# USE OF ICT TECHNIQUES/TOOLS IN LIBRARIES

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**Abstract:** Information Communication Technology (ICT) is integral to modern education, transforming society into an information-based one and enhancing various life aspects. It supports knowledge dissemination and improves access to information through libraries and the Internet. Defined as the integration of computers and telecommunications, ICT offers innovative methods for lifelong learning and creative work. Libraries utilize ICT to overcome space limitations, manage the growing volume of information, and enhance efficiency. In this paper, the use of ICT is described, emphasizing the need for libraries to update their technology to handle the flood of literature and provide new technology to users.

Keywords - Information Communication Technology (ICT), INFLIBNET, DELNET, OPAC, Computer.

# 1.0 Introduction

Information Communication Technology (ICT) is one of the important slogans of Today's education world. It has changed the society into an information society and our way of life. The library is the main source of information and able to provide the users with the necessary facilities in ICT infrastructure form which they access the required information. The Internet is that the gateway for libraries and knowledge centers to enter the Electronic modern Era and is providing the knowledge, generated by totally different organization, establishment, institutions, and research center and people everywhere the world.

Information and Communication Technology is the fusion of computer and telecommunications. It describe exciting and innovation ways to provide lifelong learners with global access to information, leaving and support. Computers enable people to work creatively. It can be used discussing, questioning, supporting a partner, debating, sharing data, analyzing, seeking, collecting, organizing, and online information and exploring the real world.

# 2.0 Definition of ICT: -

- According to Carter (1987), "The system and devices used for receiving, storing, analyzing and communicating information in all its forms, and their application to all aspects of our lives, including the office, the factory, and at home."
- According to Information Technology Association of America (ITAA) "The study, design, development, implementation, support or management of computer-based information systems, particularly software applications and computer hardware."

# 3.0 Needs of ICT in Library:

Various factors have contributed to bring about the change from traditional to ICT based library operations. Basically, ICT is needed in libraries for the following two main reason:

In terms of various problems faced by the traditional library system.

The manual preformation of library functions was getting difficult because of the following main reasons:

- 1. The size of recorded information is ever growing whereas space available at the disposal of each library is limited. No library can think of getting additional space every year, although the collection will grow continuously.
- 2. Due to the knowledge explosion, society is faced with multifaceted and multidimensional information to such an extent that not only its storage has created challenges, but the organization of this bulk of information has become unwieldy.
- 3. Library operations, due to potential growth of information, could take many hours to perform manually.
- 4. Due to the information explosion, all sorts of house- keeping jobs and information works can be performed manually with less effective and less accuracy.

### 4.0 Advantages:

4.1. **Communication**: Speed/time – money can be saved because it's much quicker to move information around. With the help of ICT, it has become quicker and more efficient.

**4.2. Globalization**: video conferencing saves money on flights and accommodation. ICT has not only brought the countries and people closer together, but it has allowed the world's economy to become a single interdependent system to contact either a business or family member.

**4.3.** Cost Effectiveness: It feels free to send an email (although it isn't); it's without doubt cheaper than phone calls. ICT has also helped to automate business practices, thus restructuring businesses to make them exceptionally cost effective.

**4.4. Greater Availability**: ICT has made it possible for businesses to be automated, giving clients access to a website or voicemail 24 hours a day, 7 days a week.

**4.5. Bridging The Cultural Gap**: Greater access to technology has helped to bridge the cultural gap by helping people from different cultures to communication with one another, and allow for the exchange of views and ideas, thus increasing awareness and reducing prejudice.

**4.6 Creation Of New Jobs**: probably, the best advantage of ICT has been the creation of new and interesting jobs.

**4.7 Education**: computer's along with their programs and the internet have created education opportunities not available to previous generations.

**4.8. Through ICT:** images can easily be used in teaching and improving the retentive memory of student.

**4.9. Complex Structure**: through ICT, teachers can easily explain complex structure, instruction and ensure students comprehension.

**4.10 Through ICT**: teachers can create interactive classrooms and make the lesson more enjoyable.

#### 5.0 Disadvantages:

**5.1. Education**: computer's along with their programs and the internet have created educational opportunities not available to previous generations.

