

Volume 6, Issue 1 (XXII)
January - March 2019

ISSN 2394 - 7780



International Journal of
Advance and Innovative Research
(Conference Special)

Indian Academicians and Researchers Association
www.iaraedu.com



**Bunts Sangha's
S. M. Shetty College of Science, Commerce and Management Studies
Powai, Mumbai**

NatioNal CoNfereNce on

"Re-engineering AcAdemic LibrAries : TrAdiTionAL To smArT"

Saturday, 2nd March 2019

Organised by
Learning Resource Center

In Association with
Internal Quality Assurance Cell (I.Q.A.C.)

Publication Partner



Indian Academicians and Researcher's Association

A BRIEF ABOUT ORGANIZING COMMITTEES

Patrons

Shri. Padmanabha S. Payyade

President, Bunts Sangha, Mumbai

CA Shankar B. Shetty

Chairman, PEC

Shri. B R Shetty

Vice-Chairman, PEC

Shri. Nityanand Hegde

Vice-Chairman, PEC

Shri. Harish Vasu Shetty

Secretary, PEC

CA Harish D. Shetty

Treasurer, PEC

Conference Committee

Dr. Sridhara Shetty

Principal,

Bunts Sangha's S. M. Shetty College of Science, Commerce and Management Studies, Mumbai

Dr. Liji Santosh

Vice-Principal & I.Q.A.C. Cordinator

Bunts Sangha's S. M. Shetty College of Science, Commerce and Management Studies, Mumbai

Ms. Smitha Ravindranath

Librarian

Bunts Sangha's S. M. Shetty College of Science, Commerce and Management Studies, Mumbai

Organizing Committee

Ms. Vandana Gharge

Ms. Prachi Agarwal

Ms. Darpana Manjrekar

Ms. Raveena Shetty

Ms. Rohini Shetty

Mr. Dattatray Dubal

Ms. Geeta Shetty

Guest Editor of Special Issue

Dr. Sridhara Shetty

Principal,

Bunts Sangha's S.M. Shetty College of Science,
Commerce & Management Studies, Powai, Mumbai

Member Editors

Dr. Liji Santosh

Vice-Principal & I.Q.A.C. Coordinator,

Bunts Sangha's S.M. Shetty College of Science,
Commerce & Management Studies, Powai, Mumbai

Dr. Sachin Shastri

Librarian,

V.K. Krishna Menon College, Bhandup, Mumbai

Dr. Yojana Patil

Librarian

DTSS College of Commerce & Science, Malad, Mumbai

Ms. Smitha Ravindranath

Librarian

Bunts Sangha's S.M. Shetty College of Science,
Commerce & Management Studies, Powai, Mumbai

About the College

Bunts Sangha, Mumbai was established in 1927 as a Charitable Trust and devoted itself to the cause of education, health care and social reforms of downtrodden and underprivileged class of people. The Sangha has been in the service of people for almost ten decades. During the last decade, more emphasis was given to the education of the masses.

Bunts Sangha's S.M. Shetty College of Science, Commerce and Management Studies was established in 2008 by Bunts Sangha, Mumbai. The college is affiliated to University of Mumbai. Bunts Sangha's S.M. Shetty College of Science, Commerce and Management Studies is committed to the promotion and propagation of quality education with excellence. Currently the college offers B.Com, B.B.I., B.A.F., B.M.S., B.M.M., B.Sc.IT., M.Com (Advanced Accountancy) and M.Sc.IT. programmes with around 2,200 students on roll. College has approved Ph.D. centre in Commerce leading to Ph.D. degree. College looks forward eagerly to a continuing and creative engagement in the field of education with the challenges of time. It has been accredited by NAAC with 'A' grade and is ISO certified 9001 : 2015.

Learning Resource Center (LRC)

Library at Bunts Sangha's S.M. Shetty College of Science, Commerce & Management Studies, Powai truly lives up to its name of '**Learning Resource Center**' by providing a variety of information resources for Teaching, Learning & Research. The Library is fully air-conditioned & the overall ambience of the library is very conducive for learning with 12 hours of library timing. The library possesses both print & e-resources to satisfy the information needs of its users, i.e. staff and students. Library resources comprises of text books & reference books, journals, magazines, newspapers, globe, maps, old question papers and CD-ROMs. In-house operations of the library are automated through SOUL Library Software. The Library has subscription to N-LIST e-resource database (by UGC - INFLIBNET), through which students & teachers can access e-journals and e-books. Students are provided with 15 computers in the library with internet facility for their study & research purpose. In addition to this, Wi-Fi connectivity is also provided to the students. The library also offers book bank facility to the economically weak students. The library has membership to Tata Institute of Social Sciences Library. Other facilities include online catalogue of the Library collection, & customized access to many subject related online resources through Directory of Open Access Journals (DOAJ). Latest news & additions to the library is conveyed through a LED screen kept in the library. The Library houses a separate Teacher's Corner for teachers where 7 computer terminals are provided along with 1 printer & 1 printer-cum-scanner. Online catalogue of the library, 'OPAC' enables users to search for resources available in the library. To keep the teaching fraternity abreast with the latest developments in their field, the library provides contents page service of current periodicals on a regular basis. News alert through WhatsApp is provided to the teachers daily. Students are guided in their search for information as well as information resources by the library staff, as & when needed. Digital Repository created by the library offers access to past years question papers & other online resources. To inculcate good reading habits amongst the students, various events like Book Review Competitions, Book Displays, Book Exhibition etc. are arranged by the library. The library conducts orientation programmes & library awareness programmes on a regular basis. Apart from this the library provides a variety of services to its users. Library is secured by 5 CCTV cameras & 2 fire extinguishers. 'Voracious Reader' award of the library is given very year during the college Annual Day function.

About IARA

Indian Academicians and Researchers Association (IARA) is an educational and scientific research organization of Academicians, Research Scholars and practitioners responsible for sharing information about research activities, projects, conferences to its members. IARA offers an excellent opportunity for networking with other members and exchange knowledge. It also takes immense pride in its services offerings to undergraduate and graduate students. Students are provided opportunities to develop and clarify their research interests and skills as part of their preparation to become faculty members and researcher. Visit our website www.iaraedu.com for more details.

Key Note Speaker

Dr. Satish Kanamadi

Librarian ,
Tata Institute of Social Sciences, Mumbai

Dr.Satish is a distinguished librarian and faculty who has been conferred with Two Gold Medals for achieving First Rank at Masters (1995) and UGC Junior Research Fellowship (1997). He is a science graduate and has completed his master's and doctoral studies from Karnataka University, Dharwad. In September 2010, he was awarded Commonwealth Professional Fellowship by the Commonwealth Scholarship Commission, UK and was in London School of Economics, London, UK for three months. He has successfully guided one PhD and another six are pursuing PhD under his supervision. . His research contributions include over 30 journal articles, edited volumes, book chapters, etc. He has been the coordinator for several workshops, conferences and UGC refresher courses.

Technical Sessions Chaired by:

Dr. Sachin Shastri

Librarian,
V.K. Krishna Menon College, Mumbai.

Dr. Yojana Patil

Librarian
DTSS College of Commerce & Science, Mumbai

Dr. Sachin J. Shastri

M. A. (Eco.), M. L. I. Sc., M. Phil. (Lib. and Inf. Sci.), Ph. D. (Lib. and inf. Sci.)

Dr. Shashtri completed his Ph.D. on "University Libraries in 2020: A Delphi based investigation with special reference to University Libraries in India". He has an experience of more than 20 years. He is a VC nominee subject expert for selection of post of Librarian in various colleges. He has been invited as a resource person at various colleges to deliver the presentations on various topics related to Library and Information Science. Dr. Shastri is also an external examiner at BLIB Sc and MLISc Centres of YCMOU. Dr. Shastri has presented and published papers at various national and international level conferences and seminars.

Dr. Yojana Yatin Patil

M.D.(A.M.), Medicine, (IBAM) Kolkata, Doctoral Degree in Spiritual Healing, B. Lib. Sc., M.A. (Sanskrit/Pali)

Dr. Yojana Patil has a work experience of more than 30 years. She is V. C. Nominee as subject expert at 21 colleges & Management Nominee at 18 Colleges. Dr. Patil was appointed as Vice Chancellor's Nominee on Local Inquiry Committee of M.L.I.Sc. Course at Joshi Bedekar College, Thane in April 2012. Dr. Yojana Patil has attended many workshops & seminars at State, National and International levels. She has also many publications at national and international level to her credit. Dr. Patil has also taken initiatives in conducting community level activities during the college vacations.

International Journal of Advance and Innovative Research

Volume 6, Issue 1 (XXII): January - March 2019

Editor- In-Chief

Dr. Tazyn Rahman

Members of Editorial Advisory Board

Mr. Nakibur Rahman

Ex. General Manager (Project)
Bongaigoan Refinery, IOC Ltd, Assam

Dr. Alka Agarwal

Director,
Mewar Institute of Management, Ghaziabad

Prof. (Dr.) Sudhansu Ranjan Mohapatra

Dean, Faculty of Law,
Sambalpur University, Sambalpur

Dr. P. Malyadri

Principal,
Government Degree College, Hyderabad

Prof.(Dr.) Shareef Hoque

Professor,
North South University, Bangladesh

Prof.(Dr.) Michael J. Riordan

Professor,
Sanda University, Jiashan, China

Prof.(Dr.) James Steve

Professor,
Fresno Pacific University, California, USA

Prof.(Dr.) Chris Wilson

Professor,
Curtin University, Singapore

Prof. (Dr.) Amer A. Taqa

Professor, DBS Department,
University of Mosul, Iraq

Dr. Nurul Fadly Habidin

Faculty of Management and Economics,
Universiti Pendidikan Sultan Idris, Malaysia

Dr. Neetu Singh

HOD, Department of Biotechnology,
Mewar Institute, Vasundhara, Ghaziabad

Dr. Mukesh Saxena

Pro Vice Chancellor,
University of Technology and Management, Shillong

Dr. Archana A. Ghatule

Director,
SKN Sinhgad Business School, Pandharpur

Prof. (Dr.) Monoj Kumar Chowdhury

Professor, Department of Business Administration,
Guahati University, Guwahati

Prof. (Dr.) Baljeet Singh Hothi

Professor,
Gitarattan International Business School, Delhi

Prof. (Dr.) Badiuddin Ahmed

Professor & Head, Department of Commerce,
Maulana Azad National Urdu University, Hyderabad

Dr. Anindita Sharma

Dean & Associate Professor,
Jaipuria School of Business, Indirapuram, Ghaziabad

Prof. (Dr.) Jose Vargas Hernandez

Research Professor,
University of Guadalajara, Jalisco, México

Prof. (Dr.) P. Madhu Sudana Rao

Professor,
Mekelle University, Mekelle, Ethiopia

Prof. (Dr.) Himanshu Pandey

Professor, Department of Mathematics and Statistics
Gorakhpur University, Gorakhpur

Prof. (Dr.) Agbo Johnson Madaki

Faculty, Faculty of Law,
Catholic University of Eastern Africa, Nairobi, Kenya

Prof. (Dr.) D. Durga Bhavani

Professor,
CVR College of Engineering, Hyderabad, Telangana

Prof. (Dr.) Shashi Singhal

Professor,
Amity University, Jaipur

Prof. (Dr.) Alireza Heidari

Professor, Faculty of Chemistry,
California South University, California, USA

Prof. (Dr.) A. Mahadevan

Professor
S. G. School of Business Management, Salem

Prof. (Dr.) Hemant Sharma

Professor,
Amity University, Haryana

Dr. C. Shalini Kumar

Principal,
Vidhya Sagar Women's College, Chengalpet

Prof. (Dr.) Badar Alam Iqbal

Adjunct Professor,
Monarch University, Switzerland

Prof.(Dr.) D. Madan Mohan

Professor,
Indur PG College of MBA, Bodhan, Nizamabad

Dr. Sandeep Kumar Sahratia

Professor
Sreyas Institute of Engineering & Technology

Dr. S. Balamurugan

Director - Research & Development,
Mindnotix Technologies, Coimbatore

Dr. Dhananjay Prabhakar Awasarikar

Associate Professor,
Suryadutta Institute, Pune

Dr. Mohammad Younis

Associate Professor,
King Abdullah University, Saudi Arabia

Dr. Kavita Gidwani

Associate Professor,
Chanakya Technical Campus, Jaipur

Dr. Vijit Chaturvedi

Associate Professor,
Amity University, Noida

Dr. Marwan Mustafa Shamot

Associate Professor,
King Saud University, Saudi Arabia

Prof. (Dr.) Aradhna Yadav

Professor,
Krupanidhi School of Management, Bengaluru

Prof.(Dr.) Robert Allen

Professor
Carnegie Mellon University, Australia

Prof. (Dr.) S. Nallusamy

Professor & Dean,
Dr. M.G.R. Educational & Research Institute, Chennai

Prof. (Dr.) Ravi Kumar Bommiseti

Professor,
Amrita Sai Institute of Science & Technology, Paritala

Dr. Syed Mehertaj Begum

Professor,
Hamdard University, New Delhi

Dr. Darshana Narayanan

Head of Research,
Pymetrics, New York, USA

Dr. Rosemary Ekechukwu

Associate Dean,
University of Port Harcourt, Nigeria

Dr. P.V. Praveen Sundar

Director,
Shanmuga Industries Arts and Science College

Dr. Manoj P. K.

