human Resource Development", Oxford and IBH Publication CO. Pvt. Ltd., New Delhi.

7. Rodriguez.MV.R., and Ferrante.A.J, Inforamtion Technology for the 21st Century: Managing the Change (Southampton, Buston Computational Mechanics Publishers, 1996.

8. Silvera, D.M. (1988), "Human Resource Development", Oxford & IBH Publication Company Private Limited, New Delhi.

9. Thomas H. Pattern. (1971), "Manpower Planning and Development of Human Resource", Wily- Inter Science, New York.

10. Venkatasubramanian.K. India as Knowledge Society, *Yojana – A Development Monthly*, Vol.47, August 2003.

11. www.johnstark.com, dated 16th August,2003

About Authors

Dr.Y. Venkata Rao is a Faculty in Department of Business Administration, Assam University, Silchar,India. He holds a Masters and Ph.D in HRD.
E-mail: venkatsil@rediffmail.com.

Dr. Manoj Kumar Sinha is Assistant Librarian in Assam University, Silchar, India. He holds Masters in Zoology, Library and Information science and Ph.D. in Zoology. He has also submitted Ph.D in LIS. He also worked with Jawahar Navodaya Vidyalaya,Gorakhpur and CSIR Research Project as JRF and SRF. He has 40 papers both in the area of Zoology, Environmental Sciences, and Library and Information Sciences. His area of interest is Library Automation and Networking, Quality Management, Knowledge Management, HRD issues, Users Study and Users Education, etc. He is life member of ILA, IASLIC, UPLA, AGLIS, ALA, FBAI etc.
E-Mail dr_mk_sinha@yahoo.com, mk_sinha_bgp@indiatimes.com