



**DEVELOPMENT OF TECHNOLOGICAL TRENDS USED IN MAKING  
SMART LIBRARY: A STUDY IN ACADEMIC LIBRARIES IN INDIA**



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**ABSTRACT:-**

The Concept of Library in educational institutions is changing of a smart library with the development of computer technology. Digital storage telecommunications internet e-format of these resources emerging through advents in Computer Science, information sciences and e-storage technology information management in general is the collection and management of information from one or more source and distribution of the information to one or more audience. This paper observes new services for university library users. The concept "Smart Library" There should be one resource centre for a country or even only one for the entire world though which everybody can cannot through ICT for uploading and downloading audio, text and video files so that equality in terms of accessibility to any of these types of resources can be maintained irrespective of gender region religious, economical back ground and the country origin of the users. 'Smart Library' is a Hardware and Software complex with a wide range of opportunities for searching and providing necessary information to virtual users according to their inquiries and requirements.

**KEYWORDS :** educational institutions , Digital storage telecommunications.

**INTRODUCTION :-**

"Library is growing organism "dealing with accommodating changes in technology, collections and services. The objective of education is enhancing knowledge by collecting and understanding useful. Information th The

objective of education is enhancing knowledge by collecting and understanding useful information. The three major sources of information in systematic education system were teacher, books, and libraries. In classical education system, each learning centre called schools or colleges had teachers for teaching new concepts, specified books based on curriculum for studies, and libraries for additional reference. The library is considered as place of accumulated information for the students in any area of interest. After invention of internet, it became major source of collecting information for education and research. The advent of internet as a product of Information

Communication Technology (ICT) became a boon for improvement in conventional education system and is now emerged as online ubiquitous education system. In this changing scenario of education system, the concept of classical information resources like teachers, books, and even libraries are also changing. Teachers are renamed as Learning Enabler, Books are changing the format as audio/video e-books, and the libraries are changing as Learning Resource Centers. Progress in electronic and communication technology is miniaturizing the devices.



❖ **Effect of Information Communication Technology on Library Concept:**

The concept of library in educational institutions are changing as the major constituents of library like physical books, hard copies of journals and newspapers are vanishing and a new format called e-format of these resources emerging through advents in computer science, information science and e-storage technology. The physical copies of books, journals and newspapers are thumbing and their electronic format do not need space for storage and single copy of such resource can be shared by any number of users so as the name of library has no longer validity. Hence libraries are now renamed as Resource Centers with online facility to provide resource sharing services to its registered users. Future libraries so called 'Resource Centers' do not need large reading rooms, large book/journal old volume storage area or even independent library building.

❖ **Present Status in Library Systems:**

In the present system, there are many libraries in the country classified as public libraries and educational institutional libraries. These libraries provide information to the users in the form of books, newspapers, periodicals, magazines, and Journals both

**DVANTAGES:**

- An integrated source of information for entire universe.
- A subscriber can get any information ubiquitously i.e., anywhere, any time and any amount of time in the entire universe.
- Every registered member can upload any piece of information.
- Sharing of information online through such smart system decreases inequality between people of different regions of different country due to the fact that information is intangible resource.
- URC supports paperless education system which supports environmental sustainability.
- Every country governments can pay the annual subscription charges so that information for education and research for individuals can be free.
- Bargaining power of users will improve and that of big publishers who have created a niche around them by creating artificial quality brand will break so that quality in information sharing without discrimination is possible.
- URS supports fast development of civilization in the world through equ shared knowledge.
- Educational and research organizations can save huge amount of money by avoiding their investment for developing and maintaining institutional libraries.
- Digital information can be copied and shared with any number of users without any additional expenditure through open access model.

**BENEFITS:**

- Easy access to information to everybody without individual expenditure.
- No discrimination for accessing and sharing the educational and research information between people of different countries, religions, race and genders.
- Customized information is available to users through powerful search machines.
- Users can avail and share information through their mobile device irrespective of their location.
- Countries can support their citizens to make use of relevant information for education and research so that they can maintain equality in terms of access to
- Everybody in the world will get same information which removes the barrier for quality research for developing countries compared to developed countries.
- Equal information sharing is possible for quality research which provides benefit to poor people of the entire world.
- Discrimination between researchers due to unavailability of reference information as well as their inability of publishing results quickly to the entire world can be eliminated.

