Application of ICT in Two Major Academic Institution Libraries in Arunachal Pradesh: A Survey

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Abstract

This Paper is based on a survey of application of Information and Communication Technology in two major Academic Institution Libraries of Arunachal Pradesh i.e., Rajiv Gandhi Central University Library and NERIST (North Eastern Regional Institute of Science and Technology) Library. Here the discussion is done on the status of library automation, different software packages used for automation, OPAC, use of e-resources and the extent of their use in library operations of these two libraries. This paper also throws light on the problems and difficulties being faced by the library authority in applying ICT in the libraries.

Keywords: Information and Communication Technology (ICT), Information Technology (IT), Library Automation, Library Software, Online Public Access Catalogue (OPAC)

1.   Introduction

Information and Communication Technology has revolutionized the concept of libraries. IT has almost converted the world into a global village. Libraries are also changing to meet the demand put on them. The new generation whose demand for information is never met is always demanding that traditional libraries should be developed as a well equipped and interconnected as computerized libraries.

An automated library is one where a computer system is used to manage one or several of the library's key functions such as acquisitions, Circulation, Cataloguing, Serials control and the online public access catalogue. Today we see most of our libraries either fully computerized or partially computerized.

1.   Scope of the Study

The present study, though small in sample covering only one central university viz. Rajiv Gandhi University and one central technical education institute viz. North Eastern Regional Institute of Science and Technology in Arunachal Pradesh, is unique in nature and shows that academic libraries are empowered by automation programme. The study is designed and carried out with the view to get an overview of methods, means and steps taken for adoption of ICT in both the libraries.

2.   Place of Study

Arunachal Pradesh (Land of the dawn-lit mountains) is a thinly populated hilly tract on the eastern-most part of India. It is mountainous and forests cover more than two-thirds of the territory. The population is predominantly tribal and the literacy rate is 54.34%. There are two major academic

institutions, one central university viz. Rajiv Gandhi University (RGU) and one central science and technical institute viz. North Eastern Regional Institute of Science and Technology (NERIST). There are seven affiliated colleges of Rajiv Gandhi University in Arunachal Pradesh.

3.   Methodology

The study was conducted through questionnaire-based survey. A structured questionnaire with multiple choices and open-ended questions, designed according to the objectives, was distributed to the libraries with a request to fill it. The data in the questionnaire was analysed and interpreted in suitable manner.

4.   Sample for Study

4.1   Rajiv Gandhi University Library, Rono-Hills, Itanagar

Rajiv Gandhi University Library was established along with the University in 1984. The university library is functioning in a separate permanent two-storied building in the RGU campus. The Rajiv Gandhi University Library is an academic library designed to support the information needs of RGU, faculty, students, staff and researchers. The RGU Library specializes in the field of social science and humanities focuses primarily on Anthropology, Tribal Studies, Botany, Commerce, Computer Science Education, English, Geography, Hindi, History, Political Science and Zoology.

The library's collections consist of some 39,400 books and 200 periodicals covering all aspects of Social Science, Humanities, Environmental Science and Life Science.The library has a reading room with a 14 newspapers, 97 journals, encyclopedias, dictionaries, yearbooks, etc. The RGU Library at present has 19 computers and using LIBSYS software for library automation.

4.2   NERIST Library, Nirjuli, Itanagar

The Government of India has set up the North Eastern Regional Institute of Science & Technology (NERIST) on 4th March 1984. The Institute was established as a unique institution of its kind in the country having non-conventional and innovative academic programme in the modular pattern i.e. Base, Diploma and Degree module respectively. The central library of NERIST consists of documents in the field of applied science i.e. Agriculture Engineering, Civil Engineering, Computer Science & Engineering, Electronics & Communication Engineering, Electrical Engineering, Mechanical Engineering and Forestry.

The Central Library, with a collection of over 44,297 books and 193 periodicals, subscribes to 49 international, 144 national journals including informative popular magazines. In addition to the above, it subscribes to 12 national and regional dailies for providing a base for enhanced learning. The library has 15 computers and using SOFTLINK software.

5.   ICT Application in these Libraries

5.1   Automation Activities

The process of automation of RGU Library is being implemented and the LIBSYS software has been acquired and installed in the library for the purpose. The retrospective conversion of library collections of more than 9000 books has already been done and OPAC (Online Public Access Catalogue) service made available to the users of the library. Now, the Library is planning for the campus network for spreading the WebOPAC service to the departments located across the campus and the automated circulation system in the library for their users very soon.

Like RGU Library, NERIST Library automation project is on the way. In the beginning, the library had created bibliographic databases of their library collection by using Unesco developed bibligraphic database management software Micro CDS/ISIS 3.07 version. Now, the library has acquired the SOFTLINK software from SOFTLINK Asia. By using the SOFTLINK, the library has transferred bibliographic data created by using CDS/ISIS to the SOFTLINK and the restrospective conversion of the library collection has been completed. The database of library members is also ready. The next priority on the automation of the NERIST Library are acquisition, OPAC, computerized CAS/ SDI service and serial control. Now, the library is planning to introduce computerized lending service for the users.

