

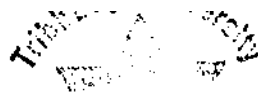
**COMPARATIVE STUDY OF KOHA OPEN SOURCE ILS AND  
LIBINFO PROPRIETARY SOFTWARE USED IN NAMS AND  
PATAN HOSPITAL LIBRARIES**

**A thesis Submitted to the  
Central Department of Library and Information Science,  
in Partial Fulfillment of the Requirement for a  
Master of Arts, Tribhuvan University in Library and Information Science**

**Submitted by  
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M.L.I.S.**

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Kirtipur, Kathmandu**

**2011**



## LETTER OF RECOMMENDATION

This is to certifying that the thesis submitted by Upendra Prasad Mainali entitled “Comparative Study of Koha Open Source ILS and Libinfo Proprietary Software Used in NAMS and Patan Hospital Libraries” is an original work prepared under my supervision and guidance. I hereby, recommend the thesis for final evaluation.

Date: December 2011

*R. P. Dulal*

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Lecturer

Thesis supervisor



**LETTER OF ACCEPTANCE**

The thesis prepared and submitted by Upendra Prasad Mainali “Comparative Study of Koha Open Source ILS and Libinfo Proprietary Software Used in NAMS and Patan Hospital Libraries” has been evaluated and accepted as a partial fulfillment of the requirements for the degree of Master of Arts in Library and Information Science.

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Date: December 2011

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I am also grateful to my wife Ms. Nisha Mainali for supporting me during this whole period.

December 2011

Upendra Prasad Mainali  
M.I.I.S.

## ABSTRACT

The thesis entitled **“Comparative Study of Koha Open Source ILS and Libinfo Proprietary Software Used in NAMS and Patan Hospital Libraries”** has been carried out by Upendra Prasad Mainali to make a comparative study between OSS Koha and proprietary Libinfo software packages.

The problem towards which this research was directed is to compare the adoption of the international standard, ease of use by the users, and the cost effectiveness between Open Source Software Koha Integrated Library System and Proprietary Software Libinfo.

The objective of the study is to find out the software application problems, basic requirements of library automation, and users friendly status between applicant libraries and their merits, demerits, features, system architecture and its module. To meet the above mentioned objectives the researcher has used the pretested questionnaire. The questionnaire was filled up by the library personnel of both libraries to find out their expectations. The researcher has focused mainly on these software and has tested on the basis of ILS cost and in terms of initial and perpetual cost, and maintenance cost. The infrastructure of the library is also assessed.

The 27 related literatures have been reviewed from different literature sources eg different books, journals, library thesis, website, library field visit, email message, conversation with professional staffs, and its expert etc.

The present study has been focused on these two softwares, as explained above. Similarly two libraries namely NAMS Library and Patan Hospital Library, has been included to show the distinct difference as they have used different software. Analysis and interpretation of data was carried out depending upon the questionnaire which were returned by the respondents.

The researcher has followed the descriptive methodology for research. The questionnaire is related with qualitative data and very few data is related to quantitative data. In the premises of NAMS Library one questionnaire and Patan Hospital Library one questionnaire were distributed and all of them were returned.

After this research, the researcher's has concluded that both Libinfo software were popular in the internal market of Nepal. The Koha OSS which was popular in both national and international market as well and was very useful and relevant on the aspect of service delivery.

This research are based on fact and reality so this research don't use sample study method for the research time and period, researcher view was of pure technical part and it is constructed on the basis of facts, field visits, conversation and questionnaires which were sufficient. The actual figure and data were collected through the structured questionnaire and the data in the form of questionnaire has been collected, edited, coded, tabulated and classified for data analysis and presented by frequency distribution, tables and interpreted it.

As analytical parts depend on the nature and characteristics of data, for necessary presentation, researcher has diagrammatically presented the facts and finding. The collected data has been brief. It also has made an effort to establish continuity in work and to establish explanatory concepts.

This study has tried to find out gap between OSS i.e. Koha and Proprietary Software i.e. Libinfo on the basis of its cost and points out and identifies the better software for medical library and its users. This study also finds out the resources, overall physical conditions of both the libraries i.e. NAMS Library and Patan Hospital Library. The findings have shown that both libraries users are satisfactory to construct database. Koha software is found to be cheaper than Libinfo software. Libinfo software is easy to handle, both software have played vital role in the field of library automation in different medical libraries.

In the recommendations part it has been suggested that Tribhuvan University, Department of Library and Information Science should introduce OSS Koha software in curriculum to stop monopoly of a few persons who know it. All libraries should focus on digital library and update with latest information in medical field. Number of library staff should be increased on the basis of work load. Accurate and relevant information should be provided to the users. The library should also try to perform some information marketing function as printing, reprography services to raise fund. Library networking should be developed from website linkage. OSS Koha, electronic tools and Proprietary Software training program should be increased and expanded.

December 2011

**Researcher**

## PREFACE

This study has been carried out as the partial fulfillment of the requirements for the degree of Master of Arts in Library and Information science. In the era of information technology the library has multidimensional role. Without library, the world likes a vehicle without wheels which is meaningless.

Both softwares are effective for medical library. It is an essential part in the professional development and also quick to provide quality medical literature service, to provide needed health information in producing highly trained manpower in the medical field, to develop the academy as the national medical library to support quality health service and research.

This study has been carried with these clear objectives, findings, conclusion and its recommendations. It is proved that without using software nobody can improve the library organization and never fulfill Dr. Ranganathan's five laws of library science. Librarian needs to his / her library develop on the basis of concept of library without border because we are affected by globalization.



# CATALOG

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# TABLE OF CONTENT

	Page No.
<b>PRELIMINARY PAGE</b>	
LETTER OF RECOMMANDATION	ii
LETTER OF ACCEPTENCE	iii
ACKNOWLEDGEMENT	iv
ABSTRACT	v
PREFACE	viii
CATALOGUE OF THE THESIS	ix
TABLE OF CONTENTS	xii
LIST OF TABLES	xv
LIST OF ABBREVIATION	xvi
<b>1. Chapter: INTRODUCTION</b>	<b>1- 10</b>
1.1 Background of the Study	1
1.1.1 Open source information library system	2
1.1.2 Description of Libinfo	3
1.1.3 Implementation of integrated library system	3
1.2 Statement of the problems	5
1.3 Objectives of the Study	8
1.4 Scope and limitation of the study	8
1.5 Significance of the study	9
1.6 Definition of the terms	9
<b>2. Chapter: LITERATURE REVIEW</b>	<b>11 -29</b>
2.1 History of Koha	11
2.1.1 Introduction of Koha	11
2.1.2 Advantage of open source software	14
2.1.3 Disadvantages of open source software	16
2.1.4 Why open source software koha	17
2.1.5 Koha feature	18
2.1.6 Koha system architecture	20
2.1.7 Koha module	21
2.2.1 History of Proprietary Software	23

2.2.2 Introduction of Proprietary software	24
2.2.3 The advantages of using proprietary software	25
2.2.4 Disadvantages to users of using proprietary software	25
2.2.5 Why proprietary software Libinfo	26
2.2.6 Proprietary features	27
2.2.7 Libinfo system architecture	27
2.2.8 Libinfo member module	28
2.3 Current research findings and gap	29
<b>3. Chapter: FOCUS OF THE STUDY</b>	<b>30 - 44</b>
3.1 Focus on OSS Koha and Proprietary Software i.e. Libinfo	30
3.2 Introduction of NAMS Library	31
3.2.1 Objectives, Mission and Vision	32
3.2.2 Facts and Figure	32
3.2.3 Services	33
3.2.4 Policies	33
3.2.5 Donation	35
3.2.6 Automation	35
3.2.7 Role of Librarian	36
3.2.8 Internet	37
3.2.9 Other Resources	38
3.3 Background of Libinfo	39
3.4 Introduction of Patan Hospital library	40
3.4.1 Objective and Mission of Patan Hospital Library	40
3.4.2 Facts and figure	40
3.4.3 Services	41
3.4.4 Policies	42
3.4.5 Donation	42
3.4.6 Automation	43
3.4.7 Role of Librarian	43
3.4.8 Internet	43
3.4.9 Other Resources	44

<b>4. Chapter: RESEARCH METHODOLOGY</b>	<b>45 - 48</b>
4.1 Background of the study	45
4.2 Research Design	45
4.3 Population	46
4.4 Sample and sampling procedure	46
4.5 Data collection procedure	47
4.6 Data analysis procedure	47
<b>5. Chapter: ANALYSIS AND INTERPRETATION OF DATA</b>	<b>49 - 51</b>
5.1 Background	49
5.2 Analysis and interpretation of data	49
<b>6. Chapter: SUMMARY, CONCLUSION AND RECOMMENDATION</b>	<b>52 - 54</b>
6.1 Summary	52
6.2 Finding	52
6.3 Conclusion	53
6.4 Recommendations	54
<b>APPENDIX-1</b>	
<b>REFERENCE</b>	<b>55</b>
<b>APPENDIX-2</b>	
<b>QUESTIONNAIRE</b>	<b>58</b>
<b>CURRICULUM VITAE</b>	<b>62</b>

## LIST OF TABLES

	Page No.
Table no.1: Operating cost	49
Table no.2: Institutional standard	50
Table no.3: On the basis of infrastructure	51
Table no.4: On the basis of models used	51

## LIST OF ABBREVIATIONS

AACR2	- Anglo American Cataloguing Rules
BN	- Bachelor of Nursing
CDS/ISIS	- Computerized Documentation System / Integrated Set of Information System
DM	- Doctorate in Medicine
FOSS	- Free and Open Source Software
GNU	- General Public License
GSDL	- Green Stone Digital Library
HELLIS	- Health Literature Libraries and Information Services
HLT	- Horowhenua Library Trust
ILS	- Integrated Library System
LAN	- Local Area Network
MARC 21	- Format FOR Bibliographic Data
MCh	- Master of Surgery (Latin – Majister Chirurgiae)
MD	- Doctor of medicine
MLIS	- Master in Library and Information Science
MS	- Master of Surgery
NAMS	-National Academy of Medical Science
OAI-PMH	- Open Archives Initiative Protocol for Metadata Harvesting
OPAC	- Open Public Access Catalog
OSS	- Open Source Software
PAHS	- Patan Academy and Hospital Sciences
PC	- Personal Computer
PGS	- Post Graduate Student
PH	- Patan Hospital
PS	- Proprietary Software
RDBM	- Read Data Base Management
TCP / IP	- Transmission Control Protocol/Internet Protocol
UNESCO	-United Nations Educational, Scientific and Cultural Organization
USA	- United States of America



WHO  
Z39.50

- World Health Organization
- Information Search and Retrieval Protocol Standard

## **1. Chapter: INTRODUCTION**

### **1.1 Background of the Study:**

In Nepal, ninety per cent of the libraries are operated manually and remaining ten per cent using UNESCO's Free Library Software, winisis. Although the software is freely available on the web, it does not fulfill the library operation requirements i.e. acquisition, circulation and serial management. Winisis is available only in english version. Hence, every nepalese library has to manage book in english using winisis only, For Nepali literature, data entry has to be done in Nepali Romanized form. (Thapa, P., 2007)

Digital Library Network South Asia (2011) has mentioned that Koha is open source software of package. Koha software is popular in field of medical library because it has many features retrieving bibliographic records, but it does not have facility of providing full text document. On the other hand, GSDL (Greenstone Digital Library) has the facility of providing Full Text Search Facility. The similarity is that the software use open standard of OAI-PMH. Using this facility, an effort is being made to integrate both the software packages so that users can have facility of bibliographic database as well as full text access.