**5.2. Lack of job security**: experts in a wide variety of fields believe that ICT has made job security a big issue, since technology keeps on changing nearly every day. This means that individuals need to be constantly studying or at least keeping up with changes in their profession, if they want to feel secure in their jobs to be secure.

**5.3. Overriding cultures**: While ICT may have made the world a global village, it has also contributed to one culture consuming another weaker one. For example, it is now argued that teenagers in the US influence how most young teenagers all over that world now act, dress, and behave.

**5.4. Privacy**- Though information technology may have made communication quicker, easier, and more convenient, it has also brought along privacy issues. From cell phone signal interceptions to e-mail hacking, people are now worried about their once private information becoming public knowledge.

**5.5. Reliance on Technology**: Professor Ian Robertson, a neuropsychology expert based at Trinity Collage Dublin who carried out the study, said: "People have more to remember these days and they are relying on technology for their memory but the less you use of your memory, the poorer it become... People don't bother learning to spell because they use spell- checker or need a calculator do perform minor addition or subtraction.

**5.6. Reliability Of Information**: anyone with access to a computer and an internet connection internet can start a blog or post something up on a website, so just because something's on the web doesn't mean it's reliable. A prime example of this is the open source encyclopedia, Wikipedia, although considered a good source of information it is not recognized by academic institutions as a trustworthy reference.

**5.7. computer** : viruses, worms, Trojans, malware, spam, phishing-any or all can cause chaos and disrupt our daily lives.

**5.8. Setting**: setting up the device can be very troublesome.

5.9. Expansive: too expensive to afford.

**5.10. Lack Of Experience**- hard for teachers to use with a lack of experience using ICT tools.

# 6.0 Use of ICT Tools:

- 1. Communication Technologies
- 2. Voice mail
- 3. Telephone
- 4. Fax
- 5. Videoconferencing

- 6. Internet
- 7. Remote control Technology
- 8. RemoteXs Technology
- 9. Social Media
- 10. Library Security
- 11. RFID Technology
- 12. Closed-circuit Television (CCTV)
- 13. Quick Response (QR) Code Technology
- 14. Digital Library
- 15. Archiving, Preservation and Digital Repository
- 16. Resource Sharing
- 17. Use of Library Automation Software
- 18. Acquisition
- 19. Cataloguing
- 20. Classification
- 21. Serial Control
- 22. Circulation
- 23. Stock-taking /Verification
- 24. ICT and Library Services
- 25. On-Line Public ACCESS Catalogue(OPAC)
- 26. Reference/ILL Service
- 27. Reprographic Service
- 28. Selective Dissemination of Information (SDI) Services
- 29. Document Delivery Service
- 30. Bibliographic Service
- 31. Translation Service
- 32. Database Search Guide

### 7.0 The impact of ICT on when and where students learn:

In the past educational institution have provided little choice for students in terms of the method and manner in which programs have been delivered. Students have typically been forced to accept what has been delivered and institutions have tended to be quite staid and traditional in terms of the delivery programs. ICT applications provide many options and choices and many institutions are now creating competitive edges for themselves through the choices they are offering students. These choices from when students can choose to learn to where they learn.

**7.1. Any place learning:** The concept of flexibility in the delivery place of educational programs is not new (eg. Moore & amp; Kearsley, 1996). Educational institutions have been offering programs at a distance for many years and there has been a vast amount of research and development associated with establishing effective practices and procedures in off- campus teaching and learning. Use of the technology, however, has extended the scope of this activity and whereas previously off-campus delivery was an option for students who were unable to attend campuses, today, and many more students are able to make this choice through technology facilitated learning setting.

**7.2. Anytime learning**In concert with geographical flexibility, technology-facilitated educational programs also remove many of the temporal constraints that face learners with special needs (eg. Moore & amp; Kearsley, 1996). Students are starting to appreciate the capability to undertake education anywhere, anytime and anyplace. This flexibility has heightened the availability of just-in-time learning and provided learning opportunities for many more learners who previously were constrained by other commitments (eg. Young, 2002).

