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Original Article

A Novel Study of Application of Information & Communication Technology in Library Classification

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Abstract *- In this research paper, we have carried out a study on the applications of Library Classification and the use of Information and Communication Technology in it. We have seen how the growing advancements in this area have affected the growth of the Library Automation w.r.t Classification and have revolutionized the field of Library Sciences.*

Keywords *- Library Classification, Information and Communication Technology, OPAC.*

I. INTRODUCTION

A library classification is a system of knowledge organization by which library resources are arranged and ordered systematically. Library classifications use a notational system that represents the order of topics in the classification and allows items to be stored in that order. Library classification systems group related materials together, typically arranged in a hierarchical tree structure. A different kind of classification system, called a faceted classification system, is also widely used, which allows the assignment of multiple classifications to an object, enabling the classifications to be ordered in multiple ways. The library classification numbers can be considered identifiers for resources but are distinct from the International Standard Book Number (ISBN) or International Standard Serial Number (ISSN) system.

II. LIBRARY CLASSIFICATION, ITS NEED, AND IMPORTANCE

Concerning the need and importance of library classification, some pertinent issues have already been raised and discussed; some more specific areas where library Classification plays a pivotal role are as under:

I. The first and foremost purpose of any library classification scheme is to create a helpful sequence of all the subject material acquired by a library so that the same can be used by library users in the most convenient way without wasting much time and energy searching the documents.
II. Library Classification helps accommodate all the newly published literature in an already created one. Order of arrangement in a filiatory sequence. Even a document on its return, with the help of classification, attains the same position and place among the already created sequence of documents.
III. The arrangement of books on the library's shelves is more mechanized than manual, and with the help of ICT tools, the arrangement has more or less become automated these days; apart from fixing the location of the document in the library, it also facilities its easy retrieval from the huge collection of the library.
IV. Library Classification helps a great deal in exploiting the information to its optimum by maximizing the use of library documents.
V. It won't be inappropriate to say that library classification helps library professionals discharge their duties more efficiently.
VI. Classification helps fulfill the basic philosophy of library science put forth by the father of library science, Sh. S.R Ranganathan in the form of five laws of library science.

III. INFORMATION AND COMMUNICATION TECHNOLOGY (ICT)

Information and communications technology, or information and communication technology (ICT), is often used as an extended synonym for information technology (IT) but is a more specific term that stresses the role of unified communications and the integration of telecommunications (telephone lines and wireless signals), computers as well as necessary software middleware, storage, and audio-visual systems, which enable users to access, store, transmit, and manipulate information.

The term ICT is now also used to refer to the convergence of audio-visual and telephone networks with computer networks through a single cabling or link system. There are large economic incentives (huge cost savings due to elimination of the telephone network) to merge the audio-visual, building management, and

telephone network with the computer network system using a single unified system of cabling, signal distribution, and management.

ICT is an acronym that stands for Information Communications Technology. There is no universally accepted definition of ICT because the concepts, methods, and applications involved in ICT are constantly evolving almost daily. It is difficult to keep up with the changes - they happen so fast. A good way to think about ICT is to consider all the uses of digital technology to help individuals, businesses, and organizations use information. ICT covers any product that will store, retrieve, manipulate, transmit or receive information electronically in a digital form, for example, personal computers, digital television, E-mail, and robots. So, ICT is concerned with the storage, retrieval, manipulation, transmission, or receipt of digital data. Importantly, it is also concerned with how these different uses can work with each other.

IV. LIBRARY CLASSIFICATION & ICT APPLICATIONS TO LIBRARIES

i. Organization of Knowledge: - Any library with a conventional or contemporary system of functioning relies heavily on library classification. Organization of knowledge in a more systematic way is the first and foremost activity of any library. A fully automated library depends on library classification like any non-automated library. To exploit the sources of information to their optimum, whether in an automated or non-automated library, classification is the only tool that has come in handy in exploiting the knowledge throughout libraries. Since there is every possibility to develop fully high-tech and mechanical libraries in the future, it won't come to me as a surprise if classification becomes the basis to realize such technological feet.

ii. Bringing order out of disorder: - Putting things in order is the age-old and fundamental activity of the human way; similarly, classifying documents in a library and putting them in a most desired order is the fundamental activity of library professionals. Classification is a systematic and more scientific way of creating the desired order of library documents, mostly subjective to fix or shelve each piece of information at the most appropriate place among the universe of subjects as such helps in bringing

iii. order out of disorder.

iv. Establishes location of a document: - A library classification helps us assign a unique ordinal number to each document on its acquisition in the library and helps us establish its location among other similar documents. A class number is more or less the translation of the bibliographic details of a document in ordinal numbers, depending upon the type of classification scheme that a particular library is using.

v. Facilitates easy access and withdrawal of documents: - When we make our simple fantasies to run and search a particular document or piece of information from a huge library collection, which mostly runs in lakhs, without wasting much time may appear impossible to a common person. Still, the fact remains that the library classification helps us retrieve information from the library in the minimum possible time, irrespective of whether the library is automated or not.