Libinfo library automation software is also popular in Nepal because it has facilities of adding any field and to delete any unnecessary field in programming.

Koha is first open source integrated library automation system. Koha was created in 1999 by Katipo Communications for the Horowhenua Library Trust in New Zealand, and the first installation went live in January 2000.

Koha software is full featured Integrated Library System (ILS) used for library automation. Now it is maintained by a dedicated team of software providers and library technology staff from around the globe.

In OSS, the sequence of human readable computer instructions known as source code is open to view. Open source licenses ensures that OSS and its derivatives may be freely viewed, used, copied, modified and redistributed. It is often developed in a public, collaborative manner. The license does not restrict any party from selling or giving away the software as a component of an aggregate software distribution containing programs from several different sources. Examples of well-known OSS include the Mozilla Web browser, Apache Web server, and Linux Operating system. In the field of library automation, some of the popular OSS are Koha, Evergreen etc.

### **1.1.1 Open Source Integrated Library System:**

Library means a place where literary and artistic materials, such as books, periodicals, newspapers, pamphlets, prints, records, and tapes are kept for reading, reference or for lending. All collected materials are systematically arranged. So librarian is called trinity of resources, users, and librarians. So librarian can keep all resources. There are different types of libraries such as: Academy library, Bookmobile library, Digital library, Hybrid library, Private library, Public library, Reference library, Research library, School library, Special library, University library and so on. A quick and fastest service in library is genuine question for library reader service and development of the library.

Koha ILS is full featured software having facility of cataloguing, circulation, acquisition, serials control etc. It is based on client-server architecture. Koha can be used from any operating system such as windows or Linux. Using the third party software such as MARC edit any data can be converted into Koha. Being web-based, users can access Online Public Access Catalogue (OPAC) through Internet. This has made possible to users for accessing the catalogue 24 hours a day from any place having available Internet service. Books in Devnagari can also be catalogued by using unicode.

### **1.1.2 Description of Libinfo:**

Libinfo is a kind of proprietary software. It is developed by software developer on the basis of team work. Utsav wagle, Prakash Thapa and other software engineer were involved to develop software at that time. But now, Mr Utsav Wagle is migrated to Australia. The information provided by Librarian Machha Bhai Shakya, Patan Hospital the cost of installation is NRs. 1,15,000 for procurement of this libinfo proprietary software, and needs partially supporting cost 15,000 for its maintenance. It can bear fully Library automation system such catalogue of serials, circulation system with picture, barcode generation capacity and OPAC environment. Libinfo proprietary software are also called Proprietary software. It is computer software is licensed under exclusive legal right of the copyright holder. The licensee gives the right to use the software under certain conditions, but is restricted from other uses, such as modification, further distribution, or reverse engineering.

Complementary terms include public domain software, which is not subject to copyright and can be used for any purpose, and free software, licensed by the owner under more permissive terms. Proponents of free and open source software, use proprietary or non-free to describe software that is not free or open source.

Another meaning of Proprietary software is a computer program that are exclusive property of their developers or publishers, and cannot be copied or distributed without complying with their licensing agreements.

### **1.1.3 Implementation of Integrated Library System (ILS):**

In a developing country like Nepal, cost, user friendly, access and maintenance are the deciding factor in the implementation of ILS. The main reason in using Winisis was its availability was free of cost. However, due to availability of ILS as a open source, people are interested in using ILS. In Nepal, the most widely used OSS is Koha ILS. The

other reason for using Koha is its standardization. It has adopted Z39.50 protocol and MARC21. This is made this software to exchange data with other ILS using this standard. However, looking at open source software, it is important to think about the skills within the organization depending on the people within its organization, outsource can be done in implementing and continuing the work of ILS work. Possible costs that go along with open source might include fees for development, hosting of database, customization, installation, training, help desk or support.

The other reason for using open source is not just about the code and the freedom to alter the code but sharing of resources. As librarians, we are taught to work collaboratively and it is important to carry that lesson on to our work with open source.

Open source has been the center of the library all over the world for the past several years. Koha and Evergreen are the two major open-source integrated library systems (ILSs), and they continue to grow in maturity and popularity.

The question remains as to how much it has have achieved in open-source development toward the next-generation catalogue compared to proprietary systems. Little has been written in the library literature to answer this question. The main objective of this thesis is to compare between Koha and libinfo software.

The coming next generation library catalogue sometimes referred to as the Library 2.0 catalogues or "the third generation catalogue." Different and even conflicting expectations exist as to what the next-generation library catalogue comprises: This catalogue is not really a catalogue at all but more like a tool designed to make it easier for students to learn, teachers to instruct, and scholars to do research. To date 2009 A.D. have implemented Koha ILS in Nepal.

Similarly, in Nepal, some proprietary software such as Libinfo is also implemented in 2 medical libraries e.g. Patan Hospital Library and American Library. Libinfo is being developed on 2005 A.D. Its features are circulation, cataloguing with

picture, patrons registration and reporting. It can also generate barcode and web based integrated system. (Shakya, MB, 2010)

A comparative study of both the software will reveal pros and cons of the cost, support service, hosting, status of development of the software and users perception towards the software (both library staff and general users).

## **1.2 Statement of the Problem:**

Central Medical Library NAMS, Bir hospital compasses wide range of medical resources. There are 6000 medical books available in this library. NAMS library has a set up a demand form for the MD (Medical Doctor), MS (Master in Surgery), MCh, DM (Doctor in Medicine) level students.

As per the recommendation of Library Management Committee, there are different types of printed journals in the different subjects such as medicine, surgery, orthopedics, dermatology etc. Printed journals are sent by the World Health Organization (WHO), access to online journals through HINARI. The HINARI provides access to 4000 medical journals (approximately). In NAMS library, thesis submitted by the final year students of PG programmes are available online through GSDL software and its link is also maintained in Koha ILS. GSDL software provides access to documents in full text. The total bandwidth of internet is 4 mb. Within the NAMS complex more than 256 computers have Internet services apart from the Wifi services. This LAN system is managed by library of NAMS. This type of system has allowed to access the catalogue and full text thesis from any place of the institute as well as through Internet outside the institute. (Mainali, UP, 2011)

Patan Hospital Library is providing medical literature services to the user and efficiently achieves the mission and its operation. There are different types of services and resources are available in smooth and adequate. Patan Hospital (formerly known as Shanta Bhawan Hospital, estd 1956) was renamed after it moved to a new place in 1982.

It is 450 beds, 7 major units of medical services and 750 staff member (90 medical staff, about 250 nursing and 50 faculty members). In 2009, it developed as an Academy known as Patan Academy of Health Sciences (PAHS) and its School of Medicine has started course for 1<sup>st</sup> batch of MBBS students (60). (Shakya, MB, 2011)

Organization resources classification of books from National Library of Medicine and Library of Congress partly. Cataloguing of books from AACR2. Subject coverage of books are Basic Sciences – QC (Chemistry), QD (Biology), ZH (Physics). Perclinical Sciences such as QS (Anatomy), QZ (Pathology), Medical Related Subjects are W (Med Professional), WA (Public Health), and WZ (History of Medicine) are available in Library. Storage and Retrieval tools (Computerized record keeping system) being apply CDS/ISS, LibInfo (Applying shortly) – Barcode, Inventory, circulation, Browsing, Reporting. (Shakya, MB, 2011)

Following number of resources are available in the library - Books (about 3400 vol) – PH + PAHS library, Journals (about 30-35 titles – Active (printed), Few theses/dissertations (BN & PG stds), About 900 bound volumes of backdated journals consisting about 70-75 titles(1990 - to date), A few resources in DVD, CD-ROMs & E-books, Reference section consists of recent basic science books. (Shakya, MB 2011)

Some problems and challenges are:

- To know the adoption of international standard.
- To findout the cost effectiveness in terms of initial and perpetual cost of both softwares.
- To find out the satisfaction rate of users with both software.

- Manpower (Trained)
- Collection development especially in changed context of increasing academic and research activities

The above problems are found out by researcher. There are no previous study to carry out a comparative study between free and purchasable proprietary software. So this thesis entitled Comparative study of Koha open source ILS and Libinfo Proprietary Software is chosen.

Being academic library, the mission of the NAMS and PAHS is to develop health manpower to meet the national requirements and global challenges through quality teaching, learning, and research.

The first phase of the project covers three years period beginning 2009 to 2011 at NAMS and at PAHS the period is 2005 to date. During this period, the object was to implement circulation, cataloguing, WebPac, creation digital library system for locally generated information such as thesis and journals. This study will review the progress made during these period regarding the performance of consultants, infrastructure and personnel in the both the medical institutes, data conversion as well retrospective conversion of card catalogue, training and provision of funding, fulfillment of users needs by the OSS and proprietary software, challenges faced in the implementation of ILS. This study will also provide lessons learned and future course of action to be adopted.



### **1.3 Objectives of the Study:**

#### **A. General Objective:**

To find out technical gap between OSS i.e Koha and Proprietary i.e. Libinfo software on the basis of its application in Medical library.

