



# Study on Application of Information and Communication Technology in domain of college libraries of Patna University

**Shailesh Ranjan\*, Dr. Sarita Arya**

Research Scholar\*, Assistant Professor  
Department of Library & Information Science  
RNTU, Madhya Pradesh

## **Abstract:**

The survey will be carried out to assess the infrastructure in college libraries of Patna University especially Information communication technology infrastructure and to study whether ICT has any influence on library professionals with regard to their professional activities, educational needs, and also to assess the awareness of library professionals about developments in the ICT. Most of the library professionals are optimistic towards the application of ICT based services in the libraries but they do not seem content with the opportunities in their work environment. It may be mainly because of lack of adequate ICT infrastructure in University Libraries in Bihar. Library Science schools should take significant steps to revise library science curriculum incorporating significant changes. It is essential for the Administration to understand that no education can develop without libraries.

## **Introduction**

This paper is based on analysis on recent developments in the area of information and communication technology that have brought radical changes in library operations and services. As research is an original contribution to the existing stock of knowledge making for its advancement. To explore the application of information and Communication technology (ICT) in various operation and services in Libraries I analyses the different college libraries of Patna University of Bihar.

ICT in education is the key to unlocking the skills and knowledge of our future generations of young people. It is the tool for learning for the 21st century. Information and communication Technology are changing the world. We are now in the Information Society in which information is an essential and valuable commodity that one can buy, sell, store or exchange. We not only want an information society, but also a knowledge society in which knowledge can be shared and distributed all round enabling people to access knowledge and benefit from being educated. Education is therefore a key issue in the knowledge society and educators have a major role and mission. Information Communications Technologies (ICT) enable society to manage, create, collect, communicate, and process information in multimedia digital formats. These include the personal computer, CD-ROM, TV, Mobile phones and Internet. These affect not only our daily life but also are useful in research and developmental activities. These devices have

resulted in the expeditious dissemination of information. Academic libraries attached to them have been greatly benefited.

Patna University is the one of oldest and center of excellence in Bihar. Almost all the Colleges and Departments of Patna University have a library to cater information needs of the students and faculties. This Study is very helpful to improve the library services using ICT and provide better information services to the students and faculties of college libraries of Patna University.

### **Statement of Problem:**

Patna University, being one of the oldest universities of India, plays a vital role in providing education in Bihar. Now concept of e-learning is emerging very rapidly. Library is very important for any educational institutions. But infrastructure and services of College Libraries of Patna University is not at par with the present need. This library should be modernized enough to support this endeavor. To identifying and analysis the problems areas and finding its solution is very important.

### **Review of Literature**

Survey of literature is an early step for conducting research. It enables to avoid the duplication of research work and broadens the understanding of the research problem. Various research studies related to the present research problem “Application of Information and Communication technology in college libraries of Patna University, Patna: an analytical study” has been conducted in India and other countries of the world. These studies relate to the different aspects of libraries particularly college libraries including use of information and communication technology, status of digitization of library document, library administration, finance, document collection, library staff, services, physical facilities, use of libraries by students, research scholars and teachers, their information seeking behavior, use pattern and user’s satisfaction with the resources and services of libraries.

- **Mishra, Narottam (2016).** carried out study titled, “Use of Information and Communication Technology (ICT) –In Universities libraries of Bihar.” To find out the use of ICT in University libraries of Bihar. The main objective of the study was to assess the Professional development, educational needs and ICT skills of library professionals in the University Libraries of Bihar in the changed information environment. Questionnaire was used as data collection tools. Study revealed that Most of the library professionals are optimistic towards the application of ICT based services in the libraries but they do not seem content with the opportunities in their work environment. It may be mainly because of lack of adequate ICT infrastructure in University Libraries in Bihar.
- **Sujatasantosh (2017).** carried out study titled “Awareness, use and attitude of library Professionals towards web.2.0 application in central university libraries in India.” To investigate the awareness and level of understanding of Web 2.0 tools among library professionals in central university libraries of India. Survey method was used to study the use of Web 2.0 tools and technologies among the library professionals in central university libraries in India. A structured questionnaire was used for the study. The results of the present study show that the respondents are aware of Web 2.0 tools and technologies. The study further revealed that there exists a fair level of understanding among the library professionals; however, they lack proper in-depth knowledge about the Web 2.0 tools and technologies. The results of the study indicate that Facebook, Wikipedia, Blogs, and YouTube are the tools most used by the respondents. Moreover, social networking followed by Wikipedia and Instant Messaging are used by the respondent’s every day.