Associate Professor,
Cochin University of Science and Technology

Dr. Indu Santosh

Associate Professor,
Dr. C. V.Raman University, Chhattisgarh

Dr. Pranjal Sharma

Associate Professor, Department of Management
Mile Stone Institute of Higher Management, Ghaziabad

Dr. Lalata K Pani

Reader,
Bhadrak Autonomous College, Bhadrak, Odisha

Dr. Pradeepta Kishore Sahoo

Associate Professor,
B.S.A, Institute of Law, Faridabad

Dr. R. Navaneeth Krishnan

Associate Professor,
Bharathiyar College of Engg & Tech, Puducherry

Dr. Mahendra Daiya
Associate Professor,
JIET Group of Institutions, Jodhpur

Dr. Parbin Sultana
Associate Professor,
University of Science & Technology Meghalaya

Dr. Kalpesh T. Patel
Principal (In-charge)
Shree G. N. Patel Commerce College, Nanikadi

Dr. Juhab Hussain
Assistant Professor,
King Abdulaziz University, Saudi Arabia

Dr. V. Tulasi Das
Assistant Professor,
Acharya Nagarjuna University, Guntur, A.P.

Dr. Urmila Yadav
Assistant Professor,
Sharda University, Greater Noida

Dr. M. Kanagarathinam
Head, Department of Commerce
Nehru Arts and Science College, Coimbatore

Dr. V. Ananthaswamy
Assistant Professor
The Madura College (Autonomous), Madurai

Dr. S. R. Boselin Prabhu
Assistant Professor,
SVS College of Engineering, Coimbatore

Dr. A. Anbu
Assistant Professor,
Acharya College of Education, Puducherry

Dr. C. Sankar
Assistant Professor,
VLB Janakiammal College of Arts and Science

Dr. G. Valarmathi
Associate Professor,
Vidhya Sagar Women's College, Chengalpet

Dr. M. I. Qadir
Assistant Professor,
Bahauddin Zakariya University, Pakistan

Dr. Brijesh H. Joshi
Principal (In-charge)
B. L. Parikh College of BBA, Palanpur

Dr. Namita Dixit
Associate Professor,
ITS Institute of Management, Ghaziabad

Dr. Nidhi Agrawal
Assistant Professor,
Institute of Technology & Science, Ghaziabad

Dr. Ashutosh Pandey
Assistant Professor,
Lovely Professional University, Punjab

Dr. Subha Ganguly
Scientist (Food Microbiology)
West Bengal University of A. & F Sciences, Kolkata

Dr. R. Suresh
Assistant Professor, Department of Management
Mahatma Gandhi University

Dr. V. Subba Reddy
Assistant Professor,
RGM Group of Institutions, Kadapa

Dr. R. Jayanthi
Assistant Professor,
Vidhya Sagar Women's College, Chengalpattu

Dr. Manisha Gupta
Assistant Professor,
Jagannath International Management School

Copyright @ 2019 Indian Academicians and Researchers Association, Guwahati
All rights reserved.

No part of this publication may be reproduced or transmitted in any form or by any means, or stored in any retrieval system of any nature without prior written permission. Application for permission for other use of copyright material including permission to reproduce extracts in other published works shall be made to the publishers. Full acknowledgment of author, publishers and source must be given.

The views expressed in the articles are those of the contributors and not necessarily of the Editorial Board or the IARA. Although every care has been taken to avoid errors or omissions, this publication is being published on the condition and understanding that information given in this journal is merely for reference and must not be taken as having authority of or binding in any way on the authors, editors and publishers, who do not owe any responsibility for any damage or loss to any person, for the result of any action taken on the basis of this work. All disputes are subject to Guwahati jurisdiction only.



Journal - 63571

UGC Journal Details

Name of the Journal : International Journal of Advance & Innovative Research

ISSN Number :

e-ISSN Number : 23947780

Source: UNIV

Subject: Multidisciplinary

Publisher: Indian Academicians and Researchers Association

Country of Publication: India

Broad Subject Category: Multidisciplinary

CONTENTS

Research Papers

A COMPARATIVE STUDY OF RE ENGINEERING OF LIBRARY RESOURCES AND LIBRARY SERVICES AMONG NCRD'S SIP LIBRARY AND DY PATIL SBB LIBRARY	1 – 7
Rajshree Ravi Autade and Sunita Jadhav	
PERSONNEL MANAGEMENT IN ICT AND KNOWLEDGE RESOURCES CENTRES	8 – 11
Dr. Rajkumar Ghule	
APPLICATION OF WEB 2.0 TOOLS UNIVERSITY LIBRARIES IN MAHARASHTRA	12 – 20
S. A. Dhande and Dr. R. R. Paithnkar	
REDUCING TRAVEL STRESS THROUGH ROLE OF LIBRARY	21 – 24
Meena Suryavanshi and Dr. S.K. Sharma	
A CASE STUDY: RE-ENGINEERING & DEVELOPMENT OF KBP COLLEGE LIBRARY, VASHI NEW MUMBAI	25 – 27
Gherade Bhagavan D. and Lad Reshma P.	
REENGINEERING LIBRARIES OF TODAY FOR TOMORROW: SPECIAL REFERENCE TO SHREEMATI NATHIBHAI DAMODAR THAKERSAY WOMEN'S UNIVERSITY BHARATRATNA MAHARSHI KARVE KNOWLEDGE RESOURCE CENTRE, JUHU BRANCH	28 – 31
Vrushali Rane	
USE OF FACEBOOK BY THE STUDENTS OF PERFORMING ARTS (INDIAN CLASSICAL DANCE), MUMBAI: A STUDY	32 – 35
Ramyia Shreejesh	
ELECTRONIC LIBRARY AND LIBRARY NETWORKS IN INDIA	36 – 38
Rohidas B. Rathod and Dr. Shilpa Gawande	
LIBRARY AUTOMATION: AN OVERVIEW IN RATNAGIRI DISTRICT COLLEGE LIBRARIES AFFILIATED TO MUMBAI UNIVERSITY	39 – 46
Subhash S. Mayangade	
EVALUATION OF WEB BASED SKILLS AMONG COLLEGE LIBRARIANS	47 – 56
Dr. Sachin J. Shastri	
GENERIC STUDY ON "DIGITIZING AND INTERPRETING OLD MANUSCRIPTS" – EXEMPLARY OF THE INDIAN ANCIENT SCRIPTS WITH SPECIAL REFERENCE TO AYURVEDA	57 – 59
Disha Roshan Bhakta	
RE-ENGINEERING LIBRARY PROFESSIONALS WITH STRESS HEALING TECHNIQUES	60 – 62
Dr. Yojana Patil	

CLOUD COMPUTING AND LIBRARIES	63 – 66
Dr. Jayshree S. Gohad	
SEARCH ENGINES WITH REFERENCE TO INFORMATION RETRIEVAL: A CASE STUDY OF LIBRARY AND INFORMATION SCIENCE STUDENTS UNIVERSITY OF MUMBAI	67 – 81
Rosy S. Khan	
BEST PRACTICES IN ACADEMIC LIBRARIES WITH SPECIAL REFERENCE TO LEARNING RESOURCE CENTER AT BUNTS SANGHA'S S.M. SHETTY COLLEGE OF SCIENCE, COMMERCE & MANAGEMENT STUDIES	82 – 85
Smitha Ravindranath	
BUILDING UP AN INSTITUTIONAL REPOSITORY IN DIGITAL ENVIRONMENT	86 – 90
Yamini P. Galapure	
FREEDOM OFFERED BY WIKIMEDIA: A GIVE AND TAKE POLICY	91 – 95
Dattatray Popat Sankpal and Dr. Vilas Govind Jadhav	

A COMPARATIVE STUDY OF RE ENGINEERING OF LIBRARY RESOURCES AND LIBRARY SERVICES AMONG NCRD'S SIP LIBRARY AND DY PATIL SBB LIBRARY

Rajshree Ravi Autade¹ and Sunita Jadhav²Librarian¹, NCRD's Sterling Institute of Pharmacy, Navi MumbaiAssistant Librarian¹, School of Biotechnology and Bioinformatics, Navi Mumbai

ABSTRACT

Information technology has brought significant changes in the global industry. Now a day's Re engineering has been very popular in the business world. It is equally become necessary in academic libraries also. The users of today's libraries are tech-savvy. To meet the changing needs of the users, there is a need of redesigning of libraries in various areas especially in the terms of library resources and services.

The current paper is a comparative study of two different college libraries from different streams like pharmacy and biotechnology; the selected libraries are NCRD's SIP Library & D.Y. Patil SBB Library. Authors have also emphasized on the need, characteristics and challenges of Re engineering the libraries and made an attempt to do comparative study among both the libraries in terms of the current status of library automation, library resources and library services that facilitate teaching and learning.

Keywords: Reengineering, Automation, ICT, Digital Library, e-library, Digitization.

INTRODUCTION

The growth of IT has brought great change in library and information science. The use of IT has changed the traditional concept of libraries from stock of books to an intellectual information centre entailed the concept of e-library and digital library. E-resources have changed not only the information storage and retrieval process but also the routine housekeeping activities of library. To meet the changing needs as well as attitude of library user's libraries need to come up with innovative practices. Re-engineering involves an advancement of key practices, keeping users at the center. The reengineering of library will be an aid in creating a new learning environment in libraries. This will improve resources, facilities and services of the library. The use of technological services and functioning method has changed the grace of the libraries. The information retrieval process is now becoming faster and possibly accurate. Reengineered libraries are more over working as hybrid libraries, balancing both print and electronic resources. They are paying attention to accept and offer new technological services along with the traditional services.

MEANING & DEFINITIONS OF RE-ENGINEERING

1} Reengineering does not mean using new computer systems in the existing system (i.e. replacing manual system). Rather, it is the modification of the existing system by the computer based system or a new human based system, and can even replace an existing computer based system with a human based system.

2} Microsoft Computer Dictionary defines the term 'Reengineer' (verb) as 'To rethink and redefine processes and procedures.'

3} Encyclopedia of Information Technology defines reengineering as 'the examination and modification of a system to reconstitute it in a new form and the subsequent implementation of the new form'.

4} Hammer & Champy (1933) says "Re-engineering is the Fundamental rethinking & radical redesign of business processes to achieve dramatic improvements in critical contemporary measures of performance such as cost, quality, service & speed."

OBJECTIVES OF RE-ENGINEERING

- To satisfy the user's needs and demands.
- To provide right information at the right time by making best use of information technology.
- To achieve improvement in the performance specifically in terms of the library and information services
- To satisfy the organization's strategic goals
- To cope the challenges posed by information explosion

NEED OF RE-ENGINEERING FOR ACADEMIC LIBRARY

Following reasons points out the need for Re-engineering in College Library:

- To deal with the challenges created by information explosion, evolution of IT and ICT
-

- To fulfill comprehensive information needs of library users.
- To restructure information services of College Library.
- To provide precise thorough information to the end-users of the library.

CHARACTERISTICS OF REENGINEERING

- **Re** engineering can be done with an existing system only because re engineering concept means the replacement of the existing system with a new or modified system.
- **Re** engineering is not a solution to a specific problem rather it is applied to a long term problem in existing user centered organization to make it more users friendly.

CHALLENGES OF RE-ENGINEERING

- Need of successful leadership for successful implementation of Reengineering
- Impact of ICT on Libraries
- New electronic information environment
- Latest techniques and concepts in managing of information
- Increase in users information needs
- Increased cost of the documents and information materials
- Information Explosion

RE ENGINEERING OF NCRD'S SIP LIBRARY AND D. Y. PATIL SBB LIBRARY

Objectives

The basic objective of the paper is to show and compare the present status of the re engineering of NCRD's SIP Library and D. Y. Patil SBB Library.

Along with this objective, we have tried to explore the following basic things related to a college library.

- Physical layout/ facilities of Library
- Collection of the libraries.
- Library and Information Services.
- Human Resources
- Status of current process of Library Housekeeping operations
- Re engineering of Library & Information Resources

SCOPE AND LIMITATIONS OF THE STUDY

NCRD Institute as well as D.Y. Patil Institute runs various courses under one management, out of these; in our present study we have included only pharmacy college library and Biotechnology Library.

METHODOLOGY

Interview method has been used for collecting the required information related to our study.