### CONSTRAINTS:

- Sharing information between people of different countries is difficult due to the fact of different language.
- Research Information sharing is difficult due to proprietary rights like patents, copyrights etc.
- High speed internet accessibility in every location in developing countries is still a constraint.
- Everybody can access information using advanced technology only if they have adopted such technology and able to use information for their advancement.
- Information sharing for education and research between different countries is difficult unless the entire world is evolved as an integrated economic union.
- Many developed countries may not show keen interest in implementation of such system due to business reasons. Disadvantages:
- The need of information for different people and for different purpose is different.
- Developing an integrated universal resource system is difficult due to resistance in sharing education and research related information between different countries.
- Realizing such model is difficult due to many constraints of technology, society, certain sections of business organizations.
- Decreases huge employment opportunity available in conventional library system due to universal automation.
- People perception of such system to adopt due to difference in culture, tradition of people of different countries.

### • ANTICIPATED TIME-FRAME FOR CHANGES:

The national central smart library concept can be realized based on political decision of the central government. Strong visionary in at Countries Central government can take decision to create policies regarding providing free/subsidized digital information to every citizen of the country. Online open access information publication model that enables the dissemination of research articles to the global community without restriction through the internet. Thus, all articles published under open access can be accessed by anyone. The open access form of books, journals in all fields of society is essential for the development of civilization and equality among the countries. It is expected that all the journals and book publishers have to adopt new open access policy in the entire world by 2020. As a result, if the country governments are ready with high speed information communication technology to support Central smart library and client Information Resource Centers, the National Smart libraries and free access to educational and research information to every citizen of the country by 2020. The time to realize Universal Resource Centre (URC) may require few more years (two to three years), due to copyright and payment issues between different countries for free information exchange. International Journal of Engineering Research and Modern Education (IJERME)

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### CONCLUSION:

Advances in information communication technology disclosed a new opportunity for innovation in conventional library models. Using the state of the art technology, the countries can convert brick & mortar libraries in to click and mortar libraries to provide quick and complete information requirement to common man and the students of the entire country and the world without any discrimination. The proposed Universal Resource Centre is expected to be an innovation in advents of technology to share the intangible information resource between every human being of the world without any barrier.

**REFERENCES:**

1. Aithal P. S., and Shubhrajyotsna Aithal, Managing Anticipated Breakthrough Technologies of 21st Century - A Review, *International Journal of Research & Development in Technology and Management Sciences*, Vol. 21, Issue 6, pp. 112 – 133, 2015.
2. Aithal P. S. & Shubhrajyotsna Aithal, Ideal Technology Concept & its Realization Opportunity using Nanotechnology, *International Journal of Application or Innovation in Engineering & Management (IJAIEM)*, Vol. 4, Issue 2, pp. 153 - 164, 2015.
4. Aithal P. S. and Shubrajyotsna Aithal. Nanotechnological Innovations & Business Environment for Indian Automobile Sector: A Review, *International Journal of Scientific Research and Modern Education (IJSRME)*, Vol. 1, No. 1, pp. 296-307, 2016.
4. Aithal P.S. and Shubhrajyotsna Aithal, Business Strategy for Nanotechnology based Products & Services, *Journal of Management Sciences and Business Research (IJMSBR)*, Vol. 5, Issue 4, pp. 139-149, 2016.
5. Aithal P.S. and Shubhrajyotsna Aithal, Nanotechnology Innovations & Business Opportunities: A Review, *International Journal of Management, IT and Engineering (IJMIE)*, Vol. 6 No. 1, pp. 182-204, 2016.
6. Aithal P.S. and Shubhrajyotsna Aithal, Nanotechnology Innovations and Commercialization – Opportunities, Challenges & Reasons for Delay, *Proceedings of National Conference on Changing Perspectives of Management, IT, and Social Sciences in Contemporary Environment, Manegma 2016, SIMS, Mangalore, India, Vol. 14, pp-1-12, ISBN 978-93-5265-6523.*
7. Aithal P.S., and Shubhrajyotsna Aithal, Nanotechnology Innovations & Business Opportunities in RenewableEnergy Sector, *Proceedings of National Conference on Changing Perspectives of Management, IT, and Social Sciences in Contemporary Environment, Manegma 2016, SIMS, Mangalore, India, Vol. 14, pp-1-12, ISBN 978-93-5265-6523.*
8. Aithal P.S. and Harischandra P., Quality Enhancement in Higher Education Institutions through Best Practices in Library: A Case of SIMS. *International Journal of Management, IT and Engineering (IJMIE)*, Vol. 5, Issue 7, pp. 489-505, July 2015.
9. Harischandra P., Shylesh S, and Aithal P. S., Information Technology Innovations in Library Management: A Case of SIMS, *International Journal of Current Research and Modern Education (IJCRME)*, Vol. I, Issue I, pp. 657-676, June 2016.
10. Aithal P. S., Concept of Ideal Business & Its Realization Using E-Business Model, *International Journal of Science and Research (IJSR)*, Volume 4, Issue 3, pp. 1267 - 1274, March, 2015.