5.2   Networking Activities

The RGU Library is one of the 142 libraries chosen by UGC for automation and networking under INFLIBNET programme. The library has access to the Internet using 2Mbps brodband VSAT connectivity provided by ERNET under the UGC-Infonet programme. With the available infrastructure, the university provides campus wide Internet access facility to all the teaching departments and the branches located across the campus including Administrative blocks of the university. The RGU library also has access to DELNET services.

The NERIST is the core member of INDEST CONSORTIUM provided by MHRD, Govt. of India through which the institute is getting online electronic journals. The institute is well connected with Internet through a permanent VSAT link from ERNET, which provides Internet and e-mail services to all the users. Campus network of the institute comprises of 400 nodes spread to various departments and sections located across the campus. The 2Mbps broadband leased line connectivity from BSNL is extended for this purpose.

5.3   Hardware and Software

At present RGU Library is having 19 nos. of computers, which contains open server on UNIX platform with five dumb terminals with available backup devices of magnetic tape, floppy disc, CD-ROM, DVD-ROM, etc. The LibSys Software on the windows platform is acquired for the purpose on about Rs. 3 lakhs.

NERIST Library has 15 nos. of computers, CD Writer, Net Server (E-800series), along with Printers (Laser Jet & Dot Matrix) with available backup devices of magnetic tape, floppy disc, CD-ROM, DVD-ROM, etc. SOFTLINK software from SOFLINK Asia on Windows NT platform is being used for the automation of the library purchased on about Rs.2.3 lakhs, The Unesco based open source bibliographic management software CDS/ISIS 3.07 version is also being used in the library.

5.4 HRD for Maintenance of IT Application

The RGU Library has three professional staffs and five other non-professional staffs for providing LIS services to the users. The library has appointed two library and information professionals for looking after the automation work, although, they did not undergo any special training on library automation.

NERIST Library has three professional staff and nine other non-professional staff for providing LIS services to the users. The number of professional staff looking after the automation programme is two trained at IIT Kharagpur.

5.4 User Services

It is equally important to know whether application software is helpful in providing user services such as OPAC, documentation, current awareness service (CAS) and Selective Dissemination of Information (SDI). The library provides OPAC services to the users but lacks CAS and SDI services. The library still needs to use the other services of the library automation software. Both, the RGU and NERIST libraries, are planning to introduce automated circulation service. Some of ICT related user services being provided to the users of the library are:

In RGU Library

- ◆ OPAC
- ◆ E-mail and Internet services
- ◆ Access to INFLIBNET databases
- ◆ Access to UGC-Infonet e-journals
- ◆ Access to DELNET databases and services, etc

In NERIST Library

- ◆ OPAC
- ◆ E-mail and Internet services
- ◆ Access to e-journals of INDEST-Consortium
- ◆ Computerized CAS/SDI, etc

5.5 Problems Presently Facing

Both the libraries have their own problems. In application of ICT, the RGU Library is facing several problems such as-

- ◆ Inadequate trained manpower,
- ◆ Due to rigid topology, the telecommunication facility is getting disturbed,
- ◆ Insufficient budget on ICT application, and
- ◆ Irregular power supply due to environmental factors

On the other hand, NERIST Library has suffering mostly from-

- ◆ Lack of adequate number of professional staff,
- ◆ Shortage of fund, and
- ◆ Irregular power supply

5.6   Future Plan and Proposals

Librarians of the both libraries have expressed their future plans according to the needs.

The RGU Library is planning to automate the entire library services i.e. circulation, acquisition, technical processing and WebOPAC. To provide most modern library access mechanism to the users, next steps have been taken for library automation. For avoiding and controlling the theft in the library and providing self issue services to the users, the RGU library has proposed for RFID (Radio Frequency Identification), close circuit camera, fingerprint recognition, smart card entry and wireless LAN by using wi-fi or wi-max.

The NERIST Library is planning to computerize the entire library services viz. automated lending service, reference service, Bar Code technology, etc. including the campus wide network for providing full access of library services to the users irrespective of the location. Their steps taken for computerization are to purchase more computers, to purchase Bar Code printer, Bar Code scanner and more IT equipments.

6.   Conclusion

The above survey study reveals that, although, some significant developments in the use of ICT in the RGU Library and the NERIST Library have been seen recently, but still lags behind in the development and in the application of the automation software acquired for the purpose.

Implementation of ICT in library operations is very complex, stressful and continuous process. Most of the libraries are not following a systematic plan in using ICT. It requires an imaginative, intelligent planning and huge investment of fund including the skilled human resources.

Both the libraries have been trying their level best to elevate their services to the height and they show that zeal to give proper shape to their work. Therefore, we can expect that within a short period of time, Arunachal Pradesh will have two well-planned and well-automated libraries in the entire NE region of the Country.

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