GENERAL INFORMATION ABOUT BOTH THE LIBRARIES

1. NCRD's SIP Library

National Centre for Rural Development (NCRD) a registered public charitable trust was founded in 1991. During the course of its various activities aimed at the upliftment of rural youth, NCRD realized early on that true rural development was not possible without the basic education for the rural folk. With this view in mind, in the year 1991 it established a school in Ambegaon in Pune district which was then a very backward area. This educational voyage has continued and now the trust has to its credit no. of schools, degree colleges, and professional courses like pharmacy, management computer applications etc. In the Year 2004-05, NCRD widened its educational activities and established the Sterling Institute of Pharmacy. It is located in Nerul which is the biggest residential node of Navi Mumbai. As the Institute is affiliated to University of Mumbai and approved by A.I.C.T.E. people come with the desire to obtain University degree. The Institute has a spacious computerized library with multiple editions of National and International books. It also subscribes National & International journals, periodicals, and magazines to keep the students abreast with the recent developments in field of pharmacy.

2. D.Y.Patil SBB Library

The Founder of D.Y. Patil University is Padma shree Dr D. Y. Patil His vision, dedication and passion has been indelibly influenced, by his wisdom and generosity and has left several benchmarks, in private higher education. This private self funded University established in 2003 under the section 3 of the UGC Act 1956. School of Biotechnology and Bioinformatics is one of amongst various schools under this University, viz. Medicine, Dentistry, Ayurveda, Nursing, Hospitality and Catering Technology, Management established under D.Y. Patil University in 2003 at CBD Belapur Navi Mumbai. School of Biotechnology and Bioinformatics run the UG, PG courses in the field of Biotechnology, Bioinformatics and Food Technology. School of Biotechnology and Bioinformatics is approved by UGC, AICTE and received accreditation with A Grade twice by NAAC.DY Patil SBB Library has nice collection of print as well as non print resources which facilitate in teaching learning system.

Comparative Analysis of the Re engineering of NCRD’s SIP Library and D Y Patil SBB Library

The comparative analysis of both the libraries has been done in terms of various factors such as physical layout, collection of library resources, library and information services etc.and the information has been mentioned in tabular form as following:

Table-1: Physical Layout/ Facilities of College Library

Table 1 Physical Layout/ Infrastructure of College Library

Sr. No.	Name of the Institute	Name of the Library	Year	Area	Seating Capacity	Air Condition	Computers
1.	NCRD’s Sterling Institute of Pharmacy	NCRD’s SIP Library	2004	200Sq.m.	80	Fully Air conditioned	12
2.	D.Y.Patil University	D.Y. Patil SBB Library	2003	398 Sq. m	125	No	10

The Table 1 shows that both the libraries infrastructure is very much convenient for the readers. Due to the individual reading table and chairs, the readers feel to seat in reading room for the study. Various sections like books section, journals section, circulation, computer sections are there to provide access to all type of resources to the library users. NCRD’s SIP library has an additional facility of air condition and no. of terminals is also more compared to D Y Patil SBB Library. D Y Patil Library is superior in terms of area and seating capacity.

Table-2: Collection of the Libraries

The Table 2 shows the collection of both the libraries. It is further divided on the basis of type of resources as Table 2.1consists of the collection of Print and Non print Resources where as Table 2.2 deals with the e-resources & digital resources of libraries.

Table-2.1: The collection of Print and Non Print Resources of both the college libraries:

Sr. No.	Name of College Library	Print Resources		Non Print Resources		
		Books	Journals	e- Books	e-journals	CDs
1.	NCRD’s SIP Library	8000	15	753	1607	150
2.	D.Y.Patil SBB Library	7470	18	849	02	1283

It has been found from Table 2.1 that both the college libraries have a good collection of print as well as non print resources. It has been noted that NCRD’s SIP Library has more collection of e-journals and print books compared to D Y Patil SBB Library while DY Patil Library has great collection of e- books & CDs.

Table-2.2: Status of E-resources and Digital Resources

Sr. No.	Name of the College Library	E-Resources Subscription Status	No. of available terminals for access
1.	NCRD’s SIP Library	1. K-Hub Pharmacy e-library [including e-books, e-journals, e-theses, e-newspapers. Conference articles etc.] 2.National Digital Library 3.D space	10
2.	D.Y. Patil SBB Library	1.IEEE (one title) 2.ProQuest Database (with e-books, e-dissertations and e-theses) 3.Membership of : NDL (E-resources), NPTEL Video Lectures In Process: Dspace IR	05

Table 2.2 reveals that both the libraries have subscribed e-resources from respective publishers as prescribed in AICTE’s Norms and made accessible to the library users as sufficient number of computer systems are available in both the libraries.

Table-3: Library Automation and Digitization:

Sr. No.	Library Name	Software Name	Automation Partial/Full	Bar Code Technology	Digitization of Resources
01.	NCRD’s SIP Library	LIBRERIA	Partial	Yes	In Process
02.	D.Y. Patil SBB Library	SLIM 21	Partial	Yes	No

Table 3 describes the status of library automation and digitization. Both the libraries are partially automated; data entries of the library resources are done in the library management system. The libraries have standard Library Management Software’s. NCRD’s SIP Library has done automation with the help of library management software, “LIBRERIA” while D.Y. Patil SBB library has done computerization with the help of “SLIM 21. Both the libraries are using bar code technology for circulation.

Both the libraries are planning to develop Institutional Repositories as well as to do digitization of student’s projects, question papers, syllabus, lecture notes etc. with the help of **D Space**.

This information reflects that the present scenario of college library automation and digitization of library resources of both the libraries is at initial stage.

Table-4: Re engineering of Library Functions and Services

Table 4 has further classified in two types.

Table 4.1 which explain about the traditional as well as modified version of library functions. **Table 4.2** describes about how the adoption of IT brought transition in previous library and information services.

Table-4.1: Status of Re engineering of Library Functions in NCRD’s SIP & D.Y. Patil SBB Library

Library functions	NCRD’s SIP		D.Y.Patil SBB	
	Before Library Automation	After Library Automation	Before Library Automation	After Library Automation
Accession	Manually in Accession Register	Data entry in Library management Software	Manually in Accession Register	Data entry in Library management Software
Classification	Use of DDC Print version	Use of Online Dewey	Use of DDC Print version	Use of Online Dewey
Cataloguing	Hand written catalogues used to be arranged in catalogue cabinets	OPAC(Online Public Access Catalogue facility available in Library Software	No Cataloguing	OPAC(Online Public Access Catalogue facility available in Library Software
Calculation of over dues	Browsing Library cards and arranging as per due dates	Automatically fine calculations done in software.	Browsing Library cards and arranging as per due dates	Automatically fine calculations done in software.
Usage Statistics	Manual calculations through browsing library cards	Automatic calculation with the help of library software	Manual calculations through browsing library cards	Automatic calculation with the help of library software
Reports required by various inspection committees	Manually entry in excel file	Report generated through LIBRERIA Software	Manually entry in excel file	Report generated through SLIM 21 Software
Serial Control	Maintenance of records in Registers	No change as software does not support	Maintenance of records in Registers	Maintenance of the journals and magazines records in the SLIM 21 Software

The libraries under the study are having library facilities at different levels. The traditional services such as issue and return and reference service are being common to most of the libraries. Previously all these services used to be provided manually but now due to library automation some of the services are being provided with the help of software and barcode technology.

Apart from this some additional services are being provided by both the Libraries as mentioned in Table 4.2.

Table-4.2: Re engineering of Library & Information Services

Services	NCRD's SIP Library		D.Y.Patil SBB Library	
	Before Library Automation	After Library Automation	Before Library Automation	After Library Automation
User education /Orientation	Physical Tour of Library to Library Stacks	Physical as well as Virtual Tour to traditional , e-library & Digital Library with the help of PPT	Orally	Conduct as per the requirement
Charging /Discharging of Books	Manually by new arc card System	Bar Code	Manually	Bar Code Technology
Book Search	From Hand written Book Catalogues	OPAC(Online Public Access Catalogue)	Manually	OPAC
Library Notices	Display on Notice Boards	Inform through E-mails or social media	Manually	Through e-mails
Reference service	Browsing Print Resources	Accessing e- resources	Manually	Use of e-resources
Internet	Low Band width	High band width	Low Band width	Low Band width
Information Search and Retrieval	Manually with the help of print resources, catalogues	Using RSS feed , accessing e- resources	Manually	Advance search techniques
Book bank	Used to be maintained manually in a register	Records entered in the Library Management Software	NA	NA
Resource Sharing	Inter library loan	Online Resource sharing	Inter library loan	Online Resource sharing
CAS & SDI	Manually	Through e-mail	Manually	Through e-mail
Institutional repository	Hard copy of publications used to be maintained in box files	To be maintained in D Space	Hardcopy	To be maintained in D Space
e-mail service	All the communications used to be made manually.	Inform the all the users about latest notifications through e-mails.	Manually	e-mail service is being provided to all the users including alumni

Best Practices/ Advanced Services offered by both the libraries

Apart from all above mentioned services both the libraries offer various other services as mentioned below:

1. D.Y. Patil SBB Library

- Implementation of QR code

- NDL facility on mobile app for students,
- NPTEL video lecture facility.
- Reference Service is being provided to Alumni through e-mails

2. NCRD's SIP Library

- Conduct users survey periodically
- Career/employment notification service

NCRD's SIP librarian conducts user surveys periodically which helps to upgrade the library collection, library & information services which ultimately leads to some innovative practices that results in the re engineering of the libraries. This will be the continuous process as the user's needs changes with time and to cope up with their needs all the libraries and attitude of librarians need to be changed.

Table-5: Human Resources

The Table 5 shows the status of different professionals and non-professionals in both the college libraries.

Sr. No.	Library Name	Professionals	Non Professionals	Total
1.	NCRD's SIP Library	02	01	03
2.	D. Y. Patil SBB Library	02	03	05

The Table 5 reveals that D Y Patil SBB Library has more nonprofessionals in library compared to NCRD's SIP. The college librarians are well qualified and eligible for managing the library department efficiently.

HUMAN RESOURCE TRAINING

The Librarians besides being professionally qualified have acquired special skills such as technical skills, managerial skills, communication skills etc. by actively participating and presenting papers in national and international conferences, workshops and seminars etc.

IMPACT OF RE ENGINEERING OF LIBRARIES

Re engineering of our traditional libraries have a great impact on three different patrons like:

1. Impact on Library Users

- Enhanced Information search and retrieval
- Universal accessibility
- Easy access to large amounts of required information anytime anywhere
- Access to primary information sources due to D space Institutional Repository
- Save the time of users

2. Impact on Library Staff

- Save the time of Library staff
- Change in traditional practices ,replaced by using technology
- Better Library Management
- Greater library cooperation
- Increase the Library Users and Usage
- Preservation of some print material

3. Impact on Institute

- Added Value to the organization
- Easy to handle inspections of various councils and committees

CONCLUSION & SUGGESTIONS

From the above study it is observed that the library and information centers are transforming in terms of type, services and resources too. Traditional libraries are changing to digital Library, e-library, & virtual library. Traditional Library services are transforming to online services. Traditional print resources have changed their shapes to e-resources like e- books, e-journals, e-these etc. Considering the importance of re-engineering in library and information services, it is necessary to rethink on this serious issue and need to apply in the library

for providing better services to accomplish multidimensional needs of the present patrons. Parent institutes of both the college libraries should provide financial support and technical human resources for makeover of the traditional libraries to automated and digital libraries. Both the college librarians have to extend their scope and vision, acquiring comprehensive training and must update their knowledge base.

REFERENCES

- Ali, Amjad. Encyclopedia of information technology. New Delhi, Galgotia, Vol 2(M-Z) 2005.
- Daniel P. Petrozoo and John C. Stepper. Successful reengineering. Mumbai, Jaico Publishing House, 1998.
- Devarajan, G., & Rahelamma, A. V. (Eds.). *Library computerisation in India*. New Delhi: Ess Ess Publications.
- Dickinson, Brain. Risk –free business re-engineering. Mumbai, Jaico Publishing House, 2004.
- Gaur, Ramesh, C. (2003). Reengineering Library Information Services. Mumbai: Allied Publishers Pvt. Ltd.
- Ghosh, S. B., & Mujoo-Munshi, U. (Eds.). (2005). *Reengineering Library services : lessons of the past and the road ahead*. New Delhi: Allied Publishers Pvt.Ltd.
- Kalita, K., Mazumdar, N. R., & Deka, D. (2010, February 18-20). Re-engineering of Library: A Study of Present Scenario of Library Computerization of Academic Libraries in Sikkim. Retrieved September 29, 2015, from 7th Convention PLANNER: <http://ir.inflibnet.ac.in/bitstream/1944/942/1/3.pdf>
- Kumar, P.S.G. (1987). Computerization of Indian Libraries. New Delhi: B.R. Publishing Corporation.
- MICROSOFT CORPORATION. Microsoft computer dictionary. 5th Ed. New Delhi, Prentice Hall of India, 2002.

PERSONNEL MANAGEMENT IN ICT AND KNOWLEDGE RESOURCES CENTRES

Dr. Rajkumar GhuleLibrarian, Dadapatil Rajale College, Adinathnagar

ABSTRACT

The new role of libraries in the 21st century needs to be as a learning and knowledge centre for their user as well as the intellectual commons for their respective communities. Libraries should aim their knowledge management goal high. Below are examples of what libraries can do to improve their knowledge management in all of the key areas of library services. Because of the exponential growth in human knowledge in a variety of formats, libraries need to develop their resources access and sharing strategies from printed to electronic and digital resources in concert with their mission and changes. This paper will flash on Information technology and personal management in library.