#### **B. Specific Objective:**

1. To find out the expectation of library staff and the ILS has meet the requirement of library staff or not.
2. To analyze ILS cost in terms of initial and perpetual cost, and in terms of materials and labor.
3. To find out the satisfaction rate of users with ILS.
4. To make a comparison study of open source ILS and proprietary ILS in term of cost, facilities for users and librarians update as per modern technology development.

### **1.3 Scope and Limitation of the study:**

Literature regarding the current status of FOSS and PS (Free and open source software and Proprietary Software) use in Nepal is not extensive enough.

- The questionnaire included very few, simple and precise questions which could not deal more detailed information about the library.
- Study is confined inside the Kathmandu valley only.
- This study is limited to Koha ILS OSS and with regard to proprietary software. It is limited to software developed by a group of IT persons.

## 1.4 Significance of the Study:

It is new topic of research. Very few researcher have done study in Koha in the special library. This study on NAMS library hopes to improve the way for other similar studies coming in future and various medical purpose. It is thought that, this study will help to guide for the upcoming activities of other medical libraries in future.

## 1.5 Definition of the terms:

**Integrated Library System:** An Integrated Library System (ILS) is an automated library system in which all of the functional modules share a common bibliographic database. In an ILS, there is only one bibliographic record for a document. All transactions involving the document are linked to its bibliographic record.

**OAI-PMH:** The Open Archives Initiative Protocol for Metadata Harvesting (referred to as the OAI-PMH in the remainder of this document) provides an application-independent interoperability framework based on metadata harvesting.

**Open Public Access Catalogue (OPAC):**The OPAC is an electronic catalogue. It is equivalent of the card catalog but it is search-able online. The OPAC could also be Web based called a WebPAC. The WebPAC is used by libraries to share bibliographic information

**Open Source Software (OSS):** -Refers to a program or software in which the source code (the form of the program when a programmer writes a program in a particular programming language) is available to the general public for use and/or modification from its original design free of charge.

**Open standards:** Open standards are specifications such as equipment sizes, data formats, and network protocols. The purpose of open standards is to facilitate

interoperability and communication. Like open source, open standards can be developed and used without significant price barrier.

The earliest example of open standard for libraries was the size of catalogue cards. This decision was made at the first ADL meeting in 1877. A modern example of an open standard used in libraries is the MARC record format.

**Proprietary Software:** This is proprietary software, which need to be purchased from the license to support services and for each upgrade payment has to be done.

**The Machine - Readable Cataloguing (MARC):** The MARC format is the standard used for the representation of bibliographic and related information for books and other library materials in machine-readable form and their communication to and from other computers. MARC 21 is the new standard MARC.

**Z39.50:** This protocol is defined as the information search and retrieval protocol standard used primarily by library and information related systems. The standard specifies a client/server-based protocol for searching and retrieving information from remote databases simultaneously using a single interface.

## **2. Chapter: LITERATURE REVIEW**

### **2.1 History of Koha:**

By (Engard, NC, 14 May 2009) Koha was originally developed in 1999. Since then it has been functionally adopted world wide by thousands of libraries by adding features and functions, depending on the as per their need capability of the system. The integration of the powerful Zebra indexing engine with the 3.0 release in 2005 Koha became a viable, scalable solution for libraries of all kinds. LibLime Koha was built based on this foundation. Today LibLime Koha has become the most functionally advanced open source ILS on the market due to its advance features.

There is no doubt that Koha organization is serving as a landing page for librarians who are interested in advanced and cost effective open source automation solution on the market by providing LibLime Koha. Koha.org is offering a functionally advanced version of Koha which is ready access to the most experienced Koha LibeLime. There are more than 700 users supported by LibLime. Support Service are available on consulting LibLime Koha services through [kohaconsulting@liblime.com](mailto:kohaconsulting@liblime.com); LibLime Koha Implementation Services [kohaimplementation@liblime.com](mailto:kohaimplementation@liblime.com); LibLime Koha Hosting and Support Services [kohasupport@liblime.com](mailto:kohasupport@liblime.com)

#### **2.1.1 Introduction of Koha:**

(Arslanpnc, 2011) Koha is the first free and open source software library automation package (ILS). The development is sponsored by libraries of varying types and sizes, volunteers, and support companies from around the world. The term "open source" software is not always free only the source code is open and free to access them, modify and distribute them as per need. Open source software may be free, a developer or distributor may charge for services, including special programming, installation, training,

and technical support, quality, and not profit drives open source developers who take personal pride. Simple use it and is not locked any single person or institution.

(Wikipedia, the free encyclopedia, 2000) Koha is a full featured Integrated Library System (ILS). There is no cost for the license, any organization have the freedom to modify the product to adapt as per institutional needs. It is developed initially in New Zealand by Katipo Communications with Horowhenua Library Trust (HLT). It is currently maintained by a dedicated team of software providers and library technology staff from around the globe. That by adopting it, the customer becomes "joint owner" of the product. In particular, the customer can freely install new versions or not, and can take part in new developments by financing them or by carrying them out them self. Criteria for evaluating open source integrated library systems. There is active current development under way. At least the cataloging, circulation, patron access catalog modules, acquisitions and serials control should be available. It should be integrated library system. MARC is supported. Current source code and documentation are available for downloading under the General Public License (GNU). The product is currently in use in libraries. It is scalability and adaptability and user friendly system.

(Aryal, J., 2009) has mentioned that there are various types of OSS product e.g. MicroLCS, Emilda, Evergreen, FireFly, GNUT eca, Avanti, Koha, OpenBiblio, phpMyLibrary, PMB, PYTHEAS, WEBLIS.

The criteria for evaluating open source integrated library systems. Currently the active development is underway. At least the cataloging, circulation, patron access catalog modules, acquisitions and serials control should be available in each library. There should be Integrated library system. MARC is supported. Current source code and documentation are available for downloading under the GNU. More than 300 libraries are using Koha, in academic, public, school and special libraries, in Africa, Australia, Canada, USA, France, India and, of course, New Zealand. Along with a committed team of programmers its development is steered by a growing community of libraries collaborating to achieve their technology.

(Wikipedia, the free encyclopedia, 26 December 2011) mentioned that the Koha is based on MARC. The cataloguing module is one of the principal strong points of Koha. Several "frameworks " can be defined to do different cataloguing for monographs, electronic resources, periodicals, etc. Export / Import: Importing records in ISO2709 format (the MARC reservoir) and through Z39.50 (client) for fast cataloguing. Copy records: One or more copy records can be attached to each bibliographic record. Fast cataloguing: To accelerate cataloguing, Koha provides, Management of a MARC record reservoir, in ISO2709 format, A Z39.50 client that can access several Z39.50 servers MARC view and simple view: catalogue data can be displayed in MARC format, in simplified form. Searching: searches can be performed on any MARC field. Advanced functions, search on one word, the beginning of the field, greater than, less than, etc are also available.

Circulation rules can be defined very finely in the library for each member category, item category, and holding branch of the item, the duration of the loan and the maximum number of books loan able can be defined. Returning items ("checking-in") is extremely easy: Simply scan the barcodes of the items being returned. It is possible to register subscriptions with reviews, and to track the arrival of periodicals.

Koha manages late issues, skipped issues, and it even claims with the suppliers. Koha manages complex subject classifications, allowing the librarian to work with eleven different publication periods (from daily newspapers to annual publications), with delayed publications, and with publications out of sequence. A state of the collection can be defined which will synthesize the missing publications, received publications etc. The state of the collection can be displayed differently in the OPAC and in the librarian interface.

The simple acquisitions module makes it possible to acquire materials and to add them directly to the catalogue. It does not manage budgetary matters and the orders placed with the suppliers. The full acquisitions module makes it possible to manage:

budgets and book funds: budget available, committed, spent suppliers.orders, via 'shopping baskets'.

The database layer manages and access to the DBMS (database management system). The processing layer which manages the processes, required by the user. The formatting layer, which contains templates for the HTML presentation. The visible interface of the software is thus entirely customizable. Koha's Intranet and OPAC by selecting from several 'themes' the librarian interface uses cascading style sheets (CSS). It is more coherent and easier to follow than was the case in version 2.0.

### **2.1.2 Advantages of Open Source Software:**

1. Timely Access to information due to the fact that searching and browsing will be made easier and quicker, time for issuing and receiving of items to and from users will be reduced among others. (Simmon, JE., 2011)
2. Enforcement of the Library regulation will be made easier by the fact that the system alerts staff in case of violation and reminders automatically. (Simmon, JE., 2011)
3. Reduced time of processing of library items. For instance, we shall be able to import cataloguing data in real time from other automated libraries that conform to the MARC standards. (Simmon, JE., 2011)
4. Online supervision of library staff on carrying the library services will be made possible from the sectional heads of the libraries as the activities on the system can be seen online. (Simmon, JE., 2011)
5. Library Statistics generation is possible. This will held the library to manage the collections and users. (Simmon, JE., 2011)

6. **Controlled Expenditure.** Through the acquisition module, the system allows to track library expenditure and therefore enabling management of the budget. It is able to alert when the subscription dates are due and when the subscriptions were not received. (Simmon, JE., 2011)
7. Koha provides a number of modules that enable the performance of several library functions namely Circulation, Patron Management, Cataloguing, Serials Management, Report Generation, Acquisition, among others. Currently, the library staff do not have the skills to use all these modules. Therefore, there is need for training for library staff in this area. (Simmon, JE., 2011)
8. Koha enables or provides the users to interact with the system for instance, users can use the system to check their borrowing history, can also use the system to send their suggestions for they can also use the system to update their personal details in addition to searching and browsing the library collection. Therefore there is need for the users of the parliamentary library to be trained in order to adequately utilize the system. (Simmon, JE., 2011)
9. Other advantages are - MARC21 and UNIMARC for professional cataloguers. Tailored catalogue module for special libraries, use as a document manager or digital library, manage online and off line resources with the same tool, e-mail and / or txt patron's overdues and other notices. Barcodes Print facilities and Koha is multi-tasking and enables updates of circulation, cataloguing and issues to occur simultaneously etc. (Simmon, JE., 2011)



