APPLICATION OF INFORMATION TECHNOLOGY IN CATALOGUE AND INDEX: ITS RETRIEVAL ASPECTS

A thesis submitted to the
Central Department of Library and Information Science in Partial fulfillment of the requirement for the Master Degree in Library and Information Science

Submitted by

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November 2008

LETTER OF RECOMMENDATION

This is to certify that Mr. Ram Prasad Sharma has prepared this dissertation entitled "**APPLICATION OF INFORMATION TECHNOLOGY IN CATALOGUE AND INDEX: ITS RETRIEVAL ASPECTS**", under my supervision and guidance. I recommend this dissertation for final approval and acceptance.

Date: November 2008

.....

Mr. Rudra Prasad Dulal

Thesis Supervisor

LETTER OF ACCEPTANCE

The thesis here to attached, entitled "**APPLICATION OF INFORMATION TECHNOLOGY IN CATALOGUE AND INDEX: ITS RETRIEVAL ASPECTS**", Prepared by Mr. Ram Prasad Sharma in partial fulfillment of the requirements foe the MASTER'S DEGREE OF LIBRARY AND INFORMATION SCIENCE is hereby accepted and approved.

……..

Mr. Rudra Prasad Dulal

Thesis Supervisor

……..

Mr. Bhim Dhoj Shrestha

External Examiner

…….

Dr. Madhusudan Karki

Head of Department

DEDICATION

To

My benevolent

Parents

You mean the world to

Me, always you have stand by

Me. You are my Inspirations and I will endeavors

to……

……

……..

PREFACE

It focuses the using of IT in catalogue & index in the library and information center and how much effective the IT in information retrieval tool is its specificity among the different tools and systems through which we access and retrieve the exact information from the collection of information. New Information Technology has become the most important Information retrieval tools even for every piece of important information rather than other manuals tools from the database in the myriad of information collection. It also saves the time, money and efforts of the Library Professionals and Information users for information retrieval with accuracy and fast.

The research study consists of six chapters the first chapter has described the background of the study, objective, hypothesis, scope and limitation of the study and Application of IT in Catalogue and Index. The second chapter has dealt with the related literature review on IT in Catalogue and index. The third chapter has focused on the field of Application of IT in catalogue and index used in the studied libraries. Research Methodology, research design, Population, sampling procedure, data collection procedure, etc have been included under the chapter fourth. Similarly chapter fifth has represented the data analysis, presentation and interpretation of collected data putting under the heading analysis and presentation of findings. Tables as well as figures have also been included to describe data collected from the users and library professionals in the chapter. The summaries of findings, conclusion and recommendations have been included in the last chapter six.

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I would like to express my gratitude and gratefulness to all those who have helped me directly and indirectly to accomplish my research work. First of all, I am very indebted to my supervision Mr**. Rudra Prasad Dulal**. He has always stood by me through the thick and thin. I was always overwhelmed by his encouragement, guidance, support and corrections. I am also indebted to my head of Department Dr**. Madhusudan Karki** and My mentors **Dr. Mohan Raj Pradhan, Mrs. Nirmala Shrestha, Mr. Bhim Dhoj Shrestha** and **Mr. Bishnu Pd. Aryal** for their directions and feedbacks. I would also like to express my gratefulness to the Chief librarian of TUCL, **Mr. Krishna Mani Bhandari** and Deputy Librarians, **Mr. Chiranjibi Neupane and Mrs. Bina Vaidya** for providing the information despite of their busyness. I, in fact, am grateful to all the respondents who has provided information with great interest and careful. For the collection of Data & Information from the respective libraries, I am thankful to the following librarians: **Mr. Jagadish Chandra Aryal**, librarian of Social Science Baha Library. **Mr. Ram Saran Thapa,** Librarian of ICIMODL. **Mr.Prem Raj Adhikari**, Librarian of the KUSOML.I am very much grateful to my dear and dearest friends of my colleague or batch, and especially **Mr. Shubodh Neupane and Mr. Amod Rijal** for their unselfish co-operation. I am also grateful to my department friends, **seniors** and **juniors** to their support and co-operation. I also wish to thanks to the Central Department of Library and Information Science and the Staffs of the Department for their assistance in the preparation of this research work. Last but not the least I am very much thankful and grateful to all those users who co-operated in filling up the questionnaires. Without them this dissertations would be impossible.

Once again I am gratefully indebted to all concerns in making this Dissertation a success.