Keywords: Management, Knowledge, Information Communication, Technology, Library.

INTRODUCTION

Library and Information Science as a profession is concerned with the knowledge and skill by which the records of human communication are collected organizes and utilized. 'A librarian is a mediator between man and the graphic records that his and previous generations have produced and the goal of the librarian is to maximize the social utility of these records for the benefit of humanity'. As such a modern librarian has a very important role to play in the process of communication of information is today's world the concept of 'Librarian' is changed to 'Information Manager'.

Librarianship today has arrived at the information age where the role of information is increasingly emphasized as an economic resource, marketable commodity and as a social wealth. In this context the role of librarian is of much importance.

NEED

Management of personnel force is one of the important tasks in any organisation. Even though, mechanisation is all pervasive and computers replace the human force, the need for human force appears to be inevitable in the organisations. No organisation can run without manpower. It is particularly so in the case of library. There are various types of jobs to perform carefully and efficiently. It requires technical knowledge, common sense and knack to perform several functions in the library. It is the task of the librarian as a manager of this institution to coordinate the energies of his library staff and channelize in a right direction to obtain given tasks productively. The activity which directs, coordinates the manpower into a kind of dynamic organisation is the personnel management. It always tries to accomplish library's goals or objectives with minimum amount of wastage of source and obtain productivity.

Technological innovations have given rise to new ideas relating to collection, processing and dissemination of information. These innovations and ideas including, Artificial Intelligence, Speech Synthesis, Electronic Mail, CD-Rom, CD Networking, Barcode System, Electronic Publishing, Hyper Media, Multimedia, Radio Data Paging, Internet etc, share a common technology revolving round electronic, computers, telecommunication, printing and reprography, popularly known as Information Technology.

The rapid technological development has affected every facet of library operations and services. Computers have indifferent ways, Influenced Acquisition of documents, Management of serials, Circulation system and Preparation of Bibliographical control tools, Services such as Reference, Circulation, Interlibrary loan and Data processing. The online searching of more databases has become possible because of convergence of computer and communion technologies. CD-ROM Technology has invaded libraries for storing and retrieving large quality of data. Further ahead, Optical disc storage technology combined with high resolution, laser printing device provide capacity for storing large quantities of textual and graphic data with facility for instant access to image and voice display and reproduction. This capacity has had far reaching implications for resource sharing and service as a cheaper alternative for databases, otherwise available through online network. All this will certainly help library professionals in achieving greater economy accuracy and speed in providing more effective and effective information service to their users.

LIBRARY PERSONNEL

The personnel in the library can broadly be divided into: (1) professionals (2) semi-professionals (3) unskilled workers.

Professionals – The persons of this category generally have high academic qualification. They perform duties relating to education, research and bear the responsibility of taking policy decisions and they are of the top ranking administrators. They involve in the development of innovative methods, new procedures, policies in library. They also work on decision making committees.

Semi-professionals – The persons in this category mostly perform routine and repetitive jobs in a library. They may also be called as junior professionals. They usually have a qualification, a degree or a diploma in library science, and they perform all jobs-circulation, cataloguing, classification, accessioning, periodical registration-which require technical qualification, experience but not required to take any decision.

Unskilled workers – The persons under this category take up jobs which do not require any type of technical knowledge. Clerical secretarial staff and class IV employees will come under this category.

FUNCTIONS OF PERSONNEL MANAGEMENT

- Determination of personnel policy
- Job analysis and job description
- Ranking and grading of cadres
- Conditions of services
- Recruitment, Selection and Training
- Staff management

MANPOWER PLANNING

With the availability of basic data provided by short-range and long-range plans, knowledge of the technical and manpower situation and the larger social considerations outside the enterprise, manpower planning proceeds. Some of the general features of manpower planning are.

- A staffing plan worked out on the basis of organization plans for both line and staff positions, managers and non-managers for a projected period of time.
- Assessment of the number of managers required at different levels of the organization structure which is decided by the enterprise, complexity of the organization structure, projected plan and the time schedule.
- Development of a management inventory chart, which is an organization chart showing all the persons and their portability. This helps in the preparation of manpower plans and implementation of the promotion process.
- Activating manpower plan which sets in motion the process of recruitment, selection, placement and promotion of candidates as envisaged.
- Continuous appraisal of managers, which is used for promotion, managerial development and corrective actions.
- Studying both the external and internal environments that affect manpower planning and staffing in all respects.

The significant indicators of the personal management in information Technology areas given below

- Right access to right information Technology areas given below,
- Introduction of computers and telecommunication technologies in dealing with information.
- Information rather than the capital as a strategic resource base.
- Growth of infra-structural backbone for Information Technology applications.
- Shift in occupational structure from manufacturing based activities.

JOB ANALYSIS

Job analysis implies the process of analysing a given job into different distinctive items, in order to estimate the quantity of work involved and the type of qualification required in performing those jobs. For the purpose of manpower planning, job analysis may be defined as the process of analysing a specific job based on the various tasks involved, machines and equipment used, skills, knowledge and personal traits required to perform the job. It consists of collecting, consolidating and recording various items of job information. It includes both job description and job specification. Job information can be gathered by using any of the following method:

- Job observation.
- Analyzing questionnaires filled by job workers giving job details.
- Interviewing workers to obtain job data for each job.
- Employing checklists, in which workers check the tasks listed for each job.
- Maintaining a dairy (i.e. daily recordings in detail of all activities of each job holder).
- Compiling information gathered by a team of experts.

ADVANTAGES OF JOB ANALYSIS

- Job analysis is basic to manpower management. It has the following advantages:-
- It defines labour needs in concrete terms.
- It specific the duties and responsibilities implied in each job.
- It, thus assists in organisation planning and provides coordination.

JOB DESCRIPTION

Job description implies the enumeration and description of each operation in job and responsibilities involved in performing are also outlined. It lists out required material, tools, equipment and machinery for each job. Job description process sometimes provides conditions of work, and the indication of relations to other jobs.

Job description implies recording of the following data concerning each job analysed

- Principal duties to be performed and responsibilities involved are outlined.
- Operations involved in each are job are listed in proper sequence.
- Requisite materials, equipment, machinery and tools etc. are listed.
- Conditions of work i. e surroundings, the time of work etc., are stated.
- Relations of various related job are indicated.
- Mental and physical abilities for performing each operation are listed. The kind of training and the length of experience required are also indicated.
- Wages payable along with other fringe benefits are started.

JOB EVALUATION

Elements of Job Evaluation

Job Evaluation means job-rating. By it the value of each job is specified vis-à-vis another job or a group of jobs; this is, perhaps, an objective method of measuring the value of particular jobs. This process may imply the following essential steps:-

- Determination of requisite elements or factors involved in all jobs carrying monetary remuneration.
- Using these elements and factors for comparing one job with another.
- Knowing the relative value of each job.
- Fixing the money value of each job.

Library processes, by their nature, lend themselves to Mechanization and those who have worked in libraries have often performed tasks which appeared more appropriate for machines. In view of this, it is of first surprising that mechanization on a large scale is by no means always possible, or even generally accepted as desirable impact of Information Technology following areas.

- Copying and communication-The improvement in copying techniques, especially the use of electrostatic processes, particularly xerography, has helped to raise the level of library services.
- Improvements in communication methods, particularly the use of telex, have made it possible for the dissemination of information and the lending of materials to be speeded up.
- Microforms-The use of microforms might totally Transform library practice, and solved the space problem. Where stocks were expanding at an exponent ice rate the microforms was seen as a possible solution.

INFORMATION SERVICES PERFORMANCE MEASUREMENT

Performance measurement is an ongoing concern for information service managers with the continuing focus on accountability, quality and value for money in all sectors. The weaknesses in measurement systems used in business generally are equally evident in library and information services, namely concentration on operational and financial data, an internal and historical focus, and a tendency to 'measure the measurable' and devise over-elaborate systems. Today no individual or institution is self-sufficient. Massive growth of publications rising prices, declining library budgets, growing diversification and user's expectations are forcing us to think of new options. Resource sharing, Collaborative research and Technology based learning and teaching are the only way available with us to improve the quality of life and work.

These things shall increase resources and access requiring much additional finance and then only Information Technology can manage the library. The invention of computers is a landmark in the history of library and information science. In the present competitive era, Information is being treated as the 6th and most traditional resources namely Man, Machine, Money, Material, and Time. A single Technology has dominated each of the past centuries.

CONCLUSION

An essential aspect of library administration is personnel management. An older term sometimes used for this activity is staffing, but personnel management better reflects the many components of this function. Personnel management typically encompasses; salary administration; training and staff development; performance evaluation; personal politics, including grievance procedures; and possibly unionization. Measures can be formulated and elaborated for both the library or information service as a whole and for its constituent parts. Electronic information service developments have complicated the task of performance measurement, with digital/networked resources on offer alongside or instead of traditional materials, and library/information services converging or merging with computing/IT services and other service units.

REFERENCE

1. Shera, Jesse H, Foundation of education for librarianship. New York; John Wiley& Sons,1972, p68.
2. Nasib Singh Gill, Dabs K.C. University New's-Vol.37, No.12, p.17.
3. Kaushal Madera. Library Science and Information Technology; Commonwealth pub, New Delhi, 1995.
4. Heeks,P. and Kinnell, M. Managing change for lib services. London: British Lib.1992
5. Jorden, Peter. Staff Management in Library and Information work. Bombay: Jaico, 1996.

APPLICATION OF WEB 2.0 TOOLS UNIVERSITY LIBRARIES IN MAHARASHTRA

S. A. Dhande¹ and Dr. R. R. Paithnkar²Research Scholar¹ and Research Guide², Swami Ramanang Teerth Marathwada University, Nanded

ABSTRACT

The Study is online survey and content analysis methodology is applied to academic Universities libraries in Maharashtra. The application of web 2.0 tools in University libraries in Maharashtra. The web 2.0 tools are categorized by generally accepted standards with some adjustment for library practices. Data were collected by from accessing these university library web sites on occasions during the period of January 17-22, 2019 by utilizing a checklist of 40 questions. In this study all academic aided university libraries from Maharashtra apply one or more kinds of Web 2.0 tools through the basic functions of their web sites. Among six types of tools, web OPAC 2.0 and Wiki are common, while RSS, Blog, SNS, are less frequent. Social Networking Sites, are only Universities official facebook, twitter sites and not active a separate Library of Knowledge Resource Center (SNS).

INTRODUCTION

Web 2.0: World Wide Web or web 1.0 is greatest success in the history. The term web 2.0 was firstly conceptualized and made popular by Tim O' Reilly and Dale Dougherty O'Reilly Media in 2004. They describe the trends and business models which survived the technology sector market crash of the 1990s. Web 2.0 suggests a new version of the World Wide Web. It does not refer to an update to any technical specification, but rather to increasing changes in the ways software developers and users use the Web. A Web 2.0 site may allow users to interact and collaborate with each other in society. As a content generator in virtual community, user can freely communicate by web 2.0. In 1.0 version people had limited content access. Web 2.0 includes tools like social networking sites, as Blogs, wikis, Youtubes, mushup, folksonomies. World Wide Web Inventor Tim Berners Lee Described the term as Jargon It is very different than prior web technology. His original vision of the Web was "a collaborative medium, a place where we could all **meet**, read and write". The use of social networking sites, wikis, blogs, RSS feeds, and recommendation systems. The goal of implementing Web 2.0 technology is not enough; libraries must focus on methods of engaging users and emphasizing content while integrating its various Web 2.0 components. Otherwise, a system built on isolated packets of information works against Web 2.0's vision of collective intelligence and integrated information platforms. Although many university libraries in the US engage with Web 2.0 technologies, there are still many who do not. Shortages of human resources, a lack of budget devoted to newer technologies, or uncertainty about Web 2.0's tangible effects may contribute to this. As it stands today, many existing studies on Web 2.0 applications in library communities concentrate on a specific aspect of Web 2.0 technology and a case study, which helps libraries to integrate that service into their digital library environments. However, there is little study that focuses on the overall development of applications of Web 2.0 among library communities. These observations, a cross-section of which Web 2.0 technologies are utilized and where, provide valuable information for libraries. So far as considering Web 2.0 tools for future strategic development. t, the study attempts to investigate the overall application of Web 2.0 and to what extent it is utilization of web 2.0 tools in University Libraries in Maharashtra. This paper consists of five main parts: introduction, research Limitations, Importance, literature review, research design, results discussions, and conclusions.

RESEARCH LIMITATIONS

This research is limited to University libraries in Maharashtra in which only academic aided universities except agriculture and private universities are included. Also this is a study of website content analysis, So, Internal applications that are not publicly accessible contain hidden information that may not be gathered through content analysis since these links usually cannot be found on library web sites. It is difficult to get exact information as to the applications of Web 2.0 in these libraries without an interview method in combination to observation.

