DIGITAL LIBRARIES IN NEPAL:
RELEVANCE OF DIGITAL CONTENTS FOR USERS AND TECHNOLOGICAL COMPETENCE OF THE LIBRARIANS

A thesis submitted to the
Central Department of Library and Information Science
In partial fulfillment of the requirement for the
Master's Degree in Library and Information Science

Submitted by
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LETTER OF RECOMMENDATION

This is to certify that Mr. **Bishwa Raj Gautam** has prepared this thesis entitled "DIGITAL LIBRARIES IN NEPAL: RELEVANCE OF DIGITAL CONTENTS FOR USERS AND TECHNOLOGICAL COMPETENCE OF THE LIBRARIANS" under my supervision and guidance. I recommend this thesis for final approval and acceptance.

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LETTER OF ACCEPTANCE

This thesis entitled "DIGITAL LIBRARIES IN NEPAL: RELEVANCE OF DIGITAL CONTENTS FOR USERS AND TECHNOLOGICAL COMPETENCE OF LIBRARIANS" prepared and submitted by Mr. **Bishwa Raj Gautam** in partial fulfillment of the requirements for the masters degree of library and information science is here by accepted and approved

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The Researcher

ABSTRACT

The thesis "DIGITAL LIBRARIES IN NEPAL: RELEVANCE OF DIGITAL CONTENTS FOR USERS AND TECHNOLOGICAL COMPETENCE OF THE LIBRARIANS" in general focuses on the current scenario of digital libraries of Nepal specifically in the areas of contents and technology. The inefficiency of traditional library system to cope with mounting pressure of users and their limited time to find out relevant and updated informational resources such as geographical, scientific, economical content. Traditional libraries can not protect the deterioration of valuable informational materials which are frustratingly growing in rapid speed. To solve these all problems a new form of library is emerged. It is digital library. Digital library system is believed to be a panacea to all these problems as granted. But to find out the efficiency of digital library, relevance of content and the technological competence of the librarians this study is carried out. So that the entire field of LIS would get insights for further avenues. Its objectives are firstly to find out whether the digital contents in digital library are enough and relevant for the users secondly to find out whether the targeted users' needs are duly quenched or not thirdly to find out the competence of the librarian to handle the modern technological devices and their operations in digital library environment, fourthly to compare and contrast the scenario of digital content and technological competence of selected libraries and lastly to provide recommendations, based upon findings, to improve the situation of content and technological competence for the digital library system

This study has focused on the aspects of relevance of digital contents housed in or served through the digital library and competence of the librarians to operate technological infrastructure used in their respective library. Four digital libraries British Council Learning Center Library (BCLCL), International Center for Integrated Mountain Development Library (ICIMODL), Mountain Forum Secretariat Library and Tribhuvan University Central Library (TUCL) have been selected. For technological competence of the librarian, eight libraries i.e. including the mentioned above and Kathmandu Medical College Library (KMCL), Madan Puraskar Pustakalaya (MPP), National Judicial Academy Library (NJAL), Social Science Baha Library (SSBL) have been purposively selected; however, the respondents were on-the-available basis. The sample population is comprised of 86 respondents. Among them 60 are digital library users but later 10 users from each library were randomly selected to make the research more uniform and comparable and 9 librarians who are

responsible for decision making have been included for the evaluation of digital contents and 17 librarians have been included for their level of technological competence. The researcher has used a set of questionnaire, informal interview, and observation as his basic instruments of research. The questionnaire had 3 parts including a cover letter clarifying about the task. Part I was to be filled up with personal information of the respondent. Part II consisted of real questions. Part II '1' consisted of questions to be filled up by the actual users of the digital library on the relevance of contents. Part II '2' had questions to be filled up by the librarians about the contents, their scope and policy to acquire the contents etc. Part II '3' was for the persons who indeed were related to operate the technological devices to build digital library and it had questions to reveal the abilities of librarian to operate the infrastructure used in their respective library.