Date: November 2008 Ram Prasad Sharma

ABSTRACT

The thesis entitled "**Application of Information Technology in Catalogue and Index: its retrieval aspects**" or research study is based upon the Application of IT in cataloguing and indexing for information retrieval aspects. In the field of library computers, telecommunication technologies are playing an important role. They facilitate collection development, storage, organization, processing, analysis, presentation and dissemination of exact information or data provided for the information users. Libraries are in the business of information with their various functions such as storage, retrieval and dissemination of information. So information retrieval is considered as an important issue. The problem towards, which this study is focused to find out the IT applications in cataloguing and indexing in information centers. The objective of this study is to find out the existing conditions of IT application in cataloguing and indexing in information centers or libraries. It aims to find out the user-friendliness in cataloguing while retrieving the information after the use of IT in catalogue and index on the basis of using Thesaurus, Subject heading list and Authority list; to examine the information retrieval facility on the basis of application of IT in cataloguing and indexing.

Application of IT in information centers has great importance for fast, easy and accurate information retrievals for scholars, students, researchers and academics. There are various software which can be used in information centers or libraries. Most of the libraries or information centers are using software such as SOUL, CDS/ISIS, WINISIS, MINISI, KOHA, ALICE, MIDAS, LIB-INFO, etc. In Nepal, information centers or libraries are using CDS/ISIS, LIB-INFO, SOUL, and MIDAS as main software. SOUL is being used in KUSOML where as CDS/ISIS is being used in TUCL, ICIMOD and SSBL for its bibliographic database for information retrieval. The information centers are providing online services as online database: EBSCO Host, JSTOR, DELNET, AGORA, etc for information retrieval in the libraries. Online journal database is mostly used in libraries or information centers. The Application of IT in Nepalese libraries: TUCL, KUSOML, ICIMODL and SSBL have also been described.

Application of IT in Cataloguing and indexing are the gateway for information retrieval. Computerized catalogue and index in information centers make fast and easy access for information retrieval. Most of the information centers or libraries in Nepal have been using IT application as automated cataloguing and indexing since 15 years ago. Both the AACR-I and AACR-II cataloguing codes are being used in the libraries and information centers. In computerized cataloguing and indexing most information users prefer to use subject heading than author and the title headings for information retrieval. They feel using more than two key words in better way for information retrieval. Information users are more satisfied with the automated indexing than automated cataloguing though they are friendly with the both applications.

Chi-sqaure test have been applied to prove the hypothesis that the libraries are providing effective services with the new technology that can help improve in the librarian's image; that large number of users and library professional are satisfied by using advance IT tools for information retrieval.

The research study focuses both the information users and library professionals who use IT in cataloguing & indexing for information retrieval. It has also try to find user friendly tools of information retrieval. Data and information presented in this study was collected through personal interview with the users and library professional of the libraries in Kathmandu and responses to questionnaires given to the users and library professional of the TUCL, KUSOML, ICIMODL and SSBL Libraries. Two set of questionnaire was prepared, one for the library professional and other for the information users. About 110 questionnaires were distributed, however only 100 questionnaires were returned. Combining the two set of questionnaire it compresses of 35 questions. Among the respondents 84% respondents have been found satisfied with using advance IT tools for information retrieval. That information found from the sample taken from the above population area has tried to know the knowledge friendliness about the application of IT in catalogue & index on the library collection for information retrieval. Online bibliographic database or computerized database is more demanding and useful form of catalogue & index. Finally the research study recommends to qualified or well trained library staff and professional for the better image of library. One should be careful and

conscious in applying the new advance IT, so that all the related information retrieves easily with accuracy.

Mr. Ram Prasad Sharma
CDLIS, T.U., Kirtipur

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LIST OF ACRONYMS

AACR-II : Anglo American Catalogue Rules II.

CAS: Current awareness services.

CCC: Classified catalogue code.

CCF: Common communication Format.

CDLIS: Central Department of Library and Information science.

CD-ROM: Compact Disk- Read Only Memory.

CD/ISIS: Computerized Documentation System/ Integrated Set of Information System.

FDT: Field Definition Table

FST: Field Select Table.

ICIMODL: International Centre for Integrated Mountain of development Library

IDRC: International Development Research Center.

ISIBC: Indian Statistical institute, Bangalore Centre.

IT: Information Technology.

IR: Information Retrieval

KUSOML: Kathmandu University school of Managements Library.

MARC: Machine Readable Cataloguing

MLISc: Master of Library and Information Science.

OCLC: Online Computer Library center.

OPAC: Online Public Access Catalogue.

SDI: Selective Dissemination of Information.

SSBL: Social Science Baha Library.

TUCL: Tribhuvan University Central library.

TULSSAA: Tribhuvan University of Library and Information Science Student Alumni Association

UNESCO: United Nation Educational, Scientific and Cultural Organization

UNIMARC: Universal Machine Readable Cataloguing

UKMARC: United Kingdom Machine Readable Cataloguing