IMPORTANCE

This study provides an overall picture of Web 2.0 tools applied in University Libraries in Maharashtra. It will benefit for future evaluation and planning for implementation of web 2.0 application and development of university libraries in Maharashtra. Today 80% of the students are using Social Media tools and web 2.0 tools. So Libraries could not separate itself from these Initiatives. Libraries are the soul of the Universities. Digital Initiative in education starts from libraries. So development of the digital libraries and accessing at large population it need to apply web 2.0.

LITERATURE REVIEW

Casey M.E. Savastinuk L.C. (2007) Library 2.0 Guide to participatory library services in this book author define library 2.0 is as Library 2.0 is model for constant and purposeful change and also empower library user through participatory user driven services Idea about Library 2.0 is reaching to new user, building new services and responding rapidly to changing customer demands **Linh (2008)** was conducted a study “A survey of the application of Web 2.0 in Australian university libraries” Published in the Journal Library Hi Tech, Vol. 26 Issue 4. The focus of that research was what types of Web 2.0 technologies were applied in such libraries as well as their purposes and features. The study provides overall picture of Web 2.0 application in Australian university libraries. **Chawner (2008)** It revealed that Web 2.0 tools application in library allow user not only to read the contents of others but participate in the communication by commenting. **Li Si, Shi Ruoyao Chen Bijuan (2011)** This paper was aims to provide an overall picture of the application of Web 2.0 technologies in Chinese university libraries. The focus of the research was what types of Web 2.0 technologies were applied in such libraries as well as their function and user interface. To investigate the status of Web 2.0 (RSS, Wiki, Blog, Tag/Folksonomy, IM, Podcast/Vodcast, Toolbar and Ajax) and services provided by top Chinese universities using these tools. **Peltier-Davis, Cheryl (2009)** The study stated that librarians must accept positive approach in learning Web 2.0 tools which would help them in improving external and internal communication and services **Dickson and Holley, (2010)** Author found that, Social networking can be effective method of student outreach in academic libraries is libraries take care to respect student privacy and to provide equal coverage for all subject areas **Mahmood and Richardson** The study stated that website works as a single window in providing library services not only in the campus but outside the campus as well. They observed that many libraries have started using Web 2.0 application in their websites as these tools are gaining popularity in academics. It found that each library was using some form of technology, such as RSS, blogs, social networking sites, wikis and instant messaging. **Rathod K. and Paithankar R.R. (2016)** Making use of the web 2.0 application in college librarian and measures its services by web 2.0 tools in percentages like, Instant Messaging, RSS, Streaming Media services, SMS services, Tagging, Wikis, Social Media use in the library of the academic college.

RESEARCH OBJECTIVES

1. To identify kinds of Web 2.0 tools have been applied to these university libraries
2. To find out purposes are these libraries using Web 2.0 tools.
3. To know features do these university libraries have applications of Web 2.0 technologies

METHODOLOGY

The study uses content analysis of library web sites as the research method to collect specific data from a variety of categories. Over the years, the definition of content analysis has evolved to embrace larger contexts. In the past, content analysis merely consisted of procedures for defining, measuring, and analyzing both the substance and meaning of texts or messages or documents. Today, web pages are growing into one of the main types of materials studied using content analysis. The web OPAC 2.0 and each page of the libraries' web sites and social networking sites pages were evaluated for the presence of tools or services that reflect the principles of Web 2.0. Examples of these tools and technologies include RSS feeds, blogs, wikis; social networking services (SNS). Since web browser tools, tagging cloud and text alert are mainly used to enhance cataloging function under Web 2.0 environment, we use OPAC 2.0 as a Web 2.0 tool to include all above tools.

A checklist as the main research instrument was developed according to the above-mentioned category of Web 2.0 tools to collect data about the purposes and features of different tools. The checklist consists of questions with yes or no answers and the list of university libraries, which indicate their status of application. The questions in the checklist are based on previously studies (Zhiping Han, Yan Quan Liu, (2010) with some adjustment for practical purposes. In order to identify application of Web 2.0 technologies and obtain the most accurate data as possible. After identifying the Web 2.0 applications, the purposes and features present among these university library web sites were noted on two separate occasions during the period of January 17-22, 2019. Their recurrence was quantified and compared to Determine the degree of participation. The data can be examined in Table I.

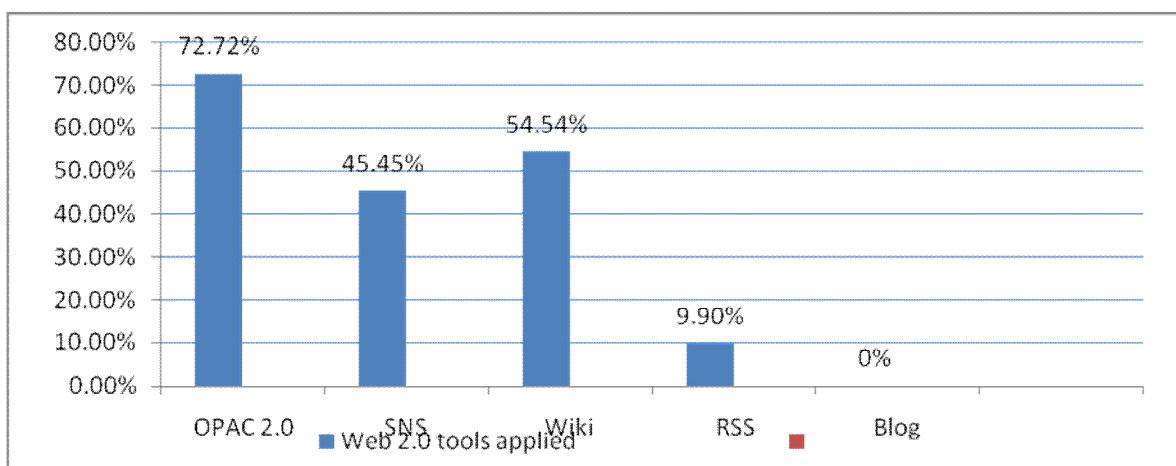
Sr. No.	Checkpoints	SPPUP	BAMUA	SGBUA	RTMNU	SRTMN	KBCNJ	SUK	SUS	GUG	SNDTM	MUM
	Category 1											
1	OPAC 2.0	1	1	1	1	0	1	1	0	0	1	1
2	RSS	1	0	0	0	0	0	0	0	0	0	0
3	Blog	0	0	0	0	0	0	0	0	0	0	0
4	SNS	1	1	1	1	1	1	1	0	1	1	1
5	Wiki	0	1	1	1	1	1	1	1	0	1	1
	Category 2											
	OPAC 2.0											
	Purposes											
6	Mining valuable Information form book record databases	1	1	0	1	0	1	1	0	0	1	1
7	Providing Unified search facility on Library WebPages	1	1	0	1	0	1	1	0	0	1	1
8	Permitting users to demand books	1	1	0	1	0	1	1	0	0	1	1
9	Permitting users to reserve books	1	1	0	1	0	1	1	0	0	1	1
	Features											
10	Web browser tools	1	0	0	1	0	1	1	0	0	1	1
11	Supported by local ILS	1	1	1	1	0	1	1	0	0	1	1
	Category: 3 – RSS											
	Purposes											
12	Library News	1	0	0	0	0	0	0	0	0	0	0
13	Books Information	1	0	0	0	0	0	0	0	0	0	0
14	SDI	1	0	0	0	0	0	0	0	0	0	0
15	New Arrivals	1	0	0	0	0	0	0	0	0	0	0
	Features											
16	Instruction on uses	0	0	0	0	0	0	0	0	0	0	0
17	Links to RSS readers	1	0	0	0	0	0	0	0	0	0	0
18	Feeds being classified into usage	0	0	0	0	0	0	0	0	0	0	0
	Category-4											
	Blog Publishing											
	Purposes											
19	Publishing library events and resources	0	0	0	0	0	0	0	0	0	0	0
20	Personal use to share news	0	0	0	0	0	0	0	0	0	0	0
21	Offering subject information to users	0	0	0	0	0	0	0	0	0	0	0
	Features											

Sr.No.	Checkpoints	SPPUP	BAMUA	SGBUA	RTMNU	SRTMN	KBCNJ	SUK	SUS	GUG	SNDTM	MUM
22	Providing links to the library homepage	0	0	0	0	0	0	0	0	0	0	0
23	Using RSS to feed blogs	0	0	0	0	0	0	0	0	0	0	0
24	Entries being brows able by tagged topics	0	0	0	0	0	0	0	0	0	0	0
25	Having archives for the blogs	0	0	0	0	0	0	0	0	0	0	0
26	Archival Entries being more than one years	0	0	0	0	0	0	0	0	0	0	0
Category 5												
Social Networking												
Purposes												
27	Official University Facebook Account	1	1	0	1	1	1	1	1	1	1	1
28	Publicizing the Newspaper Clipping	0	1	0	0	1	1	1	1	1	1	1
29	Accessing the Library resources	0	0	0	0	0	0	0	0	0	0	0
30	Providing reference services	0	0	0	0	0	0	0	0	0	0	0
31	Sharing Photos Features	1	1	1	0	1	1	1	1	1	1	1
32	Providing links to the Library's homepages	0	0	0	0	0	0	0	0	0	0	0
33	Designing own SNS	0	0	0	0	0	0	0	0	0	0	0
34	Personal Presence on a popular SNS	1	1	1	0	1	1	1	0	0	1	1
Category 6. Wiki												
Purposes												
35	General Information	1	1	1	1	1	1	1	0	0	1	1
36	Project Progressing	0	0	0	0	0	0	0	0	0	0	0
37	Resources listings Features	0	0	0	0	0	0	0	0	0	0	0
38	Instruction on usage	0	0	0	0	0	0	0	0	0	0	0
39	Providing links to the library homepages	1	1	1	1	1	1	1	0	0	1	1
40	Allowing users to contribute to it.	1	1	1	1	1	1	1	0	0	1	1

Above table short form of the university name are as below, SPPU=Savitribai Phule Pune University, Pune, BAMUA=Dr. Babasaheb Ambedkar Marathwada University Aurangabad, SRTMUN+ Swami Ramanand Teerth Marathwada University, Nanded, SGBUA= Sant Gadagebaba Amravati University, RSTMN=Rastrasant Tukdoji Maharaj Nagpur University, KBCNJ= Kaviyatri Bahinabai Chaudhari Naorth Maharashtra university Jalgaon, SUK= Shivaji Univeersity Kolhapur, GUG= Godwana University Gadchiroli.SUK =Shivaji University Kolhapur,SNdT= Shreemati Nathabai Damodhar Thakarshi Women’s University Mumbai, MUM= Mumbai University Mumbai

DISCUSSION

From Figure 2 we find that OPAC 2.0 is widespread and the most popular Web 2.0 utility with 72.72 percent of University library (11 out of 8) using this method as the main tool for improving user-friendly search process. It is not surprising that wiki is using 54.54 percent Libraries and followed by SNS (Social networking sites) 45.45 percent. RSS is used only 9.90 percent universities in Maharashtra. And no one university is using a blog.



The main purposes and features of the application of OPAC 2.0. OPAC 2.0 involves much higher technology barrier and may demand collaborative work with ILS vendor since it is traditionally one of the main components of the library management system provided by system vendors. Recently, stimulated by librarians and partly supported by ILS vendors.

The second purpose of the OPAC 2.0 is to help patrons conveniently utilize the book-related information from other popular web sites, mainly by seamlessly integrating other web-based services into catalog interface such as supplementing information in the catalog with Google Book Search, Library Thing. Nearly -- percent of libraries boast this function, some of which are fulfilled through the adoption of new OPAC facilities, while some are fulfilled under the effort of the technical persons

The third purpose of OPAC 2.0 so university libraries is to permit users to demand and reserve books from library collection. Also feedback facility from OPAC 2.0 views about collection such as book rating, contribute book reviews and adding tagging in collections. This collective intelligence has been embraced by traditionally conservative librarians to engage more contribution from their patrons and sharing experiences with one another. By doing so, libraries can develop their own social networking community to engage more patrons with improved openness and flexibility of identifying related materials.