The major findings of the study show the information being served by digital libraries is relevant to the target-users and the librarians are competent to handle daily chores of digital library system. Moreover, academically 59% librarians have received degree (Bachelor or above) in library and information science, but 11% have received degree in computer science, 30% have been providing service though they are from other than library and information science and computer science. All the librarians are abreast of the new technology with that what is implanted in their digital library. Most of them have received in-service/ refresher course. However the digital libraries and librarians are facing many hardships such as educational, economical, societal, technological etc. some of the difficulties are handling hardware / software. Various natures of database, digital materials, key words assigning, value-added information assigning, etc. also made their job difficult. Almost all the librarians have replied they have tried their best to solve the encountered problem, they (55%) have received training and 45% have hired experts pertinent to the problems but contradictorily 65% of them are unable to do hardware related tasks. This is because librarians (47%) did not have to do hardware related tasks most of them (14%) have lacked training. All the librarians are able to update their digital libraries. Most of the librarians (82.5) are basically involved in content downloading and updating their digital library. 57.5% of the weight is given that the librarians believe monetary factor is the main which has a significant role in the digital library development. Because money is being lacked to buy digital library infrastructure and to train the librarians. Where as 37.5% weight is given that money is only means. Therefore the gap in technology, low level of

competence of librarian, culture to stick in traditional library system are responsible for the digital library system to be paralyzed.

For sound development of digital library system full-text and abstracts service should be made strong, ensuring the access of historical knowledge. Digitization should be prioritized to make them available in digital form. Training, workshops, refresher course should be organized. All the digital libraries should recruit professional librarian who have received bachelor degree or above in LIS. Every library should encourage digital library project/section economically, institutionally and morally and user education should be imparted.

Bishwa Raj Gautam

This work is dedicated to:

LISSA

Library and Information Science Students' Association

And my family

...and miles to go before we sleep
And miles to go before I sleep

PREFACE

This research work on digital libraries in Nepal in general it focuses on the current scenario of digital libraries of Nepal specifically in the areas of digital contents housed and served to users and technological competence of the librarians. For our discipline i.e. LIS we recognize the centrality of communication in modern society and the increasing demand for quality information by commercial and public systems. These have turned the field of librarianship and information science into a world that is dynamic, fascinating and much in demand. It is not by accident that LIS is considered the field of the future of the 21st century.

The librarian—information specialist must be a person with social awareness, broad education, and ability to communicate, possess technical knowledge, and be able to navigate among the huge sources of information locate and pull out the information required through the use of sophisticated search methods on computer to keep pace with the acceleration of research, mounting societal and demographic pressure, short span of time of academicians, business persons, decision makers, doctors, executives, planners/ policy makers and even general public.

In an information and knowledge based society most of the informational products should be cheaper, which would occupy as minimum space as possible but could be communicated in greater speed ensuring its preservation. This is possible through digital library. This thesis has documented various important aspects of library since its evolution. From the pioneering efforts of digital library it has presented various bases, reasons, rationale, i.e. digital content, technology and skills, of digital libraries. Digital libraries in Nepal are, however in nascent stage, getting widespread importance among researchers and academicians.

This research study consists of six chapters. First chapter deals with the introduction of study. The second chapter deals with literature review. The third chapter is focus of study. Research methodology, research design population, sampling, procedure, data collection procedure and data analysis procedure are discussed in the fourth chapter. Fifth chapter presents analyzed data, their presentation and interpretation to evaluate either the set objectives or hypotheses are positively met or not. Sixth, the final, chapter deals with summaries, conclusions and recommendations

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ABBREVIATIONS AND SYMBOLS:

AACR-II:	Anglo American Catalogue Rules II.
ACM:	Association of Computer Machinery
BCLCL:	British Council Learning Center Library
CAS:	Current Awareness Services.
CCC:	Classified Catalogue Code.
CCF:	Common Communication Format.
CDLISc:	Central Department of Library and Information Science.
CD-ROM:	Compact Disk- Read Only Memory.
DLF:	Digital Library Federation
DVD:	Digital Versatile Disk
GSDL:	Green Stone Digital Library Software
HTML:	Hyper Text Mark-up Language
ICIMODL:	International Centre for Integrated Mountain Development Library
ICT:	Information Communication Technology
ILU:	Information Literacy Unit in TUCL
IMP:	Interface Message Processor
INASP:	International Network for the Availability of the Scientific Publications

ISP:	Internet Service Provider
IT:	Information Technology.
KMCL:	Kathmandu Medical College Library
KWIC:	Key Word in Context
LAN:	Local Area Network
MARC:	Machine Readable Catalogue.
MFSL:	Mountain Forum Secretariat Library
MLISc:	Master of Library and Information Science.
MPP)	Madan Puraskar Pustakalaya
NJAL :	National Judicial Academy Library
OCLC:	Online Computer Library Center.
OJS:	Open Journal System
OPAC:	Online Public Access Catalogue.
PERI:	Program for Enhancement of Research Information.
PKP:	Public Knowledge Project
R&D:	Research and Development
SDI:	Selective Dissemination of Information.
SSBL :	Social Science Baha Library
TUCL:	Tribhuvan University Central library.
WAN:	Wide Area Network
WHO:	World Health Organization
WWW:	World Wide Web