### 2.1.3 Disadvantages of Open Source Software:

1. A library may find that it needs to do a great deal more work than anticipated to adapt the software to local needs. The decentralized development of open source software means that progress can be chaotic and there may be delays in addressing bugs. (Breeding, 2008/2009)
2. Documentation tends to be limited and aimed at developers. There usually is limited technical support, especially for users of the software. Open source software may not offer the level of customization as it is being done in case of proprietary software. (Breeding, 2008/2009)
3. Relatively new and unproven (Breeding, 2008/2009)
4. Current focus may be on improving functionality rather than greater innovation (Breeding, 2008/2009).
5. There may be unanticipated work load as adaptations are made to fit local needs (Jones, 2009).
6. Decentralized development may lead to chaotic progress and delays in fixing bugs (Jones, 2009).
7. Customization may not be as great as proprietary software (Jones, 2009).
8. Currently unfeasible for the larger and more complex libraries (Breeding, 2009).
9. The decentralization development of open source software means that progress chaotic and there may be delays in addressing bugs. (Kumar, R., 2011)

10. Documentation tends to be limited and aimed at developers. There usually is limited technical support , especially for users of the software. (Kumar, R., 2011)
11. Open source software may not offer the level of the customization as it is being done in case of proprietary software. (Kumar, R., 2011)

#### **2.1.4 Why Open Source Software Koha:**

**Cost-effective:** paying licensing fees for proprietary solutions, users of open-source software can often deploy the product using in-house resources. They pay only for needed support or any additional vendor services they require. (Kaul, S., 2011)

**Innovation:** code is open, users are free to innovate and improve the software to meet their needs Free innovation also means that open-source software has much faster development cycles when compared to proprietary software. (Kaul, S., 2011)

**Free/open source software koha** is an economical alternative to reliance upon proprietor supplied software. It means the cost involved development, license, upgrading, maintenance etc, lower than proprietary software. koha does not need the initial cost like proprietary software. (Kaul, S., 2011)

**Proven, Stable Technologies:** Koha is tried and tested and has demonstrated both stability and scalability, used in hundreds of libraries worldwide. (Kaul, S., 2011)

**Software Collaboration and Resource Sharing:** software solutions that are freely available to all libraries worldwide. Libraries can benefit from the contributions of other participating library systems. (Kaul, S., 2011)

**Long term Support:** With proprietary software, source code is 'closed' and support and future development of the product rely on the success and resources of a single

vendor. If the vendor goes under, so does your product support. open-source solutions rely on stable code bases developed and supported by many providers worldwide.

**User-driven:** Open-source software user-driven--you decide what features are important and deserve attention rather than a vendor.

**Cost-effective:** Paying licensing fees for proprietary solutions, users of open-source software can often deploy the product using in-house resources. They pay only for needed support or any additional vendor services they require.

**Free/open source software Koha** is an economical alternative to rely upon proprietor supplied software. It means the cost involved development, license, upgrading, maintenance etc., lower than proprietary software. Koha does not need the initial cost like proprietary software.

**Free/open source software Free download** under the GNU General Public License. Users of open-source software Koha can often deploy those using in-house resources. Service charge is needed only for needed support or any additional vendor services i require. It means the cost involved development, upgrading, maintenance etc., Koha does not need the initial cost like proprietary software. Here cost means commitment, dedication, and a long term efforts to sustain and development of the software.

### **2.1.5 Koha Feature:**

Koha's features are:

**Full-featured ILS:** It is used use worldwide in different libraries of all sizes. Koha is a true enterprise-class ILS with comprehensive functionality including basic or advanced options. Koha includes modules for circulation, cataloging, acquisitions, serials, reserves, patron management, branch relationships, and more. ([www.koha-community.org/about](http://www.koha-community.org/about), 2012)

**Full text searching:** Koha uses an RDBMS coupled with an external search engine to provide powerful searching that is truly scalable. ([www.koha-community.org/about](http://www.koha-community.org/about), 2012)

**Library Standards Compliant:** Koha is built using library standards and protocols that ensure interoperability between Koha and other systems and technologies, while supporting existing workflows and tools. ([www.koha-community.org/about](http://www.koha-community.org/about), 2012)

**Web-based Interfaces:** Koha's OPAC, circ, management and self-checkout interfaces are all based on standards-compliant World Wide Web technologies—XHTML, CSS and Javascript—making Koha a truly platform-independent solution. ([www.koha-community.org/about](http://www.koha-community.org/about), 2012)

**Free Software / Open Source:** Koha is distributed under the Free Software General Public License (GPL) version 2 or later. ([www.koha-community.org/about](http://www.koha-community.org/about), 2012)

**No Vendor Lock-in:** It is an important part of the free software promise that there is no vendor lock-in: libraries are free to install and use Koha themselves if they have the in-house expertise or to purchase support or development services from the best available sources. Libraries should be free to change support company and export their data at any time support system.

**Operating system:** Linux, Unix, Mac. It is Web based and Web-based Interfaces. It is integrated with website.

**Support system:** Full MARC21 and UNIMARC support for professional cataloguing. It is based upon multilingual and multi-user support Library-Standards-Compliant. Industrial standards & protocol Z39.50 server.

**Customizable web based:** opac.circulation system. Online reservation facilities are available. Other features are full catalogue, circulation, acquisitions, library stock management. Web based OPAC, public to search the catalogue. Major industry-standard and database type such as text, RDBMS, SQL, MYSQL. Other features are serial management module, barcode system, export and import records, ISO2709 etc. are available in OS Koha. (Engitu, SJ., 2011)

#### **2.1.6 Koha System Architecture:**

Koha is based on a client-server architecture. Network Server: koha can be installed on a server running Linux, Unix, Mac. The recommended operating system is stable version of Debian Linux, although Koha can run on any modern operating system. Client Workstations: Koha requires only a web browser on the workstation (a graphical browser, or even a text browser for the OPAC). Koha thus functions on PCs running Windows, PCs running Linux, Macs, or even UNIX workstations. Koha runs over any TCP-IP network. Koha accommodates low-bandwidth connections. It is completely usable on ordinary telephone line connections. This is more true of the librarian interface than of the public interface (OPAC). A full featured modern integrated library software (ILS).

#### **Koha server based operating system:**

There are different type of operating system ware used such as Linux, OpenBSD, FreeBSD, MacOS X, or any other Unix. Apache web server are used in Koha and Perl programming language used in koha. The database name is MySQL. It is 2.2.9 based integrated library software. Koha clint software users require a recnt internet browser. Certain data validity checks are made on the client machine, JavaScript must be enabled. The public interface (OPAC) conforms with XHTML1.0 standards; the utility is thus compatible with alternate browsers. In particular, the OPAC can be used by people needing special assistive technology (Braille browsers, voice synthesis, text-based browsers, etc.).

## **Koha Module:**

There are various types of Koha Modules such as Open Public Access Catalogue, full catalogue, circulation, serials, Acquisition, Patron members circulation and serial management, Reservation.

Online Public Access Catalogue (OPAC). This module provides access to the library catalogue. Through this module users of the library will also be able to check their borrowing details, reserve items, make suggestions for new books, update their personal details as well as to add tags to books of their liking. This module provides a simple and clear search interface. Users will be able to search through all fields of the database as well as within specific fields. (Simmon, JE., 2011)

Full catalogue module. This module will enable library staff capture bibliographic details of any item in the library. It is MARC format compliant which means that staff will be able to exchange bibliographic information of the library items with other libraries and also acquire bibliographic details from other libraries. MARC (MACHINE Readable Cataloging) format is the international standard for creating computerized bibliographic records. This module is also z39.50 protocol compliant. Because of this compliance, library staff will be able to automatically import bibliographic data from other systems instead of having to repeat data entry for items which may have already been catalogued elsewhere. This feature will help save the time of the library staff performing cataloging which time may be utilized in performing other valuable activities. (Simmon, JE., 2011)

Circulation Module. This module will enable library staff perform all tasks related to the circulation of items in the library, e.g. issuing and returning of items, reserving books. This module will eliminate the need for using borrowers' cards during issuing and return of items. With Koha, this transaction will be automated which will also lead to a reduction in the amount of time spent and the inaccuracies that may occur with the manual system, e.g. users providing wrong names, wrong signatures etc. this module is full integrated with the online public access catalogue and due to this each user will be

able to see what books they have borrowed at any particular time. They will also be able to know whether any book they may have identified from the OPAC is available or not at any particular time. Through this module staff will be able to identify which books are overdue on any particular date and which books have been reserved. The system will be able to send automatic overdue reminders to users via email. (Simmon, JE., 2011)

Acquisitions module. This module will enable library staff to better manage the acquisition of new books and budget of the library generally. The module is fully integrated with the cataloguing module as well as the OPAC module. Book suggestions made by user through the OPAC will be received at this module. The process of preparing details of new purchases will be made easier as this details will be simply obtained either from the catalogue, users' suggestions or imported directly from another library. When the items purchased are received there will be no need for data entry because the acquisition and catalog are integrated. The library staff will simply with a click of a button add the received item to the catalogue and in that same instant

it will be available to the users through the OPAC. Serials management modules. This module will provide better management for serials. The module has an in-built algorithm that will enable better tracking of frequencies. (Simmon, JE., 2011)

Reports. This module will enable staff produce statistics about the utilization and management of library resources, e.g. staff will be able to run reports about the number of books issued out and returned on any particular date, the activities of each staff allowed to use the system, the number of reservations made etc. In addition to the above the system also prints barcodes and spine labels and if activated it automatically emails overdues and other notices to users and library staff. A full account of the advantages is here below. (Simmon, JE., 2011)

### **2.1.7 Koha Member Module:**

The members (borrowers) module makes it possible to manage not only individual borrowers, but also institutions. Each member belongs to a category. The member category defines: The minimum and maximum ages for members of the category. The online reservation systems are available in Koha and it also mentioned the rules of circulation. By entering the borrower's library card number into the librarian interface, the librarian can: See the financial standing of the borrower (charges due).