Table-2

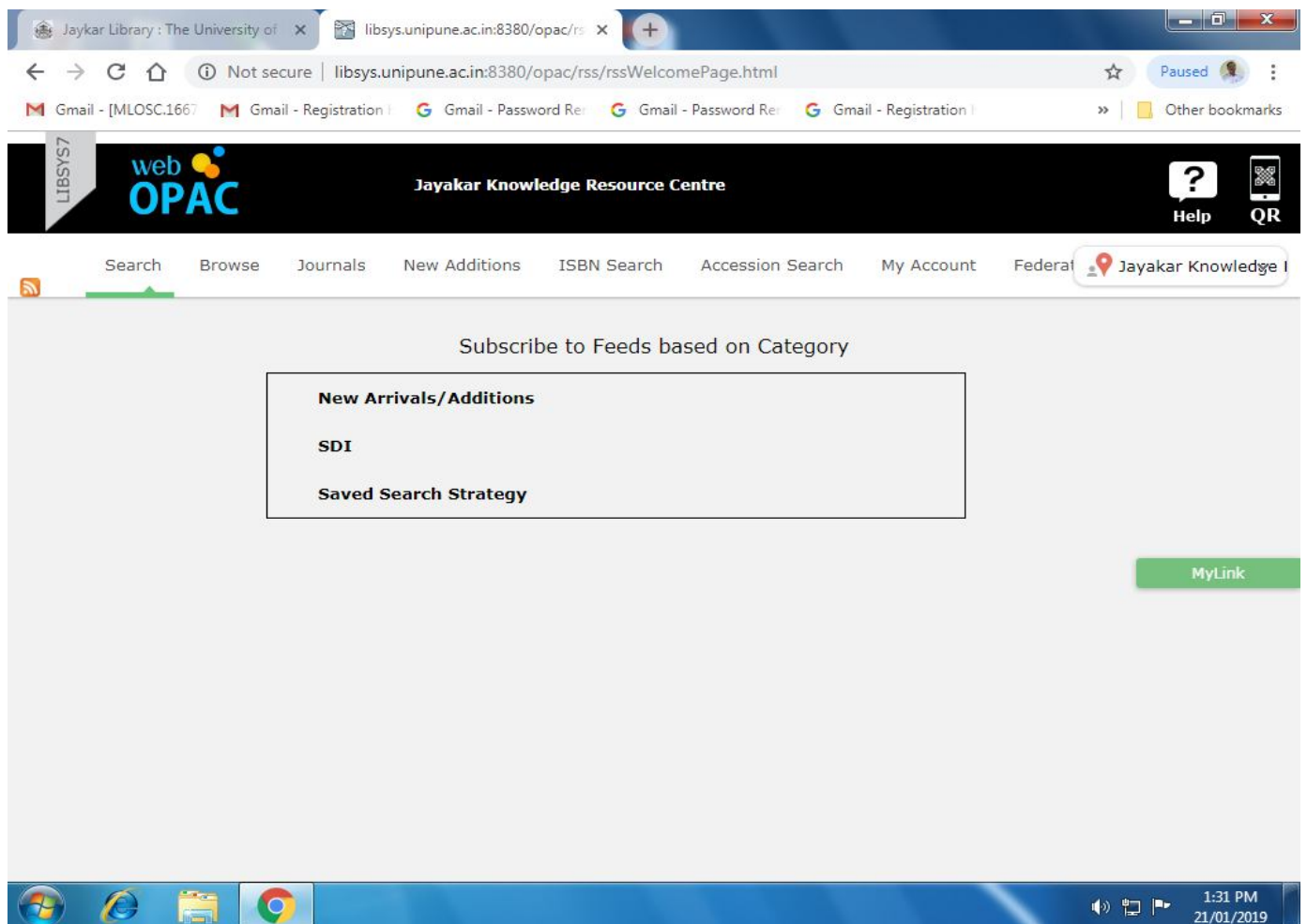
Purpose and futures of OPAC of Universities in Maharashtra	No. of Libraries having it	Percentages
Mining valuable Information form book record databases	7	63.63
Providing Unified search facility on Library WebPages	7	63.63
Permitting users to demand books	7	63.63
Permitting users to reserve books	7	63.63
Features		
Web browser tools	6	54.54
Supported by local ILS	8	72.72

Category: 3 – RSS

Table-2

Purpose and futures of RSS Universities in Maharashtra	No. of Libraries having it	Percentages
Library News	1	9.09
Books Information	1	9.09
SDI	1	9.09
New Arrivals	1	9.09
Features		
Instruction on uses	0	0
Links to RSS readers	1	9.09
Feeds being classified into usage	0	0

RSS: - RSS is the second criteria in this study of web 2.0 tools application. Out of 11 libraries only 1 library is using RSS web tool. There are three purposes of RSS application in Maharashtra University Libraries the first and basic one is the notification of Library News and books information and third SDI for library users. These purposes are initiated by libraries such as library news and events, new books available. The purpose is the syndication of subject-related information for users to access easily and timely. These different purposes involve different levels of efforts from technical supports and human resources. Uses of RSS web tools in Maharashtra university library is only offer the basic level of application, and only one library in out of 11 libraries using this tools for services. Savitribai Phule university of Pune using these web tools for users to providing Library news, book information, SDI services in Figure 2 illustrates Savitirbai Phule University Pune Jaykar Library RSS feed.



Blog: Blogs can be used to communicate library events, announce information resources, staff training, and offer subject-related reference services. From all university Libraries in Maharashtra no libraries are using this tool to publicize Library information. All libraries not having any blog for the users on website.

SOCIAL NETWORKING

Category: 4 Social Networking

Table-4

Purpose and futures of SNS Universities in Maharashtra	No. of Libraries having it	Percentages
Official University Face book, Account	10	90.90
Publicizing the Newspaper Clipping	08	72.72
Accessing the Library resources		0
Providing reference services		0
Sharing Photos	10	90.90
Features		
Providing links to the Library’s homepages	0	0
Designing own SNS	0	0
Personal Presence on a popular SNS	8	72.72

As shown in table 3 social Networking sites are very much important for online services. SNS tools are used in Maharashtra university library shown in the table that universities official face book account is active in 90.90 percent universities, but separate university library official face book account is not present online. These accounts are using for the publication of news and newspapers clipping and sharing photos in universities. Also for making personal presence 72.72 percent Librarian are using the Social Networking tools for personal and professional presence and also publicize events and functions organised by library.

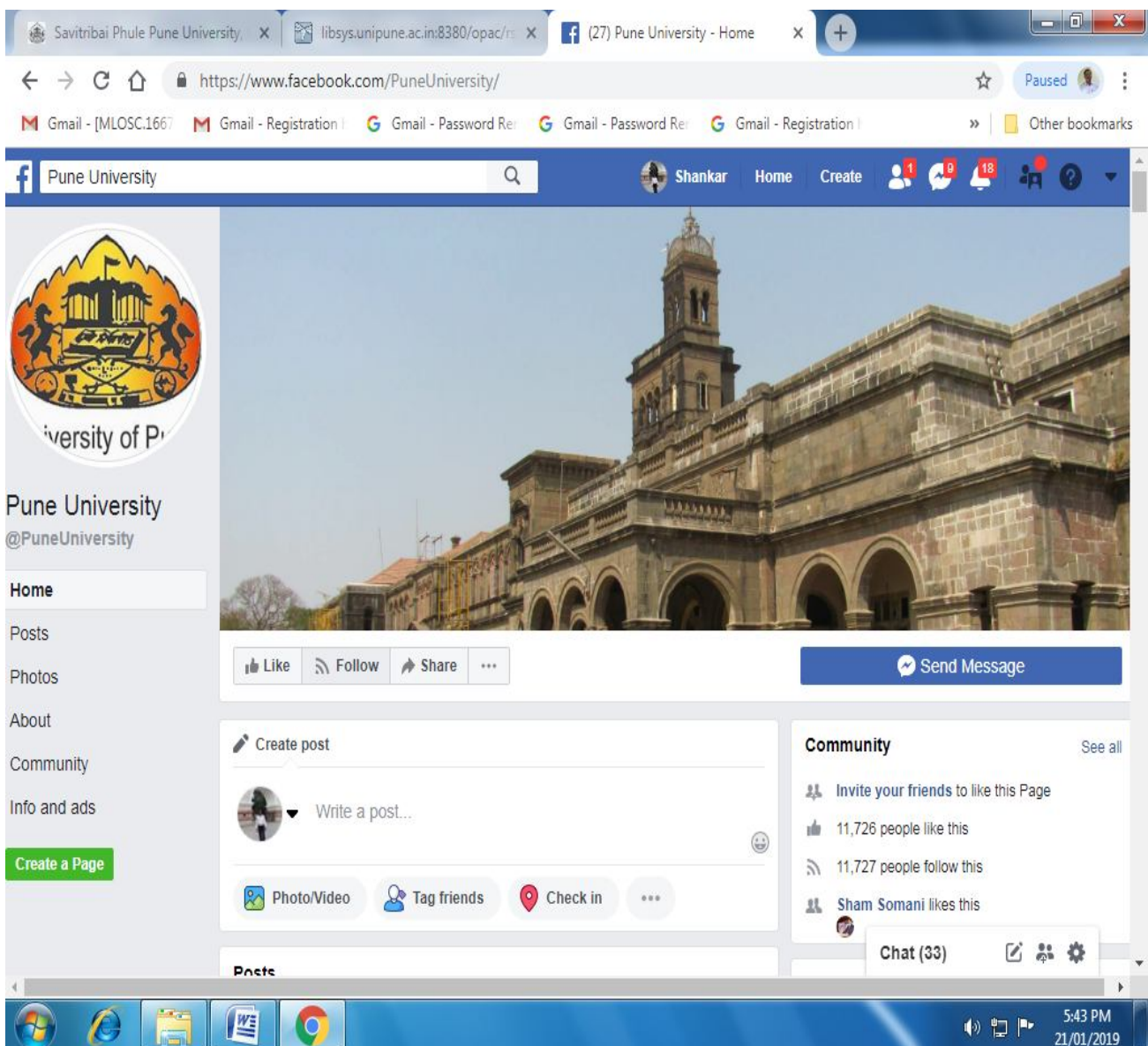


Table-5

Purpose and futures of Wikis Universities in Maharashtra	No. of Libraries having it	Percentages
General Information	8	72.72
Project Progressing	0	0
Resources listings	0	0
Features		
Instruction on usage	0	0
Providing links to the library homepages	5	45.45
Allowing users to contribute to it.	8	72.72

Wiki: Wiki is also a Web 2.0 tools in our sample with 72.72 percent of application in (table 4) used for general short information is available in about Wikis. University official wiki page is available, but no university library separate page for Libraries on Wikipedia. Website has link with available resources and separate wiki page about university library 5 university libraries having links to university library on Wikipedia. And every university has given to edit university information on wikis. Therefore web 2.0 tool applications such as wiki or social networking sites, it is quite underdeveloped in Maharashtra university libraries. These applications on library sites are unpredictably low considering the millions of users are involved in one kind of social networking or another. Presenting the results seen in Table 4 suggest the libraries can improve on their services that connect users to each other in the Web 2.0 worlds



CONCLUSIONS

This study is based on only two visits to the library web sites, and Google search for web 2.0 tools with keywords. Conclusions on Web 2.0 applications remain somewhat basic. Often, the full data available to successfully evaluate Web 2.0 is constantly changing, and thus unavailable even to the library who is offering these services. This study cannot have the ambition to evaluate the effect of these applications. What we can do is investigate how university libraries in Maharashtra applying Web 2.0 applications in its services. After careful investigation, we find that most of the Web 2.0 applications in these 11 university libraries are still in their basic development stage and most of the libraries only use one or two applications in their services. In this sense, the general status of Web 2.0 application in Maharashtra university libraries is still extremely underdeveloped even for those most prestigious university libraries. Under most circumstances, these Web 2.0 applications are not integrated into whole new platforms to create user-friendly environment. No libraries in our sample have tried to integrate Web 2.0 tools into a platform for library services. So far only the way of use these SNS focusing personal event, functions photo sharing. While Web 2.0 applications in university libraries in Maharashtra still have a long journey to go.

REFERENCES

1. Casey M.E. Savastinuk L.C. (2007) Library 2.0 Guide to participatory library services information today inc. Medford New Jersey.
2. Chawner Brenda (2008) "Spectators, not players: information managers' use of Web 2.0 in New Zealand", The Electronic Library, Vol. 26 Issue: 5, pp.630-649,
3. Dickson, A. and Holley, R. P. (2010). Social networking in academic libraries: the possibilities and the concerns. New Library World. 111(11/12), 468-479
4. Linh Nguyen Cuong (2008) "A survey of the application of Web 2.0 in Australasian university libraries", Library Hi Tech, Vol. 26 Issue: 4, pp.630-653, <https://doi.org/10.1108/07378830810920950>
5. Zhiping Han, Yan Quan Liu, (2010) "Web 2.0 applications in top Chinese university libraries", Library Hi Tech, Vol. 28 Issue: 1, pp.41-62, <https://doi.org/10.1108/07378831011026689>
6. <http://lib.unipune.ac.in:8002/> on date 15/1/2019
7. https://en.wikipedia.org/wiki/Savitribai_Phule_Pune_University on date 15/1/2019
8. <https://www.facebook.com/PuneUniversity/> on date 15/1/2019
9. https://www.nagpuruniversity.org/links/central_library.htm 15/1/2019
10. <https://www.facebook.com/RTM-Nagpur-University-127541067314650/> 15/1/2019
11. https://en.wikipedia.org/wiki/Rashtasant_Tukadoji_Maharaj_Nagpur_University on date 15/1/2019
12. https://en.wikipedia.org/wiki/Sant_Gadge_Baba_Amravati_University
13. <https://www.facebook.com/pages/category/College---University/North-Maharashtra-University-Jalgaon-1465284373789542/>
14. <http://www.nmu.ac.in/> / on date 15/1/2019
15. <https://www.facebook.com/pg/NMUJal/about/> on date 15/1/2019
16. <http://www.bamu.ac.in/krc/Home.aspx> on date 15/1/2019
17. <https://www.facebook.com/pages/category/School/Dr-BAMU-109762465782992/> on date 15/1/2019
18. <http://www.srtmun.ac.in/en/library-2.html>
19. <https://www.facebook.com/SubCentreLatur/> on date 15/1/2019
20. <https://www.facebook.com/pages/category/College---University/Shivaji-University-Kolhapur-141484459248969/> on date 15/1/2019
21. <https://www.facebook.com/Solapur-University-Solapur-802417016463640/> on date 15/1/2019
22. <http://su.digitaluniversity.ac/> on date 15/1/2019
23. <http://unigug.org/portal/departments/6/LIBRARY/department/> on date 15/1/2019
24. <https://sndt.ac.in/university-library/ul-intro.htm> on date 15/1/2019
25. <http://mu.ac.in/portal/services/library/> on date 15/1/2019
26. <https://www.facebook.com/sndtwuniversity/> on date 15/1/2019
27. <https://www.facebook.com/Official-University-of-Mumbai-1592096307699282/> on date 15/1/2019

