

# A SHORT NOTE ON USE OF INFORMATION COMMUNICATION TECHNOLOGY AND ITS APPLICATIONS IN SPECIAL LIBRARIES

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**Abstract:** Computing, communication and storage technologies are revolutions in the way libraries access, store, store, manage and disseminate information to the public. Information and communication technology have affected all areas of special library services. ICT has brought unprecedented changes and modifications to library services, based on LIS such as OPAC, user services, reference services, library services, updated information, information distribution service, lending service, audiovisual service and customer needs can be better provided. Use information and communication technologies effectively and efficiently, providing convenient time, place, cost advantage and faster and modern reporting.

**Keywords:** ICT tools, Libraries, Special libraries, ICT applications, Information technology, Libraries services

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## 1.0 Introduction

Considering that both academic and public libraries could not meet the information needs of people working on special projects, the special library was put into operation last year. A special library is a library that provides specific information on a particular subject. Its clientele is professional and limited, and the library provides professional services to patrons whenever they are needed or required. These libraries belong to a school that works for a specific purpose, so the library serves as the main function of the main school and works for the organization to achieve these goals. Note that a special library is not a standalone institution but is part of a private institution that is appropriate for a commercial, research or service organization, business, government, or museum. In a specialized library area, users are well equipped in their field of expertise. They need specific and up-to-date information to do their jobs. Therefore, most information needs come from reference materials, books, manuals, models, patents, documents, charts, maps, new materials, and others, while other types of libraries often have less information available. Unlike other libraries, these libraries spend a lot of money every year to find information because this information is expensive and rare. Moreover, these special documents can be in different formats, languages, etc. it could be.

Information and communications technology (ICT) have changed the world in many ways. Easy and fast access to information, communication and the Internet has created a world where people from all over the world are close to each other. For this reason, today the world is called a world village. Information and communication technology have influenced almost all human activities. As a media centre, libraries are influenced by media use and communication. ICT is a term used to describe many technologies, including storage, communications, printing and communication technologies. The following sections discuss various media and communication technologies and how special libraries can use these technologies to enhance their outreach activities.

Information and communication technologies (ICT) have brought significant changes to our daily lives. Today we live in the information age. Information plays an important role in the social and economic life of our country. An increasing amount of valuable information is being published. For this reason, the use of information and communication technologies in libraries has now become the most important issue. Special libraries in India are working together to prepare an ICT-based information service platform. The Internet has changed the way and means of information services. The Internet has broken down the barrier of distance and become a boon for information seekers and libraries. It has become popular, easy to use and cost-effective teaching and research.

## 2.0 Use of Applications of Information Communication Technology for Special Libraries

Information and communication technology is a broad term that includes technology but mainly includes: computer technology, communication/technology printing technology, printing machine, printing technology etc. The size and capacity of storage devices seem to be evolving in parallel with each other. The storage equipment has been reduced in size and made portable and compact. However, storage capacity has increased significantly, gigabytes have passed and now we are talking about storing petabytes of data. Now the flash drive has a capacity of up to 256 GB. Transcend is developing a 2TB USB 3.0 pen drive. Data transfer speed has also been improved. Broadband internet speeds of up to 100 Mbps are becoming common. Large-capacity, high-performance netbooks and tablets with screens as small as 7 inches, light enough to fit in your pocket. Some of the use of applications of ICT in special libraries such as below;

### **2.1 Free Open Source Software (FOSS) for Libraries**

Free software Free generally means freedom to copy and reuse, and is not free. However, the definition of free software proposed by the Free Software Foundation (FSF) focuses on the fundamental freedoms provided to users. (Free Software Foundation, 2013) It says that software is free if it provides the following freedoms to computer users. Free programs that work for all purposes. Learn how the program works and modify it to suit your needs. Access to the source code is a prerequisite for this. Feel free to redistribute the output to help your neighbors. Freedom to improve the program and release your improvements (and often updates) publicly so that the entire community can benefit (Freedom 3). Access to the source code is a prerequisite for this.

### **2.2. Open Source Software**

To get the source code, you should be able to download it for free from the internet. It should be in a format that programmers can easily modify. The license should allow you to make changes and distribute those changes under the same terms. If the license restricts modification, it should allow you to distribute "patch files" for building the program. The license should not discriminate against anyone or any field of endeavor. It should apply to everyone who redistributes the program without needing a separate license. The rights should not depend on the program being part of a specific software distribution. The license should not restrict other software that is distributed with the licensed software. And it should not be based on any specific technology or interface style.

### **2.3. Free Software [or] Open Source Software?**

FOSS and open source software developers both work towards the goal of developing free software, but there are differences in implementation. Some open source licenses are too restrictive, and products like Android phones may use free software code but don't allow users to install modified versions. FOSS provides many advantages over proprietary software, such as full software availability without locked-in modules, firmware support from the community, regular updates, no extra charges for upgrades, data retrieval even if software becomes obsolete, and no vendor lock-in. It's highly recommended to use FOSS over proprietary software for its flexibility, freedom, and support from the community. NKC recommends using open source software in libraries and developing an open source web-enabled library management software supporting multiple Indian language scripts.