### **2.2.1 History of Proprietary Software:**

It is computer software licensed under exclusive legal right of the copyright holder. The licensee is given the right to use the software under certain conditions, but restricted from other uses, such as modification, further distribution, or reverse engineering. (Wikipedia, 30 December 2011)

Complementary terms include free software, licensed by the owner under more permissive terms, and public domain software, which is not subject to copyright and can be used for any purposes. Proponents of free and open source software use proprietary or non-free to describe software that is not free or open source i.e. Libinfo. (Wikipedia, 30 December 2011)

Software becoming proprietary, until the late 1960s computers huge and expensive mainframe machines in specially air-conditioned computer rooms were usually supplied on a leasing rather than purchase basis. Service and all software available were usually supplied by manufacturers without separate charge until 1969. Software source code was usually provided. Users who developed software often made it available, without charge. Customers who purchased expensive mainframe hardware did not pay separately for software. (Wikipedia, 30 December 2011)



In 1969 IBM led an industry change by starting to charge separately for (mainframe) software and services, and ceasing to supply source code.

### **2.2.2 Introduction of Proprietary Software:**

Vendors of proprietary software say “Keeping the source code closed make their product more secured”, Keeping the source code closed safely is called proprietary software. This type of software is also called proprietary software, which need to be purchased from the license to support services and for each upgrade payment has to be done. (Wikipedia, 30 December 2011)

Libinfo is a kind of proprietary softer and developed by few members of IT persons of Kathmandu, Nepal. Libinfo automation software have various characteristics which can help various fields such as serial management, circulation system with picture, barcode generation facility and OPAC environment. It is computer software licensed under exclusive legal right of the copyright holder. The licensee is given the right to use the software under certain conditions, but restricted from other uses, such as modification, further distribution, or reverse engineering. Proprietary software mean non free so it is called proprietary software. (Wikipedia, 30 December 2011)

Any types of proprietary software producing company creates software that must be purchased in order to be installed and used, the company can set limit to the licence of use. This will allow the company to control and monitor the installation and distribution of the software sold. (Wikipedia, 30 December 2011)

There are also disadvantages of producing proprietary software because manufacturers are often under massive amounts of pressure to release the software before it is ready, causing major problems later. This is because the release of the software would affect the profit. (Wikipedia, 30 December 2011)

Security is a major issue, Manufacturers will have to invest in an ongoing research against threats from hackers.

### **2.2.3 The Advantages of Using Proprietary Software:**

1. The software offers a stable system support if it fails or malfunction.(Panitia ICT, 2011)
2. The software is safe and guaranteed to be safe from dubious threats like programming bugs and viruses.(Panitia ICT, 2011)
3. The software is easier to install and used as the production is planned and extensive research is carried out to ensure users purchase only the best. .(Panitia ICT, 2011)
4. Furthermore, free updates and latest information on the software are usually provided to the user. .(Panitia ICT, 2011)

### **2.2.4 Disadvantages to Users of Using Proprietary Software:**

1. Any improvements would usually require fees, which is often expensive. .(Panitia ICT, 2011)
2. Users are not allowed to describe and share the software as that are licenced. .(Panitia ICT, 2011)
3. Users need to spend a long time downloading and installing security patches to fix bugs announced by the manufacturer. Any improvements would usually require fees, which is often expensive. Users are not allowed to describe and share the software as that are licenced. Customising the software is nearly impossible

because when users buy proprietary software will receive binary version of the program, not the code as the code is the manufacturer's trade secret. (Panitia ICT, 2011)

4. Complementary terms include public domain software, which is not subject to copyright and can be used for any purpose, and free software, licensed by the owner under more permissive terms. Proponents of free and open source software, use proprietary or non-free to describe software that is not free or open source. (Panitia ICT, 2011)
5. Another meaning of Proprietary software mean, it is a computer program that are exclusive property of their developers or publishers, and cannot can be copied or distributed without complying with their licensing agreements. (Panitia ICT, 2011)
6. Application Description of proprietary software i.e Catalog allows the user to easily access and manage geographic data that is stored in folders on local disks or relational databases that are available on the user's network data can be copied, moved deleted and quickly viewed before it is added to a map. (Panitia ICT, 2011)

#### **2.2.5 Why Proprietary Software Libinfo:**

**Causes of technology:** Libinfo software is trial and tested. It has demonstrated by vendors. Used in various libraries in Nepal.

**Long term support system:** Proprietary software, source code is 'closed' and support and future development of the product relay on the success and resources of a single vendor.

**User driven:** It is also user driven. The vendor primary objective is to fulfill the requirement of the user.

**Cost effective:** On the basis of supporting system, it is also cheaper software. Piracy of software is prohibited.

### **2.2.6 Proprietary features:**

Proprietary format and Proprietary protocol often, proprietary software stores its data using proprietary file formats and communicates using proprietary protocols controlled by the vendor. Most proprietary formats and protocols are secret and incompatible with other software. Their use may be restricted by trade secret or patent rights.

A proprietary application programming interface (API) is a software library interface. It includes standards compliant, bar coded spine labels, and data export and import facilities. Catalog search facilities are also available.

It is also full featured such as MARC21 support for professional cataloguing. Protocol Z39.50 server is also used in it. It has customizable web based opac.circulation system, and online reservation system. It is web based software but now it is not web link.

### **2.2.7 Libinfo System Architecture:**

Libinfo software is a kind of library automation software. It stresses on managing the library activities and the need for library automation. The characteristics of paper library to automated library have been given in detail with the services and products. It provides bibliographic in detail about book through title card, subject card and author card. The enhancement of automated environment has been given in detail with the

services offered under different headings like SDI, accession data transfer and sharing, the databanks, the role of reference librarian in automated environment, online catalogs and about information networks are explained in detail. The benefits of libinfo software are explained and the LIS professionals should take the new environment as a challenge and face the user community by redesigning the services.(Shakya, MB, 2011)

**It provides following facilities:**

- Customizable search
- Circulation and borrower management
- Full acquisitions system including budgets and pricing information (including supplier and currency conversion)
- Simple acquisitions system for the smaller library
- Ability to cope with any number of branches, patrons, patron categories, item categories, items, currencies and other data
- Serials system for magazines or newspapers
- Reading lists for members
- OPAC facilities
- Barcode with picture facilities
- Web based features(Shakya, MB, 2011)

#### **2.2.8 Libinfo Member Module:**

Libinfo software provides users to access timely the library materials. It eliminates routine tasks and performs them more efficiently. It reduces the amount of time spent on material acquisition, serials management, budget administration and record keeping. It supports new means of information retrieval by introducing patrons to global information. It allows patrons to use search strategies that exceed those that can be used with card catalogue. It allows patrons to search library's collection from locations outside the library's walls. (Shakya, MB, 2011)

### **2.3 Current Research Findings and Gaps:**

(Chundnov, 1999) noted that libraries have not been quick to adopt OSS. (Pace's, 2005) and Breeding's (2007a) data on the number of sites per ILS vendor show that most ILSs in use are proprietary, and fewer than two percent of ILSs in use are open source.

A few articles describe empirical studies of open source ILSs. (Kumar, 2005) has compared the open source ILSs Koha, Open biblio in a cross-comparison ranking of their features, and found that Koha was the most functionally manner.

In Nepal, apart from Koha ILS, other proprietary software such as Libinfo is used. A comparative study will be done based on the factors, a librarian considers in choosing the ILS and a presentation will be made regarding the superiority of software between OSS and Proprietary Software. The factors which will be considered for comparison will be affordability, customizability, portability, vendor-lock-in, ease of use, support, documentation and scalability, etc.

### **3. Chapter: FOCUS OF THE STUDY**

#### **3.1 Focus on OSS Koha and Proprietary Software i.e. Libinfo:**

This study has tried to findout gap between Open Source Software i.e. Koha and Proprietary Software i.e. Libinfo. It has been compared on the basis of cost and its services between Koha open source software and Libinfo proprietary software. It will identify in the same way to find out the better software for medical library and its users.

Different types of OSS are used in (all over the world as well as in developing countries) e.g. Emilda, Avanti, Evergreen and Koha, libinfo etc. Among them Koha is most popular and widely used open source software in more than 300 different libraries including academic, School, Public, and Special libraries in Africa, Australia, Canada, USA, France, India, and New Zealand and other remaining part of the world . So it is more successful in the field of library automation. It stands as a software industry and Automation software markets are greater expansion and its software applications are being updated day to day.

The OSS and proprietary software are highly required for knowledge management, without these we can't systematically arrange large amount of resources. So, OSS is permanent solution and it gives us quick information about availability of resources. Still now different libraries are using different OSS and proprietary software i.e. Libinfo. Our primary aim is to digitize of all types of information in library or information centre so without Library Automation Software we can't do anything in the field of management so it is basic need for findout which one is bettr software for library automation.

Koha is full featured software having facility of cataloging, circulation, acquisition, serials control etc. Data is casily converted from Winsis to Koha and it is web based cataloguing so can be accessed through Online Public Access Catalogue (OPAC). Books in Devnagari can be catalogued by using Unicode. It also supports barcode reader for circulation.

So, it is a full featured modern integrated library software (ILS). It does not need no license fee so it is called free software. It's independent any operating system such as Linux, UNIX, and Mac. Web based interfaces are available so we can easily integrate with website. Full MARC21 and UNIMARC support for professional cataloguing. Multi-user user easily handle when used Koha library automation system. It is fully based on international library standard and we can use Z39.50 server. We can easily provide online reservation system to the library user. Koha software available MYSQL, print for barcode, export and import record, and ISO2709 standard.

### **3.2 Introduction of NAMS library:**

Central Medical Library, National Academy of Medical Sciences (NAMS) is situated at Bir Hospital, which was established in 1971, as Bir Hospital Library. Government of Nepal, Ministry of Health in January 1982 officially designated this library as the National Focal point library for HELLIS (WHO) program of Nepal. This library was serving to senior administrators, planners, researchers, doctors offering the routine library and information services such as circulation, reference, selective dissemination, photocopy, online services etc.

The National Academy of Medical Science (NAMS) was established in the year 2059 (2002) by the Government of Nepal as deemed University. The post graduate program was started in 2060/02/15. From the beginning of post graduate program NAMS library have been providing library service for their users. In the beginning there were only three post graduate programs: Anesthesia, General surgery and Medicine but now Anesthesiology, general surgery, internal medicine, obstra. & gynecology, ophthalmology, pediatrics, radio diagnosis, radio therapy, orthopedics, pathology, dermatology, general practice, orthodontics, prosthodontics, periodontics, Mch neurosurgery, general surgery and surgical gastroenterology, programmes are in National Academy of Medical Sciences. All students intern doctor, faculty members of Bir Hospital are using NAMS library. NAMS library is the central medical library for valley groups'



### **3.2.1 Objectives, Mission and Vision of NAMS library:**

Central medical library NAMS library, Bir Hospital is a special library so the objectives of library is also special. The objectives of this library are:

- To provide quality medical literature service in the library.
- To provide needed health information in producing highly trained manpower in the medical field.
- To develop the academy as the national medical library to support quality health service and research.