vi. Conventional Card Catalog to OPAC: - Catalogue contains bibliographic details of documents in the holding list of a particular library. It also contains the other document information like the Call number, Accession number. Etc. Conventional card catalogs which used to run on the horse at the entrance of a library used to be the main attraction for library clientele. Still, with the introduction of IT and ICT applications to libraries, the conventional card catalog has got replaced by Online Public Access Catalogue (OPAC). The only advantage of OPAC over its predecessor is that it is fast, more reliable, and one can take repeated searches for a document in a fraction of seconds which was not so when taken the case of the card catalog.

vii. Creation, Collection, Access, and Management of Databases and Databanks:- In the simpler sense, we call data something which is not processed and once processed, it becomes information. In the same vein, a database is an organized form of unprocessed data required for different purposes and processed as per one's requirement. Similarly, databanks can be counted as places or the organizations involved with the activity of acquiring data more or less in a centralized form. The terms databases and databanks are somewhat used interchangeably. Databank is also referred to as an organization concerned with creating, collecting, organizing, and managing databases in electronic format. All the up-holdings about the databases and databanks are in the context of IT and ICT applications. Library and information professionals have already treaded the course in this direction to a good extent. With the application of tools like classification and IT, people have started realizing the need and importance of databases and databanks.

V. LIBRARY CLASSIFICATION Vs. INFORMATION TECHNOLOGY

In most parts of our discussion, we have emphasized the relevance of classification during all eras, and the era of IT is no exception. Despite having so much interdependence between classification and IT in the modern era, there is still one area where the classification has lost or is vulnerable to losing its

significance, which more or less has been overtaken by IT and ICT applications.

Earlier, there used to be every danger that a wrongly classified document would get either lost in a huge collection of the library for want of being put either in that section which may not pertain to its main class or subject, where a seeker of information may never like to give it a try or to look for such a document in any irrelevant section where there may be very remote chances of its presence, as such these kind of documents most of the time lay useless for want of finding its reader.

In large libraries, many books may hardly find their reader; as such, they do not even get issued ones, and all this, most of the time, comes to the fore the moment these documents are weeded out. But when taking the case of IT applications to libraries, it becomes very easy to locate a wrongly classified document. One can take repeated searches, and with the help of barcodes and light guns, this problem can be easily overcome. Even guiding a seeker of information to its wrong location is a good idea to help get the document traced and ultimately used by a seeker. One can also generate details about the amount of use of documents in the library rather than the documents which remain most of the time in circulation and those which remain least in circulation.

VI. ADVANTAGES OF USING ICT IN LIBRARY CLASSIFICATION

Finding a document in an unclassified library is as difficult as some believe that one can seek the solution of a problem in less time by experimenting with it in the laboratory than finding it in the unclassified library where the solution of the problem already lies. This indicates the need and importance of Library classification in organizing knowledge and information.

i. Classification helps to build a fool-proof security system with applications like RFID.

ii. Stock verification has become easier and more reliable with the applications of IT with tools like classification.

iii. Charging and discharging of books has become more smooth

iv. Weeding out documents has become easier

v. Book drop boxes have become the trend of the day

vi. Classification helps us to have an arrangement of books in the library precise, exhaustive, and expeditious.

vii. Segregation of documents in various library sections is also effectively carried out by classification.

viii. Classification is the tool that helps fulfill the five laws of library science in every respect.

VII. RECOMMENDATIONS FOR USE OF ICT IN LIBRARY CLASSIFICATION

i. Exploring possibilities for opening new vistas of library classification is very bright; the need is to work on them & tap them. Automated classification is indeed the future of this vital library tool where only the performance of libraries is going better leaps and bounds and sustained in this hi-tech world where service and speed are being set as parameters for survival and sustenance.

ii. Classification of web resources is a big challenge for library professionals, and the need is to overcome it. The application of tools and techniques of classification will help lower the apprehensions among the users of web resources about their reliability and authenticity.

iii. The fusion of Classification and IT has already shown signs of great wonders, and together these tools can revolutionize do in the field of information. The amount of research required to be carried out in library classification is not being carried out to that extent. Even the exposure to technology is somewhat limited for the students and professionals of Library and Information Science.

iv. Hiring expert services from professionals, especially in training IT people, can prove an added advantage to LIS professionals. This, of course, involves the danger of intrusion by non-professionals in the profession, but this also is something that experts from the LIS profession can try in other areas with similar professional assignments in the areas like Banking, BPOs, Industry, Pharmaceuticals, R&D, etc.

VIII. CONCLUSION

In this research paper, we have reviewed the role and application of the use of nICT in the Library Classification. We have seen that Information Technology (IT) has revolutionized almost every sphere of library services. Classification is one such activity in which we believe every living being is bestowed inherently by nature and is being used by one and all in everyday activity. Classification has always been the backbone of Library services and activities. Without it, the library will suffer in its recourse, and finding a particular piece of information from an unorganized heap of knowledge is almost impossible. Research activities in library classification and Information Technology are the areas where attention is required to be paid. Fusion of IT and classification has already created wonders, and the need is to carry forward it from here on to new scales.

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