REDUCING TRAVEL STRESS THROUGH ROLE OF LIBRARY**Meena Suryavanshi¹ and Dr. S.K. Sharma²**Ph. D. Student¹ and Ph. D. Guide², Department of Library & Information Science, Veer Narmad South Gujarat University, Surat**ABSTRACT**

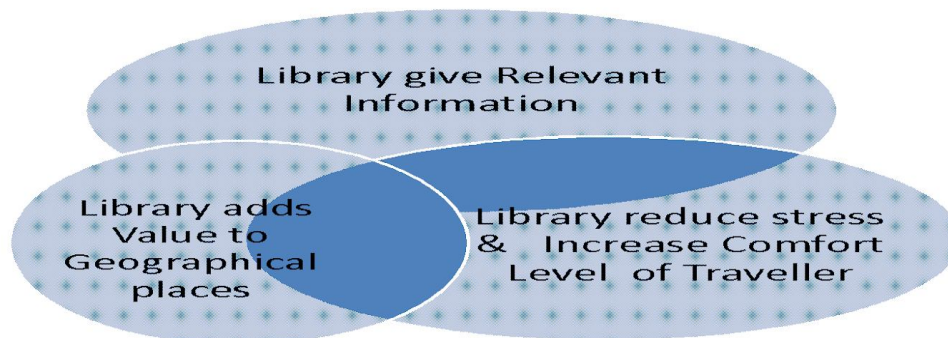
Library collection, services has changed very fast due to Information Communication Technology. Now the future library professionals have to equip themselves as per the requirement of the electronic Information Society, and "Traveller" is one of ancient & basic user. This paper briefly Change in Sources of travel Information, Information Seeking Behaviour & Traveller's Satisfaction & Effective use of Social Media for users. Library professionals knowing the importance of Cultural Heritage preservation of geographical sources Maps, Gazetteers, Atlases, Globes, Guidebooks, Encyclopaedias make effective use of Social Media for users, relieve stress & has to move towards Traveller's Satisfaction.

Keywords: Traveller, Geographical Sources, Information Seeking Behaviour & Traveller's Satisfaction

INTRODUCTION

Portuguese explorer 'Vasco da Gama' discovered a sea route to India in 1497-1498.

Curiosity to know the unknown parts of the world prompted men to conduct tours with innumerable queries for location, identification and brief description of unknown and less known places having tourist importance. All these factors initiated the compilation and designing of comprehensive tourist guides in which geographical information is conveniently presented. Hence the birth of the Geographical Sources of Information had taken place.

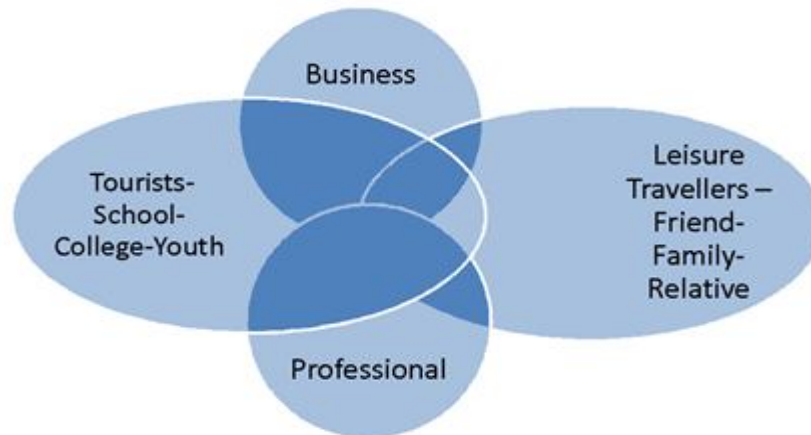
Role of Library**CULTURAL HERITAGE PRESERVATION OF GEOGRAPHICAL SOURCES**

Value and importance of geographical works is more because they give precise information, they are limited to one specific area like village, town, city state. Geographical sources are invaluable and dominant part of reference collection of any library. They are capable of taking the viewer to any part of the world. With the help of these sources user can find location about place, hotel, motel etc. Cultural Heritage preservation of geographical sources Maps, Gazetteers, Atlases, Globes, Guidebooks, Encyclopaedia was and is and will be main duty of library professionals. Perhaps ancient Manuscript collection of geographical collection sources, is the most Precious Cultural Heritage of libraries of each country. Responsible tourism makes one's travel even more enjoyable. Responsible tourism brings a traveller closer to Nature, Indigenous culture and communities. It also gives a boost to the economy, conserves natural resources, and make tourism a more sustainable affair. Sustainable and environment-friendly tourism can be best attained with commitment and proactive role of library. Along with these now library professionals has to build their collection by adding-

- Journey planners
- Printed material
- Public transport
- Radio.
- Real-time information

- Smartphone apps
- Social media
- Travel time information
- Websites

Types of Tourists



INFORMATION SEEKING BEHAVIOUR & TRAVELLER’S SATISFACTION

All the trade routes Stories of World famous geographer’s discovery to the various countries and along with their sea-route & trade routes. Awareness of information about trade route & sea routes are given importance from ancient times. Library is one of important place in every school, college, university , where service quality affects the users satisfaction. Any library can be successful, if its users are satisfied with the facilities provided and if they are in the interests of its users. A study of library facility should therefore start with analysis of the factors of library facilities which lead to user’s satisfaction. Although there may be satisfaction with staff support, collection and library cleanliness, but also Space, Library Shelving, Collection Arrangement and Environmental Conditions (Illumination, Noise, Temperature, Humidity). Physical Space has an important role in learning, teaching, and research. Information seeking behaviour of traveller changes due to-

- Analysis of Different Demographic Tourists
- Countries tourism business website
- Have visited Penghu's friends and relatives to word-of-mouth
- National Scenic Area website
- Newspaper local news reports
- Residents or friend recommendation
- The comments made by users on the Internet
- The Government Agency published tourism brochures
- The portal and travel website for tourist information
- Tourism Bureau website
- Tourism Magazines
- Travel agents recommended
- Travel books
- Travel op-Ed report in newspaper
- TV news report
- TV travel programs
- Word-of-mouth publicity by friends and relatives visited

Travel in Amsterdam



Group Tours



INFORMATION NEEDS OF TRAVELLERS

Various studies revealed that relaxation is a better predictor of life satisfaction for people engaged in shorter trips; while life satisfaction after longer trips can be best predicted by detachment, mastery, and control. Tourism experiences as a stress reliever, particularly focusing on the underlying psychological experiences associated with recovery. It was found that tourism recovery dimensions experiences had, positive effects on life satisfaction. Even a weekend getaway can help people to recover from work stress, while longer trips provide more opportunities for recovery experiences.

Information needs of travellers are characterized by highly dynamic and individual factors, e.g. perceived attractive sites, weather conditions, prices, transportation, accommodation, appointments (preparation before a trip, travelling, and post-travel activities.). In today's digital world the greatest challenge is to keep pace with the knowledge and technological expertise, necessary for finding, applying and evaluating information. We get information in different sources but from this vast information, choosing useful information is very difficult work. For all these difficult tasks we need information literacy. Therefore it is a necessity of this age to include information literacy in education. Information literacy is one art in which, we know how to use computer and also it teaches us different structure of information. With availability of internet, information literacy gets special importance. Information literacy is a survival skill in the information age. Most people think of information literacy as a set of abilities requiring individuals to recognise when information is needed and have the ability to locate-evaluate and use effectively the need information. Information literacy responsibilities are increasing in all areas of life. Information literacy bridges the gap between unknown parts of the world to known parts of the world, that we observe from grassroots level.

In order to create the global movement needed to affect real change, its become must to commit to spreading travellers knowledge and approach to travel. It's not enough to pick a responsible vacation yourself, but as you see the very real and immediate need for sustainable travel solutions, you must educate others—your friends, family, neighbours, readers, about how they can make responsible tourism choices.

Travel information falls into two main types of content

- Static: information which does not change over time (over the short term) or due to conditions, &
- Variable: information which changes over time, or due to conditions. Such information may be related to events which are recurrent, or non-recurrent in nature and information can be updated in real time

Travel information Needs include

- Accessibility information, eg for people with disabilities, luggage and strollers.
- Alternative routes
- Cycling routes/facilities/travel times
- Emergency alerts
- Incidents
- Information on the cost/sustainability of different modes
- Parking availability/location
- Ridesharing
- Real-time bus/next-bus information
- Road works/restrictions

- Special events
- Traffic delays (e.g. congestion)
- Travel times/distances
- Travel-planning tools
- Walking routes/facilities/travel times
- Weather conditions

EFFECTIVE USE OF SOCIAL MEDIA FOR USERS

Though Indian travellers are increasing day by day the usage is more on personal than academic use. More users are using popular social media like facebook, instagram, twitter etc. to upgrade their profile and communicate for personal things. Libraries are not far away from the literature has shown that many libraries are trying to cope up with this changing technology by creating presence on social media but the challenge of staying upgraded remain unanswerable. To provide facilities or services library professionals need to upgrade their skill to fill gap between library and users as; Understanding and articulating social networking site, Creating content and overhauling, Evaluating information, Applying information ethically and legally, Searching and navigating, Interacting, Teaching, Providing services.

Research shows that social media can significantly impact travel plans. In fact, 52% of Facebook report that, friends' photos have inspired travel plans. Additionally, 55% of people like social media pages related to trips they are planning. In addition to social media, mobile technology allows travellers to research and book trips anywhere at any time. Research shows that 85% of leisure travellers use their smartphones while travelling. In addition to updating personal accounts, travellers also use social media to connect with brands during vacation. Social media is a great way for travellers to ask questions and voice their concerns and opinions— and they expect quick responses from travel brands.

Today readily available GPS device is ideal for most travellers. Whether driving unfamiliar territory, hiking through the wilderness, or exploring a new city, a reliable GPS at traveller fingertips gives them options. It can guide traveller from the start, or they can get intentionally lost, knowing there's a way out. The best GPS devices not only deliver spot-on navigation but also come with an array of bonus features that keep the user super-informed (weather and traffic reports) and make the exploration experience more fun (with social media connectivity).

CONCLUSION

Travellers information literacy had impact on information seeking of them. There is a need for proper training and orientation of online resources or ICT based resources. Travellers such as Students & any other type of readers are largely depending on the library to satisfy their information needs. Information seeking behaviour studies helps to, improve understanding about traveller's information needs, Information literacy will help them flight delays and cancellations as their main source of travel stress, flight and accommodation bookings is the biggest source of stress during the travel experience, unfamiliar environments.

Our aim was to understand traveller's information needs & stress accumulates during regular travel trips. We then try to reduce the impact that, this travel-induced stress has on an organization, and through building Cultural Heritage preservation of geographical sources Maps, Gazetteers, Atlases, Globes, Guidebooks, Encyclopaedias understanding Information Seeking Behaviour; making user information literate about travel; Effective use of Social Media for users—library professionals can relieve travel stress and focus on Traveller's Satisfaction.

REFERENCES

1. https://www.researchgate.net/publication/270710928_Tourism_Experiences_as_a_Stress_Reliever
2. <https://pdfs.semanticscholar.org/ff13/ac771f6b0adfeb68b176174da0d9ecc47b58.pdf>
3. https://pure.au.dk/portal/files/104114990/Ways_of_knowing_FINAL.pdf
4. http://shodhganga.inflibnet.ac.in/bitstream/10603/71634/9/09_chapter%202.pdf
5. https://www.researchgate.net/publication/319159871_DESTINATION_TOURISM_INFORMATION_SOURCES_TRIP_QUALITY_AND_BEHAVIORAL_INTENTION_FOR_ISLAND_TOURISTS

**A CASE STUDY: RE-ENGINEERING & DEVELOPMENT OF KBP COLLEGE LIBRARY, VASHI
NEW MUMBAI**

Gherade Bhagavan D.¹ and Lad Reshma P.²Librarian¹ and Researcher², KBP College, New Mumbai

ABSTRACT

This paper presents a case study of reengineering Library and information services rendered replacing traditional methods by ICT and trace the subsequent developments. The KBP College Central Library has achieved success and attracted student's community by reengineering services and infrastructure development. This paper highlights Karmveer Bhaurao Patil (KBP) College on the transition from old system and services to reengineering and improving the library services in all sections like Acquisition section, Circulation section, References section, Periodical section, Research section and Open Access library System: Innovative project. This paper may be helpful to other Librarian to initiate reengineering library activities and library services.