#### **Mission:**

The mission of the NAMS Library is to advance the education, research, patient care and public service programs of the university by obtaining, applying and disseminating biomedical information and the tools for its management and use.

#### **Vision:**

The context for achieving this mission is the vision of an environment in which individuals using personal computers in classrooms, offices, laboratories, hospitals, libraries and homes can access and obtain information when and where they need it, and in the format most appropriate to their need, regardless of where that information is located physically.

### **3.2.2 Facts and figure:**

- Total number of books: 6000 title
- Total title of journals: 35 items
- Bound journal volume: 1000 copies
- Total number of computers – 12 pcs

- Total number of printer – 2 pcs
- Total number of items of daily news paper: 10

### **3.2.3 Services:**

Following services are provided by NAMS Library such as Text book service, Reference service, Online bibliographic data, online e-resources through various web addresses, photocopy services, referral services, printing services, news paper services etc.

### **3.2.4 Policies:**

#### **General rules and regulations:**

1. Every person on entering the library shall sign the gate register thereby denoting his / her acceptance of the rule and regulation of the library.
2. All personal belongings except purses, notebooks and pens will not be allowed to be taken by the reader beyond the circulation counter. They should be deposited at the property counter.
3. The books that are issued inside the library if found destroyed at the time of return, she/he shall have to replace or pay the latest price of the book. So members are requested to check the books thoroughly before getting them issued. If any user of library has to go on long leave, the user should deposit all the issued books to library.
4. If any user is carrying the unauthorized documents, it means she /he is stealing the library property. Thus his /her name will be published on the NAMS notice board.
5. Loss of membership card:
  - a. A Member who losses the membership card shall make a written report to the Librarian
  - b. A duplicate membership card will be made after approval of membership form.

6. Any user, who wants to take his/her books inside the library, has to show the books to the library staff which taking them in and out.
7. Book checker/Gatekeeper is fully authorized to search the members if he/she suspects that the members are carrying unauthorized books from library.
8. Silence should be maintained in the library at all time.
9. Eating of any kind inside the library is not permitted.
10. Users are welcome to ask the library staff on any enquires.
11. The library committee will be obliged to all members for observing the rules and regulations for the smooth running of the library.

#### **Guidelines in Renting Textbooks**

1. Textbook rental forms can be secured at the Textbook Section counter. The student is advised to get his/her textbooks on the scheduled date.
2. After accomplishing the form properly, stay in line and present the textbook form with the duly registered ID at the counter and get the textbooks personally. Count and check the textbooks issued before leaving the counter;
3. Books must be rented for personal use only and not for other persons;
4. A student is not allowed to rent two (2) copies of the same title;
5. After the deadline, all textbooks rented will be charged with their corresponding rental fees. All textbooks rental forms will be forwarded to the accounting office. Corresponding fees of rented textbooks are added to the student's account.

Members (Faculty Member, Student of NAMS, Intern Doctor, and employed medical professional of NAMS (National Academy of Medical Sciences) are requested to fill up the membership form and library provides library card to the library members.

### **3.2.5 Donation:**

NAMS welcomes donations or in-kind gifts to provide additional resources and services that might not be available to users. Donations and gifts benefit students, faculty, and staff as they work to fulfill the university's missions of education, research, and patient care. The generosity of each individual can provide critical resources for the Library and help sustain the excellence of the Library's access to health sciences information in the face of drastically increasing prices of journals and other print and electronic resources.

The Library accepts gifts and donations of books, journals and other materials if these items are needed for the collection. In accepting these materials, the Library retains the right to dispose of them if they duplicate existing material or are outside the scope of the Library's collection.

### **3.2.6 Automation:**

#### **Catalogue (Bibliographic in details) with picture of book:**

There are 6000 medical books available in this library. This library has been providing catalogue service through internet. There are 2000 books in bibliographical forms. All library users can easily find out his/her demanded book after using the [www.namslib.org.np](http://www.namslib.org.np) website.

#### **Post graduate medical journal of NAMS (PMJN) online full text:**

Post graduate students publish medical journal in half year duration which can be obtained through [www.namslib.org.np](http://www.namslib.org.np) All PMJN is processed or digitalized by Green Stone Software (GSDL) and full texts are available.

### **Thesis online full text and other information:**

This library is providing online full text 400 thesis to date through <http://www.namslib.org.np>

#### **3.2.7 Role of librarian**

The Library has identified five major service roles to guide its strategic planning:

- Librarian can provide at no charge
- Literature searches in many disciplines
- Answer to specific questions
- Assistance in locating and using electronic journals
- Help with using Library Resource
  
- **Comprehensive Library Information Support Center:** The Library provides comprehensive information support services to a primary clientele that includes all who are engaged in teaching, patient care, research, administration, and public service. The Library promptly provides clients with appropriate information in suitable formats, endeavoring to meet clients' needs as fully as possible. The Library provides access to information resources that are not a part of its collection via electronic and other networks. Services include preparing information products tailored to specific needs, screening and selection of information, providing in-depth consultation on information management issues, providing accurate answers to specific questions and assisting clients in the use of the Library, its resources and services.
  
- **Self-Service Information and Study Center:** The Library provides self-service library research and study opportunities. It maintains hours of operation which reflect its commitment to meeting the needs of its clients. The building, collections and electronic information systems are designed and organized to facilitate unassisted use of the Library. Sufficient seating and work space are available to meet demands during peak periods. The Library's catalog and

selected literature citation databases are available to remote sites via the campus communications network.

- **Information Resources Instruction Center:** Library staffs provide instruction in information acquisition and management skills. Staffs teach clients who are using traditional library materials, bibliographic and other databases, the online catalog, and other electronic resources. Instruction is also provided in the use of personal productivity software to efficiently manage information. The Library prepares written materials to assist individuals in using the Library and its resources.
- **Key Health Science Resource Center for the National Information Community:** The Library participates in, and ensures access to, national information networks. The Library and its staff are active participants in local, regional and national information networks and organizations. The Library participates in appropriate interlibrary lending networks and is a member of appropriate cooperative collection development programs.
- **Regional Health Information Support Center:** The Library provides library information services regionally. The Library maintains an active outreach program for health professionals in Southeast Texas. The staffs provide answers to brief, factual questions, provide online searches and documents for a fee, provide assistance in using the Library and make referrals to other information sources where appropriate. The Library provides consultation services to other libraries. The Library is open to the public and students from unaffiliated institutions. Clients not affiliated with The University may use materials in-house.

### **3.2.8 Internet:**

Broadband internet connection with EMR (Electronic Medical Resources), and bears the capability of providing video conferencing, telemedicine services.

### 3.2.8 Other Resources:

HINARI, Pub Med, Cochrane Library, NAMS library Database, E-resources, E book, E-journal etc.

Reference service provided by librarian from reference desk or information desk. The Central Medical Library, NAMS reference book section is located at the post graduate's Study room under the rules and regulation of the library between 8 am to 11 pm every day and management approved users demand and librarian provided reference services to the users.

#### Electronic Resources Free Full text E- Journals

[www.ntrmednet.edu.in](http://www.ntrmednet.edu.in)

[www.pubmedcentral.nih.gov](http://www.pubmedcentral.nih.gov)

<http://www.freemedicaljournals.com/>

<http://www.plos.org/journals/index.html>

<http://www.biomedcentral.com/home/>

<http://www.medscape.com/welcome>

<http://highwire.stanford.edu/lists/freeart.dtl>

<http://indmed.nic.in/>

<http://openmed.nic.in/>

<http://www.qmedin.com/medsites/journals.htm>

[http://www.gfmer.ch/Medical\\_journals/Free\\_medical.php](http://www.gfmer.ch/Medical_journals/Free_medical.php)

<http://www.emedicine.com/>

<http://www.aib.it/aib/commiss/cnur/peb/pebs.htm3>

<http://www.jmir.org/>

[www.who.int/hinari](http://www.who.int/hinari)

#### Free Book Full text available under the following site:

[www.google.com](http://www.google.com)

[www.freebooks4doctors.com](http://www.freebooks4doctors.com)

[www.cdc.gov/vaccines/pub](http://www.cdc.gov/vaccines/pub)

[www.hesperian.org](http://www.hesperian.org)

[www.freebookcentre.net](http://www.freebookcentre.net)

The library is providing printings and photography service to users. User gets 12 page photocopy and 12 page printing service every day. 14 computers are providing net facilities to the users in this library.

### **3.3 Background of Libinfo:**

Libinfo is a kind of proprietary software. Beginning, winisis library automation software was used in various library of Kathmandu valley. Some library get different types of problems from winisis such as does not have an easy circulation model, Nepali literature automation, and others features and comparatively it is not more user friendly UNESCO's developed library software. So, as a alternative solution a group of young energetic scientists, with a team of library science professionals, computer engineers, architects, and management experts established the information access network as a private company and developed libinfo software which offers a complete solution for library automation in both English and Nepali font. This is proprietary software, which need to be purchased from the license to support services and for each upgrade payment has to be need. The Software has features i.e. circulation, cataloguing, patrons registration and reporting developed Libinfo proprietary software. The Libinfo library automation software being used in Kathmandu Valley such as Patan Hospital Library, American Library etc. Its features are circulation, cataloguing with picture, patrons registration and reporting. It can also generate barcode and web based integrated system and manage books in both English and Nepal.

A comparative study of both the software will reveal advantage and disadvangages on the basis of various aspect such as cost, support service, hosting, status of development of the software and users perception towards the software (both library staff and general users).



### **3.4 Introduction of Patan Hospital Library:**

Historical Background of Patan Hospital formerly known as Shanta Bhawan Hospital, established 1956 was renamed after it moved to a new place in 1982. Patan Hospital Serves the patients with about 450 beds, 7 major units of medical services and 750 staff members (90 medical staff, about 250 nursing, and 50 faculty members. In 2009, it developed as an Academy known as Patan Academy of Health Sciences (PAHS) and its School of Medicine has started course for 1<sup>st</sup> batch of MBBS students, the total numbers of students are 60 in Patan Academy of Health Sciences.