- **Kumar, Viamal V and Majeed, K.C Abdual (2018).** carried out study titled “ E-resources sharing through Linux based virtual private network (VPN) : a case study. ” Objective of the study was to describe the method of establishing a virtual private network using open source software, and To describe the status of recourse sharing in digital form. Case study method is adopted for this study. Finding of the study was VPN service has been found to be useful to access e-resources in educational institutions. To implement a cost-effective system, expertise in Linux operating system is essential and therefore, training on Linux is essential for library professionals.
- **Namita, G. Patel and Indira, N. Dodiya (2021).** carried out study titled “The Role of Public Library in Promotion of Informal Education with Special Reference to Rural Area”. Objective of the study was described the role of public libraries in promotion of informal education with special reference to rural area. The area of study is limited to the public libraries in the Valsad district. The main objective of this study is to know the role of public libraries in promotion of informal education.
- **Kortemeyer,G. and Dröschler, S. (2021).** carried out study titled “A user-transaction-based recommendation strategy for an educational digital library”. Objective of the study that the automated recommendation of content resources to learners is one of the most promising functions of educational digital libraries. Underlying strategies should take the individual progress of the learner into account to provide appropriate recommendations that are meaningful to the learner. If presented with appropriate assistance, learners will more likely engage in productive learning strategies, such as reading up on concepts and accessing preparatory materials, and refrain from unproductive behavior, such as guessing on or copying of homework. In this exploratory case study, we are analyzing transactional data within an educational digital library of online physics homework problems and learning content.

### **Objective:**

- To examine current status of library automation & use of information and communication technology in college library of Patna University
- To assess the infrastructure facilities in college libraries of Patna University
- To assess the ICT skills and expertise of library professionals in the college libraries of Patna University
- To know the view of user’s application regarding application of ICT for the important of library service
- To find out some solutions for improvement of library and information services using ICT in College library of Patna University.

### **Scope of the Study**

The scope of the proposed research is the “Application of information and communication in college libraries of Patna University: an analytical study”. Patna University has great importance in higher education in Bihar. Several personalities of international fame had been its students, such as Lok Nayak Jay Prakash Narayan, Dr. Ramdhari Singh Dinkar, Indradeep Sinha, Ram Karan Sharma, Bindeshwar Pathak. Nitish Kumar, Ravishankar Prasad, JP Nadda, Lalu Prasad Yadav, Patna University has its glorious history. There are many students of this University are posted at various high posts in the Central services as well as State Level Services in India and abroad.

## RESEARCH METHODOLOGY

As the focus of this proposed Title of Thesis, “Application of Information and Communication Technology in college libraries of Patna University: an analytical study.” it is essential to study the existing status of this library. Survey method will be used. The primary data shall be derived from personal experience, personal observation of the activities of the different section of the library, examination of the issue register, library brochures, library Websites, referring annual reports of University, discussion with the librarian, Asst. Librarian and other concerning staff as well as users, etc.

To get idea about some impacts, questionnaires shall be distributed to the users with a request to fill it. The data in a questionnaire shall be analyzed and interpreted in suitable manner.

### **Sample Size:**

The common characteristics of the population under study will be that all the colleges belong to same university i.e., Patna University, Patna. The population of the study from which the sample will be drawn consisted of library staffs and students of college libraries of Patna University, Patna.

There are 10 colleges are affiliated to Patna University. Ten library professionals will be taken as sample from each college libraries whereas 30 users from UG courses and 20 users from PG Course will be taken as sample. So, sample size will be (600) six hundreds.

## Outcomes

The survey will be carried out to assess the infrastructure in college libraries of Patna University especially Information communication technology infrastructure and to study whether ICT has any influence on library professionals with regard to their professional activities, educational needs, and also to assess the awareness of library professionals about developments in the ICT. Major accepted findings of the study may be as follows:

Most of the library professionals are optimistic towards the application of ICT based services in the libraries but they do not seem content with the opportunities in their work environment. It may be mainly because of lack of adequate ICT infrastructure in University Libraries in Bihar. Library Science schools should take significant steps to revise library science curriculum incorporating significant changes. It is essential for the Administration to understand that no education can develop without libraries.

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