#### 8.0 ICT Development In India:

Telecommunication networks form an integral part of access, communication and transmission of information without which information dissemination cannot be achieved. Bharat Sanchar Nigam Limited (BSNL) is responsible for providing and maintaining national telecommunication facilities and the Videsh Sanchar Nigam Limited (VSNL) are responsible for providing and maintaining international telecommunication facilities. After allowing private sector entrance to the ICT sector in India, lots of ISPPs, Mobile Phone Service, etc., appeared with a competitive edge and improved quality. India has been able to achieve a modest success in making computer network operational. Few networks still remain in the planning stage. The general data communication networks in India are INDONET, NICNET, GPSS, RABMN, I-NET AND ERNET and some

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specialized library and information networks are INFLIBNET, BTISNET, ADINET, BONET, MANLIBNET, CALIBNET, MALIBNET, MYLIBNET and DELNET. In India, several information systems have been developed during the last two decades, viz., NISCAIR, the Defense Scientific Information and Documentation Centre (DESIDOC), the National Social Science Documentation Centre (NASSDOC), the Environmental Information System (ENVIS), and the Biotechnology Information Systems (BTIS).

#### 9.0 Referencs:

- i. Anunobi, V. N. (2015). A study of the information and communication technology use among student-techers in universities in North Central Nigeria, order 5(1), 106-112.
- ii. Bindu, C. N. (2017). Attitude towards and Awareness of using ICT in classrooms: A case of expatriate Indian Teachers in UAE. Journal of education and practice, 8(1), 10-17.
- Collis, B. (2002). Information technologies for education and training. In Adelsberger, H., Collis, B, & pawlowski, J. (Ed' s.) Handbook on technologies for information and Training. Berlin: Springer Verlage.
- Duffy, T., & amp; Cunningham, D. (1996). Constructivism: Implications for the design and delivery of instruction, Handbook of research of education telecommunication and technology (pp. 170-198). New York: Macmillan.
- v. Cholin, V. S. (2005). Study of the application of information, technology for affective access to resources in Indiana university libraries. The international information & amp; Library Review, 37 (3), 189-197. https://doi.org/10.1016/j.iilr.2005.07.002.
- vi. Ghuloum, H. (2012). The utilisation of new ICT services in academic libraries in the state of Kuwait: An interpretive case study (PhD). Sanford: University Sanford. Retrieved from http:// usir.salford.ac.uk/26690/
- vii. Beal, V. (n.d.). What is Videoconferencing? Wepopedia Definition. Retrieved September 7, 2017, from http:// www.webopedia.com/TERM/V/ videoconferencing.html
- viii. Husain, S., & Nazim, M. (2015). Use of different information and communication technology in Indian academic libraries. Library Review, 64 (1/2), 135-153.https://doi. Org/10.1108/LR-06-2014-0070.
- Lgne, K. N. (2010). Resources sharing in the ICT Era: The case of Nigerian University Libraries. Journal of Interlibrary Loan, Document Delivery & amp; Electronic Reserve, 20 (3), 173 187. https://doi. Org/10.1080/1072303X.2010.491016
- x. Freeman, M. (1997). Flexibility in access, Interactions and assessment: The case for web-based teaching programs. Australian journal of Education Technology, 13(1), 23-39.
- xi. Eclat Engineering Pvt. Ltd. (n.d.). RemoteXs. Retrieved from http://www.remotexs.in/remotexs.
- xii. Kumar, V., & amp; Svensson, J. (Eds.). (2015). Promoting social change and democracy through information technology. IGI global.
- xiii. Law, R., Leung, R., & amp; Buhalis, D. (2009). Information Technology Applications in Hospitality and Tourism: A Review of Publications from 2005 to 2007. Journal of Travel and Tourism Marketing, 26 (5-6), 599-623.
- xiv. Rouse, M (2006, June). What is fax? Retrieved September 8, 2017, from http://searchnetworking, techtarget. Com/definition/fax
- xv. Sampath Kumar, B. T., & amp; Biradar, B. S. (2010). Use if ICT in college libraries in Karnataka, India: a survey. Program, 44(3), 271-282. https://doi.org/10.1108/00330331011064267.
- xvi. Sastry, G. G., & Reddy, L. C. (2010). Digital Repository Software Packages: An extended architecture for image handing in open sources packages. International Journal of Information, 2(2), 115.
- xvii. Thanuskodi, S, " The Environment of Higher Education Libraries in India"(2009). Library Philosophy Practice (e-journal). Paper 278. http://digitalcommons.unl.edu/libphilprac/278.