#### **3.4.1 Objective and Mission of Patan Hospital Library:**

Library Objective and Mission are:

1. Providing organized access to information, resources and services
2. Carefully selecting teaching and learning materials
3. Providing access to electronic information and resources , and
4. Updating library equipment, technology and facilities

PAHS/ Ph provided efficient service to different types of users i.e. Medical Doctors for patient care, writing papers, and research. Undergraduate students (MBBS) use for learn theory and practical knowledge. Faculty members use for teaching and research purpose. Nurses use for patient care and student (PG and undergraduates), PG Students are use updating their knowledge and writing thesis as well as Paramedical staffs are being used this library for information on new operational techniques through manuals, handbooks and protocols.

#### **3.4.2 Facts and Figure:**

**Books:** (about 3400 volume, Journals about 30 -35 titles in different subject such as Medicine, Surgery, Orthopaedics, etc).

**Bound volume:**

About 900 bound volumes of backdated journals consisting about 70-75 titles (1990 - to date).

**E- resources:**

There are few resources in DVD, CD-ROMs and E-books.

**3.4.3 Services:****Database service:**

Database services provided to the different type of users through e.g. Libinfo, winsis, Photocopy service, Media tech (e-resource center) and personalized search service.

**Journal service:**

Following topic of journals are available:

- General Surgery
- General Medicine
- Obstetrics and Gynecology
- Pediatrics
- Public Health
- Pharmacology
- And other Health forum

**Other services:**

Internet, Photocopy, and Text book services are available.

### **Periodical service:**

Periodical service (printed, Newspapers, E-Database – (HINARI, Pubmed and in-house bibliographic

### **Reference service:**

There are so many collections of recent basic books which books can study at in the library itself but which books member cannot borrow.

There are different types of services and resources offered include such as loan services via membership (circulation), Textbook and reference service (non loanable), Stack room (open access) – Books for loan etc.

### **3.4.4 Policies:**

Patan Hospital Library is an autonomous body under Ministry of Health and Population, Government of Nepal. It has a well-equipped library having rich collection books, journals, periodical and other documents. It provides reference and digital information services to clients. It provides user orientations program to users. The Library is committed to employ new strategies to satisfy the modern day information needs of the patrons.

Every library has certain rules and regulations to promote and control the library day to-day activities such as library opening hour, about circulation system, membership criteria, general rules and regulations, and loan rules.

### **3.4.5 Donation:**

The Patan Hospital Library system welcomes the donation of medical books and other resources such as CDs, videos and DVDs. Fiscal year 2067/68, National Academy of Medical Sciences provided few medical books to the library and World Health

Organization also provided some equipment. While, the library is happy to receive donation. This library gets all resources as Institutional contact, Personal donation and publisher.

#### **3.4.6 Automation:**

Patan Hospital library being used both software i.e. Libinfo, and win/isis software. The infolib software was web based software. It is appropriate for small libraries. Circulation, catalog, circulation, and OPAC services are provided to the users. This software based on barcode with picture system.

#### **3.4.7 Role of Librarian:**

A librarian is an information professional trained in library and information science, which is the organization and management of information services or materials for those with information needs.

In this modern age librarian provide various information in many formats such as information from different medical books, magazines, newspapers, audio recordings (both musical and spoken-word), video recordings, maps, manuscripts, photographs and other graphic material, bibliographic databases, web searching, and digital resources.

Librarians often provide other information services, including computer provision and training, coordination of public programs, basic literacy education, and assistive equipment for people with disabilities, and help with finding and using community resources.

#### **3.4.8 Internet:**

It has Dedicated Internet Network (DIN) for the library only. There are 38 computers in Patan Hospital Library where twenty has connected through dedicate 2MB internet bandwidth for user to get online databases and e-resources and used in circulation

system for staff purpose. Library hour internet service provided for different types of library members.

#### **3.4.9 Other Resources:**

Some online resources are available in the library such as HINARI, Pubmed, and in-house bibliographic, Up to date etc.

## **4. Chapter: RESEARCH METHODOLOGY**

### **4.1 Background of the study:**

To carry out this study, researcher has followed the descriptive and questionnaire methods, and application of Koha software of Central Medical Library, NAMS and application of Libinfo software of Patan Hospital. Libraries have been compared on the basis of profile, cost such as initial, recurring (supporting cost), training cost. It also has studied to find out institutional standard of MARC 21, Z39.50, Web based and supportive service. It also tried to find out the basis of infrastructure of both Koha and Libinfo automation software such as Internet capacity level of MB, Kbps, find out involvement person, also find out facilities of federated of those software, which models facilities are used by both software i.e. acquisition, cataloguing, circulation, service standard in user aspect. Through the survey method, researcher has collected the view of librarian's of both libraries i.e. Patan Hospital Library, and NAMS library and has been described by various methods. The researcher has used different tables, and explanation in descriptive ways and appropriate presentation method such as pie chart and diagrammatic representation method.

### **4.2 Research Design**

This study has tried to find out the role of open source koha software, Libinfo proprietary software. Descriptive method has been used for the study. Email, and questionnaire sent to the PAHS Librarian for collect related information. The researchers are confirm don't need more questioner for find out fact problems of both software i.e. Koha, and libinfo library automation which includes on the basis of software cost, Maintenance cost, installation process, models used and so on. Respondent i.e. librarian were contacted personally to fill the questionnaires. The data collected from the questionnaire have been analyzed using different statistical tools like mean and other frequency percentage and conclusions were drawn on their basis.

### 4.3 Population:

Central Medical library, National academy of medical science NAMS library is the greatest and first medical library in Nepal for post graduate, DM student. In this library, 276 post graduate students are doing specialist in different subject, 60 intern doctors are taking experience of working in real cases, 200 more medical officer are also studying in names and working in medical sector, and 1000 more Alumni student of NAMS and faculty member of NAMS are using Koha library Automation software this days.

Data was collected on PAHS Library using a structured questionnaire covering the relevant details. Pre testing was done by researcher. All the personnel involved in the study group were given a proper orientation on criteria for proprietary software i.e. and data collection methodology. All fact figure were explained about the nature of the study, their role, the advantages and disadvantages. In the Patan Academy of Health Sciences, there are different types of users like post graduate student studying in different faculties. There are also faculty members and other medical officers, staff nurses, Intern doctor etc. In this library there are 750 staff members, 90 medical staff, 250 nursing, 50 faculties members and 60 more MBBS students.

### 4.4 Sample and Sampling Procedure:

The achievement of the aims of a sample survey depend on the basis of field visit, objective of the study, statement of the problems, questionnaire of both library and summary and analysis of data. All of the above mention groups the researcher selected, information are collected on the basis of facts. Due to the lack of the man power, money and material the researcher selected following samples for the study. The comparative study of library automation software i.e open source software Koha, proprietary software Libinfo are divided in to four tables.

#### **4.4 Data Collection Procedure:**

The data required for this Thesis were collected by the following methods:

##### **a. Questionnaire Method:**

Questionnaire were distributed to librarian of Central Medical Library, NAMS and Librarian of Patan Hospital Library. The purpose of questionnaire was explained and requested them to fill up on the basis of fact. Only two proforma was used to collect the necessary informations for the research.

##### **b. Literature**

The historical and other information which are published on books and journal. Some information are collected from on the basis of IT person and other information were collected on the basis of librarian interview.

##### **c. Application feedback:**

Feedback were taken from both librarian about Koha software, and Libinfo software.

#### **4.5 Data Analysis Procedure:**

First step, data collected from questionnaire have been tested i.e. thoroughly checked and tabulated on the basis of characteristics, nature and magnitude of data. In the second step, data has been organized into classes categories and numbers have been given to each item according to the class in which it falls. The data are grouped under various understandable homogeneous groups for the purpose of convenient interpretation in the third step. After editing coding and classification of data, they have been presented



in the tabulation,description mentioned on the basis of tabulated form for analysis. The datas are qualitative in types.

## 5. Chapter: ANALYSIS AND INTERPRETATION OF DATA

### 5.1 Background:

Analysis and interpretation are the main focus in the research process. Analytical part depends on the nature and characteristics of data. If there are necessary to display digramatical presentation, researcher has worked in that way, if no need digramatically presentation, mean and other finding have been shown accordingly. The presentation and determinant part has been done on the basis of necessity and fact. The objective of analysis is to summarize the collected data to answer the questions under consideration. It makes an effort to establish continuity in work and to establish explanatory concepts (Joshi, 2003 P.148)

The collected data has been analyzed and presented in necessary tables. Diagram and figures are not shown as the collected informations are qualitative and were collected only from two diferrent institutions. The objective of the researcher is to make simple and understandable and to perform the comparative study between recently available proprietary software i.e. Libinfo and OSS i.e. Koha. The facts and figures are as mentioned below:

### 5.2 Analysis and interpretation of data:

Table Figure: 1 Operating cost (NRs)

Variable	Proprietary Software (Libinfo)	OSS (Koha)
Initial Cost	1,20,000	60,000 as a web hosting cost
Recurring Cost	15000	No
Update Cost	No	No
Training Cost	Non	Yes

Source: - Data from question no.B

The initial cost of proprietary software i.e. libinfo is 1,20,000, supporting cost of libinfo software is 15,000 and as a web hosting supporting cost Rs. 60,000 per year

expenditure on Koha software. New version updating cost were not necessary for both software. Initial cost recover the Koha training cost. Above figure fact shows that Koha software is cheaper than libinfo software.

**Table and Figure: 2 On the Basis of Institutional Standard**

Variables	Proprietary Software (Libinfo)	OSS (Koha)
a. MARC 21	Yes	Yes
b. Z39.50	Yes	Yes
c. Web Based	Web based currently not available	Yes
d. Supportive Service	Yes	Yes

Source: Data from question no C

Table 2 show that Institutional standard are same of proprietary software and OS. Currently libinfo is not available on website. For Web based need to create DNS Server and need link IP address. In near future user will get Patan Hospital library catalogue on web site.

**Table and Figure: 3 On the Basis of Infrastructure**

Variable	Proprietary Software (Libinfo)	OSS (Koha)
Internet Capacity (Broad band)	2 mb (38 computers)	4 mb for 157 computers and 9 wifi station
Involved Person	Expert + Librarian	Expert + Librarian
Federaed Search Provision	Not available	Available

Source: Data from question no. D

Above figures are showing the Strong basic infrastructure in both libraries. Both institutions librarians are efficient to handle and to participate in libinfo and Koha software training. Federaed searching facilities are available only in Koha OS software.