Greenstone Digital Library (GSDL) is software used to create and share digital libraries. It is easy to use and can be customized to fit your needs. With Greenstone, you can manage all types of digital content, such as documents and images. It is used by many institutions and researchers worldwide. You can save time and improve metadata quality with its features. Plus, it is optimized for Google Scholar and works with bibliography managers. It is a high-quality platform for open access collections that comply with research funder mandates.

### **2.4. Drupal Modules for Libraries**

Remote search module; This module allows users to search remote sites (such as OPAC) from the Drupal website. 2. Z39.50 search: This model uses the z39.50 protocol to retrieve data from the PHP interface of the YAZ toolkit. Using the standard Drupal search API, it can easily search or crawl z39.50 targets (servers) simultaneously and display the results. Bibliography Module Also known as Drupal Scholar; This module allows users to manage and view a list of academic publications. Key features include: EndNote tags and XML import/export, bibTex import/export, inline citations for references of the "Page" or "Story" node type (create a list at the end of the body). OAI-PMH module; This module provides the Open Knowledge Initiative for Metadata Collection (OAI-PMH) interface to the bibliography. Extracts metadata from Biblio mods. MARC; This mode helps import MARC data in nodes, works like repopulating a book review site or regenerating the library catalog in a dynamic social environment. Library; The library module allows users to track the availability of nodes as assets. You can use CCK to create custom content and add it to the library. This model supports multiple copies of library objects linked to a library, with each copy configured to be independently usable or unusable. Administrators can define their own



With the development of technology, the information services offered by libraries have also changed significantly. With the advent of computers, new and unexpected services became possible. Services like Selective Data Distribution (SDI), Current Awareness (CAS), Latest Services and Referrals have taken on a new meaning. The internet age has brought more challenges and also provides exciting insights for service platforms. Universal remote access and 24/7 service have become a reality. In fact, the term Library 2.0 has become very popular, but there is a lot of debate about what it means. Although many people believe that it is the use of Web 2.0 technologies that makes the library "Library 2.0", others say the term refers to more than the use of Web 2.0 technologies. The term Web 2.0 itself is still debated.

### **2.9. Virtual Libraries on Second Life**

Second Life (<http://secondlife.com/>), Linden Research Inc. It is an online virtual world created by. It was released on June 23, 2003. Many free clients, or Clients, allow Second Life users (called Residents) to interact with each other through avatars. Residents can explore the world (called a grid), meet other residents, chat, participate in individual and group projects, and create and exchange virtual resources and services with each other. Second Life is used as an educational tool by many institutions such as colleges, universities, libraries and government agencies. According to Wikipedia, as of 2007, Second Life had more than 40 libraries. Many of these libraries can be found in Cybrary City, part of the Second World Press. This site was created for the library to create virtual services and view resources. While providing services, librarians can learn new skills for the 21st century library. Library services in Second Life can be found at the following SL locations;

- ✓ Knowledge Island 1
- ✓ Knowledge Island 2
- ✓ Education Island
- ✓ Caledon Library
- ✓ Health Knowledge Island
- ✓ Imagination Island Rachelville
- ✓ Search Art Island
- ✓ Cybrary City 1
- ✓ Cybrary City 2

Second Life Library is an example of an immersive learning environment where library users can interact with the service through ideas such as walking. We are wandering in a virtual space. The library in Second Life often has digital exhibitions, such as virtual recreations of Van Gogh's paintings, as part of its services. The aim of library services is to attract new users of traditional libraries and connect with international libraries. Most of these services are run by volunteers. Libraries can also host virtual events such as seminars, workshops and conferences. Alliance Library Systems (ALS) organized a conference called "Virtual Worlds: Libraries, Education and Museums Conference" in 2008 and 2009. Held at Second Life's New Media Alliance Conference Center, the event aims to "provide a meeting place for librarians, professionals, educators, museum curators, and others to learn about and discuss Second Life Education, information, and culture." virtual reality

### **2.10. Issues with managing libraries on Second Life**

Like any new technology, Second Life libraries have problems and challenges that must be overcome through proper planning and management. For example, it is difficult to balance online and offline roles. Libraries who complete their virtual library at home will not be charged for this work. Adequate computer hardware and faster access are necessary to increase the productivity and efficiency of Second Life libraries, and these requirements limit the participation of many buildings. Other issues supported by computing include cybersecurity processes such as proper authorization, authentication, operational restrictions based on security constraints, and countermeasures. Challenges such as the use of radio frequency identification (RFID), common in most libraries, have become an issue facing Second Life libraries. Second Life may sometimes not be able to access all information typically stored on RFID devices, such as ways to keep track of borrowed books, employees, or policies. Some studies have shown that some libraries do not pay enough attention to the library's Second Life planning. Since offices do not have regular appointments, most Second Life libraries do not have time to manage the Second Life library during business hours. Therefore, Second Life Library is misunderstood by many people who think that Second Life Library is just a game without any educational value. Although the Second Life library is easier to navigate and

provides a lot of useful and good information, it has very few users. The reason for this is that the Second Life branch is not supported enough in real life, so library users are not aware of the existence of this branch.

### 3.0 Conclusion

Software development includes open source free software, Software as a Service (SaaS), LiveCD, virtual machines, turnkey projects, and cloud computing. The following sections discuss various ICT applications that can be used in special libraries to improve outreach. Research shows that the implementation and development of information technology in library services is not ideal. Library authorities, librarians and teachers come together to improve library services and use ICT. They should learn about modern technologies and use them in library projects to create library services.

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