**Table and Figure: 4 On the Basis of Models Used**

Variable	Proprietary Software (Libinfo)	OSS (Koha)
Acquisition facilities	Yes	Yes
Cataloguing facilities	Yes	Yes
Circulation facilities	Yes	Yes
Service Standard	Yes	Yes

Source: Data from question no E

Above table showing that Acquisition, cataloguing, circulation and service standard models are used in libinfo software and Koha software.

## **6. Chapter: SUMMARY, FINDINGS, CONCLUSIONS AND RECOMMENDATION:**

### **6.1 Summary:**

This study has been carried out in the central medical library, NAMS, Bir Hospital and Patan Hospital Library. The main objectives of this study are to investigate and to find out better software which is more users friendly for library automation and that are more adopted by other libraries on the basis of cost and software maintenance services in the local market. The researcher prime objective is to find out the better software on the basis of Library management and digitalized resources. The main conclusions and recommendations on the basis of this study are as follows:-

### **6.2 Finding:**

1. Both software have played vital role in the field of library automation in different medical library.
2. Both library users are satisfied from bibliographic database management system.
3. Collections in both the libraries are not adequate for users.
4. OS Koha software is comparatively more cheaper but there is lack of trained manpower.
5. Libinfo was comparatively more easy to handle due to availability of quick technical support.
6. Comparitively OS i.e Koha has long installation process and frequently updated new version causing difficulty in updating the new knowledge.

7. There is monopoly market of OS in Nepal.
8. Both software can be used for Library automation. But Koha software is comparatively more user friendly because all koha informations are available in website.
9. For an uniformity of medical library use of OS Koha is better option because less libraries are using Libinfo software.

### 6.3 Conclusion:

1. Comparatively both libraries staffs and users are satisfied from library automation. Researcher study have been done with a small number of libraries, it is quite significant for understanding the value of libraries to medical professionals.
2. Many of the medical professionals don't get adequate current title of library collections on proper time due to the various causes and very few numbers of library staffs trained on OS i.e. Koha and Proprietary Libinfo software.
3. Both Libinfo and Koha software popular in internal market of Kathmandu, Nepal but more popular Koha software in international market. Both software objectives are web based library automation and also provide quick information to the user.
4. Both software are very useful and relivent on aspect of service delivery. Both software ful fill the five laws of library science.
5. Both library software play vital role to keep updated information to the user feedback and user demand.

#### 6.4 Recommendations:

1. Tribhuvan University, Department of Library and information science should introduce OS Koha software study opportunity for M.Lib.Sc student as a academic course.
2. Data conversion should be made easier as a card reader method.
3. All library should focus on digital library and update with latest information in medical field.
4. Number of library staff should be increased on the basis of work load.
5. Accurate and relevant information should be provided to the users.
6. The library can also do some information marketing function as printing, reprography service to raise finance.
7. Library networking should be developed from website linkage.
8. OS Koha, electronic tools and proprietary software training program should be increased and expanded
10. Both the software OS Koha and proprietary libinfo should be brought for application according to need of the library and grants should be provided to expand the software application.

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## THESIS QUESTIONNAIRE (NAMS LIBRARY)

This questionnaire is regarding to fulfillment of the requirements for the degree of Master of Arts in Library and Information Science. The researcher has decided to carry on “Comparative Study of Koha Open Source ILS and Libinfo Proprietor Software Used in NAMS and Patan Hospital Libraries”, where these types of software are used.

### A. Profile of Library:

1. Name of the library.....
2. Date of Establishment.....
3. Total number of books.....
4. Total number of journals.....
5. Total number of computers.....
6. Total number of printers.....
7. Photo copy service (please tick any one) a. available b. not available

### B. On the basis of Cost

- |   | OS Koha software |
|---|------------------|
| 1. Initial Cost                           | .....            |
| 2. Recurring cost<br>(Supportive Service) | .....            |
| 3. Update Cost                            | .....            |
| 4. Training Cost                          | .....            |

### C. On the basis of Institutional Standard:

- |                       | Tick any one of each questions |
|-----------------------|--------------------------------|
| 1. MARC 21)           | Yes / No                       |
| 2. Z39.50             | Yes / No                       |
| 3. Wcb based          | Yes/No                         |
| 4. Supportive Service | Yes/No                         |

### D. On the basis of Infrastructure: (number)

- |  | For OS Koha (pls tick any one of each |
|--|---------------------------------------|
| 1. Internet (Broad band)   | Yes / No                              |
| 2. Speed in Kbps / or MB   | Yes / No                              |
| 3. Who Involved in installation this software                                | Librarian /IT person                  |
| 4. Federated Search (Searching more than one Library's data browser capacity | Available / Not available             |

**E. On the basis of Modules used:**

**For OS Koha software (pls tick any one of each number)**

- |   |          |
|---|----------|
| 1. Acquisition Facilities                       | Yes / No |
| 2. Cataloguing facilities                       | Yes / No |
| 3. Circulation facilities                       | Yes / No |
| 4. Service standard in user aspect              | Yes / No |
| 5. Please if any more feature pls mention ..... |          |

**F. On the basis of problem faced in implementation:**

1. Data conversation time now this was solved by OS Koha software

.....  
.....  
.....  
.....  
.....

2. Which procedure adopted in data conversation time by OS Koha software i.e.

.....  
.....  
.....  
.....

**G. Meet your library requirement by this software:**

**For Koha software  
(plstick any one of each number)**

- a. Professional and users are satisfied from library automation Satisfied / Not satisfied
- b. Medical professional get adequate resources average/medium/satisfactory
- c. Sufficient information tools in your library sufficient / not sufficient

## THESIS QUESTIONNAIRE (PATAN HOSPITAL LIBRARY)

This questionnaire is regarding to fulfillment of the requirements for the degree of Master of Arts in Library and Information Science. The researcher has decided to carry on "Comparative Study of Koha Open Source ILS and Libinfo Proprietor Software Used in NAMS and Patan Hospital Libraries", where these types of software are used.

### II. Profile of Library:

8. Name of the library.....
9. Date of Establishment.....
10. Total number of books.....
11. Total number of journals.....
12. Total number of computers.....
13. Total number of printers.....
14. Photo copy service (please tick any one) a. available b. not available

### I. On the basis of Cost

- |  |                                    |
|--|------------------------------------|
| 5. Initial Cost                        | For proprietary software (Libinfo) |
| 6. Recurring cost (Supportive Service) | .....                              |
| 7. Update Cost                         | .....                              |
| 8. Training Cost                       | .....                              |

### J. On the basis of Institutional Standard:

- |                       |                                |
|-----------------------|--------------------------------|
| 5. MARC 21)           | Tick any one of each questions |
| 6. Z39.50             | Yes / No                       |
| 7. Web based          | Yes / No                       |
| 8. Supportive Service | Yes/No                         |

### K. On the basis of Infrastructure:

- |   |   |
|---|---|
| 5. Internet (Broad band)                      | For Libinfo (pls tick any one of each number) |
| 6. Speed in Kbps / or MB                      | Yes / No                                      |
| 7. Who Involved in installation this software | Yes / No                                      |
| 8. Federated Search (Searching more than one  | Librarian /IT person                          |

Library's data browser capacity

Available / Not available

**L. On the basis of Modules used:**

For Libinfo software (pls tick any one of each number)

- 6. Acquisition Facilities Yes / No
- 7. Cataloguing facilities Yes / No
- 8. Circulation facilities Yes / No
- 9. Service standard in user aspect Yes / No
- 10. Please if any more feature pls mention .....

**M. On the basis of problem faced in implementation:**

1. Data conversation time now this was solved by Libinfo software

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2. Which procedure adopted in data conversation time by Libinfo

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**N. Meet your library requirement by this software:**

For Libinfo software  
(pls tick any one of each  
number)

- a. Professional and users are satisfied from library automation Satisfied / Not satisfied
- b. Medical professional get adequate resources average/medium/satisfactory
- c. Sufficient information tools in your library sufficient / not sufficient

## CURRICULUM – VITAE

### LIBRARIAN OF NATIONAL ACADEMY OF MEDICAL SCIENCES, BIR HOSPITAL

#### INTRODUCTION:

Name: UPENDRA PRASAD MAINALI  
Gender : Male  
Date of Birth : 19 November 1964  
Nationality : Nepali  
Marital Status : Married (with two sons)  
Permanent Residency : Kapan – 3, Kathmandu  
Contact: Mobile No. : 9841143485  
E-mail Address : mainali\_upendra\_84@hotmail.com

#### ACADEMIC QUALIFICATION:

- Master Degree in Public Administration II Division from Tribhuvan University, 2000

#### TRAINING:

- 2 Months, Library Science from IDRC and TUCL, Ktm., Nepal
- 1 Month, Environmental Educational from Sida, Sweden
- 2 Months, Computer Ms word, Excel from May Field, Ktm, Nepal
- 1 Month, On the job training from Administrative Staff College, Ktm, Nepal
- 1 Month, Educational Management Training from NCED, Sanothimi, Nepal
- 1 Month, Report writing and oral communication skill from American Language Centre, Kathmandu, Nepal
- 11 days, Exposure visit on Information Technology on Health and HELLIS activities in Thailand
- 7 days, 18<sup>th</sup> Mountaineering liaison officer orientation training from Ministry of Cultural, Tourism and Civil Aviation, Kathmandu, Nepal

- 7 days, Training of Trainers workshop on Information management for HELLIS Librarian, WHO, Kathmandu, Nepal
- 3 days INASP training workshop on Koha from TUCL, 2009

**PUBLICATION:**

- Report writing on Privatization of Nepal
- Case study on non-formal education in Lalitpur District
- Research on comparative study on promotion system in Nepal
- Report writing on Air pollution of Kathmandu valley impact, causes and recommendation.
- Knowledge management article publication on Infolib of LISA publication
- An introduction of Central Medical Library of NAMS, Bir Hospital Souvenir

**TRAVEL:**

China (Mansarobar, Kailash Parbat in Tarchen), India (Ahamdawad, Delhi), Sweden, Denmark, Thailand

**LANGUAGE:**

Nepali, English, Hindi