Keywords: Re-engineering, Academic Library, ICT services, Open Access.

1. INTRODUCTION

Use of modern technology in library has great relevance in the context of fourth law of library science "save the time of the User" in which the internal efficiency of the library develops. IT facilitates collection, storage and organization, processing analysis, presentation, communication and dissemination of data.

The main objective of library re-engineering is to cope up with the modern re-engineered libraries are more over working as hybrid libraries. Balancing both copies and electronic resources. KBP Library have implemented to reach out to the users ,in draw them into the library either physically or virtually with growing emphasis on quality improvement KBP library adapting management techniques to give the best in form information products and services. The management theory and principle which are applicable to and organization can be successfully implanted to library.

KBP Library re-engineering entails automation ,introduction online journals ,in-house databases of differences collections, internet information services ,manpower development ,sufficient financial grants proper planning and management ,bar-coding tags use in books and back volumes journals for transaction in circulation counter with the re-engineering networking technology. The automation system facilitates user to use the KBP Library resources and services with easy and user friendly.

2. MEANING OF RE- ENGINEERING

Re-engineering means reorganization for the purpose of providing updated and improved services .The library - engineering means use of computer technology time and provide its users right information at the right time by making best use of technology.

3. OBJECTIVES

- 1) To know the changing infrastructure & development of KBP College Library.
- 2) To study Re-engineering Library services in the KBP College Library
- 3) To study benefit of Re-engineering Library services to Library Users.
- 4) To know the User satisfaction with the availability of information this is in the library.

4. RE-ENGINEERING KBP LIBRARY INFRASTRUCTURE AND DEVELOPMENT

KBP College library change from the book store of house to the e-library has come out with the effort of the ICT.

At Ground floor: Librarian's Office, Research reference & Journal Periodical section, Book acquisition & Processing Unit, Circulation Section, Text book Section, Main stack Room, OPAC & New Arrivals display, Reprographic Unit e-books section with books bank with four circulation stations . User tracking system is also available at ground floor.

At First Floor: Open Access Library system: Innovative project (at first floor)

To get at most access and use of library holdings, management of the college has decided and established and a new innovative open access library system during academic year 2015-16.

This project is KBP College ambition and optimum utilization of space in library have successfully achieved. The collection of the references books are available on various subject from Arts,Commerce,Science,

IT/Computer science streams. Learning the traditional organization of the store wells & selves, library has utilized complete space for storing the holding and producing healthy reading space with attractive personalized seating arrangement which is divided in Arts, Commerce, Science, IT/Computer Science sections and free Internet Section. Organization of the store wells and selves in wooden furniture is made around the walls of the three halls and integrated porch of three halls with seven feet height.

User is allowed to use concise any books any section. To Inspire the users Dr, Babasaheb Ambetkar, Dr. APJ Abdul Kalam and Dr. Karmveer Bhaurao Patil Books Gallery is establish in Internet Section. 100 of students and faculty are taking benefits of this project with high satisfaction. Circulation counter for Open Access Library, Free Internet section for student & Faculty, OPAC & New arrivals display showcases.

A new system i.e. **User Tracking System** for user is replaced against old user entry register in Open Access Library. In this process the authorized students and users are given a Barcode cards. This card contains an integrated Barcode that used for storing and processing information through modulating and demodulating of Barcode signal that is being transmitted. Daily and Monthly record give overall picture of the total members attended and average hours in order of Faculty/Stream, Class and Division. All records are also give the form of graph and chart also. **At third floor**:-Completive examination Guidance cell: reading room for boys and girl

5. PERIODICAL SECTION

Periodical section is a vital source for academic research and up to-date information.

KBP Library subscribes 125 National & International journals, i.e. 74 journals and 50 periodicals of various subjects. All journals are arrangement subject wise and display on Display rack. Current Awareness Services (CAS) of research journals to respective department. Periodicals/Journals /e-journals ,Bound Volume ,References, Reports, Thesis, Projects, CD/DVD, N-LIST Databases, Scholarly Literature, Newspapers & E-news papers these materials are consists in periodical section.

6. RESEARCH SECTION

Research section is allowed to use of faculty & all students. This section is established in a separate hall. Research section consists of following research materials:

61 + various subject general encyclopedias

100 of subject dictionaries, yearbooks, gazetteer.

417 latest bound volumes journals and 110 subscribes national, international journals

23 Newspapers are made available to faculty members and students.

150+ newspapers clipping on various topics,

15 subject wise file of journals current content,

Seating capacity this section more than 20 seats and assists provided to locate required information to use this section allows using faculty all students.

Besides this section reprography services is available.

7. CENTER LIBRARY PORTAL FOR ONLINE /E-LIBRARY KBP COLLEGE WEBSITE

www.kbpcollegevashi.edu.in.

KBP College library is fully Computerized Barcoded. The library has MKCL's Libraria: Library management system software develops by MKCL, Pune. OPAC is provided for searching of documents. The Library is having seven terminals for daily routine work and five terminals of Internet access.

KBP college library portal on college website include more than 150 scholarly literature, Library link thousand of full text documents including books and journals

Links are on books of various subjects, journals including competitive examinations, employment zone, syllabus etc.

Today more than 400 visitors are visiting daily to the Central Library Portal.

8. RE-ENGINEERING, ICT & OTHER TOOLS DEPLOYED TO PROVIDES MAXIMUM ACCESS TO THE LIBRARY COLLECTION:

Library Automation Software- MKCL's Libraria: Library Management System.

Online e-Library on College Website: kbpcollegevashi.edu.in portal: CENTRAL LIBRARY Use Online/e-library of our college for full text (Books/Journals). Use of OPAC For book search, Literature search services @kbp Central library our mission: you research: e-resources @N-LIST /E –journals.

Central Library consists with About Library, Scholarly Literature, Institutional repository, Open access publications, Competitive exam guidance, Employment Zone, Question papers, College Newsletter, Current Content Services.

9. KBP LIBRARY SERVICES

The library has key role in supporting the academic activities of the institution by establishing, maintaining and promoting the following library and information services. Main library services available in the library due to change in the infrastructure. The library has References services, Newspaper clipping services, Inter Library Loan, Current Awareness services, Content highlight from journal, KBP Library website, Ask to librarian, Day to day news heading, New Arrival book /journals Display services, Membership of INFLIBNET N-List database, Reprography services, Internet services, User orientation and awareness, Assistance searching Database, You search you research –Literature search. Free online books, journals, Encyclopedias, Newspapers, Dictionaries and online catalogues.

10. KBP LIBRARY FACILITIES

Library membership, Book Circulation based on Barcodes five counters for book circulations ,Library computerization and bar-coding , Searching ,downloading and printing ,College books bank scheme ,References consultation ,Inter library loan, Senior citizens library services, users awareness programme, News paper clipping, free Internet services, New arrivals book display, Special facility visual challenge, Library user feedback, suggestion, VIP visitor feedback ,Book galley ,Book drop system for book returned ,Demand slip for books ,Departmental library guides .

BC Book Bank Scheme: This scheme is free of cost to BC students, set of relevant semester against their filled book bank form.

College Book Bank Scheme: Under this scheme each student can take the set of text books of their class paying non refundable 1/3 amount of the set.

Textbook Section: There are four circulation stations and there are textbooks on various subjects of various classes of various publication and authors. All students are taking benefit of this section all working days and hours.

CONCLUSION

The transition of traditional collection to digital collection presented the library professionals with the new opportunity to play a new dynamic role and serve the information base society in better way. The finding of this study explores positive trend and considerable contribution of reengineering library services. There is a considerable growth in library services and facilities. The availability of huge information, resources and services the KBP Central library portal access is used by academicians of various faculties of Arts, Science, Commerce, IT, Management etc. KBP Library provides better services to users by the trained library professional staff.

REFERENCES

1. Pal Suredrakumar, (2012). Reengineering of services and resources in Academic libraries at Digital Era. From: <https://www.researchgate.net/publication/284156027>
2. Khan Md Alamgir, (2016). Reengineering of Libraries: Issues and Trends, Asian Journal of Multidisciplinary studies, 4(5).
3. Bakkannavar, Nagappa, (2012). Best Practice, Case Studies and Management of content, Information and knowledge in LIS Profession, Ess Ess publication, New Delhi.
4. Pai Rekha, (2015). Library reengineering: Issues and Trends, Journal of Library Science and Research (JLSR), 1.2, 1-6.
5. Parmeswaran, N. and Vimalkumar. V (2018). Reengineering Public Library services for the networked community in the Indian context. Asian school of Business National Seminar.

REENGINEERING LIBRARIES OF TODAY FOR TOMORROW: SPECIAL REFERENCE TO SHREEMATI NATHIBHAI DAMODAR THAKERSAY WOMEN'S UNIVERSITY BHARATRATNA MAHARSHI KARVE KNOWLEDGE RESOURCE CENTRE, JUHU BRANCH**Vrushali Rane**Dy. Librarian, SNTD University, Juhu Campus, Mumbai

ABSTRACT

The present article is discussing various library facilities, library services and the strategies developed to face actual challenges at SNTD Women's University Library which is now called as Bharatna Maharshi Karve Knowledge Resource Centre of Juhu Branch. The 50 year old library has developed steadily not only in providing rich resources to its users but also in terms of providing technology based services and good infrastructure. All the transformation was done with the help of dedicated staff with no cost or in limited budget of the library. While the library moved on facing the new challenges, tacit knowledge about various aspects is shared in this paper for other libraries to use. It will help libraries right from the planning stage to organising, coordinating to budgeting. The experiences shared in this paper will help libraries successfully achieve the task discussed. There are six issues discussed viz; user survey on collection & services, technology user survey, signages, sms service, six sigma and discovery services for which references are available in bibliography to locate the article to understand the strategies & outcome in depth. Rest of the paper is completely based on practical experience so the bibliography given at the end is only a means of further reading.

INTRODUCTION

The SNTD Women's University Branch Library of Juhu has developed over the years from a print library to an online library. Juhu library had good facility and number of services but many more user oriented were required to be looked at. Also quite a challenge was to complete a few long overdue jobs. Services which were hassle free were implemented on immediate basis while few services & facilities required approvals and provision of budget. The library was closed access. It was made open access after consultation with the University Librarian as it was found to be more feasible looking at the student category. Students were keen on browsing the books by themselves on shelves rather than someone else pick up the book for them. The main reason for this could be to get a look at the more related books of their subject. Also after looking at the content students would find more useful material than what one might get from the book they asked for in closed access. The important point that each library should inform their student is that the books should be searched systematically using the web catalogue, books should not be wrongly shelved as a book mis-shelved is as good as a book lost. Students should not restrict their search to the books that are seen right in front of them or which comes straight in the eye contact. A user survey was floated to understand user requirement in connection to the collection, facilities and services. The results were satisfactory and suggestions made were implemented.

Another very useful service was Table of Content (TOC) and Info Alert service. These services are based on the individual interest of the faculty. The table of content of the newly arrived core journals and magazines is scanned and is send to faculty by e-mail. The article they find useful and wish to read is send to them or they visit library to access the full article. Info alert is similar to Selective dissemination of Information (SDI) wherein user profile and document profile are matched by the library to provide interesting reads to the faculty. With these services users remain updated in their field of work.

Along with the rich print resources, library had fair number of online resources but the usage was low. A technology survey was carried out to understand the need of users better. It was found that there was less awareness among them about the online resources. Besides the regular orientation programmes at the beginning of year and during the year, a detailed information literacy programme were being organised. These trainings helped the user to understand the database better and use it well for their course and other research related work. A computer lab was developed to provide students in-house facility for use of online resources. Reference desk was bought right at the entrance with a board 'may I help you'. This facility was another motivation for students to use the database as there was always a reference librarian to help them during their search. It resulted in increase of database usage. Having reference librarian at the entrance of the library helped in right navigation of the users to the information they were looking for. Several signages were implemented all over the library to help users navigate easily through the library even if there is no person physically available to guide.

Way2sms service was introduced to send short messages to students on mobile. Technology survey revealed that students prefer everything on mobile and via e-mails. Changes with respect to their demand were made.

SMS related to books overdue, fine payment, library notice, new resources, facility & services are sent. Students feedback is huge as the message flash on their mobiles on which they can act immediately.

A 3 day annual festival Granthotsav was organised in order to cultivate reading habits among students. There were games, quizzes, competitions, book exhibition where students, faculty and other users participated to win exciting prizes. A talk was also arranged by a well known speaker who is a non librarian for all library users and another talk by professional librarian for library professionals.

These services immediately gain visibility to the library. There were few facilities, services or long overdue jobs that needed planning and monitoring during implementation. It has been discussed here in the form of case studies.

CASE 1 – UNCLASSIFIED BOOKS

There were several books unclassified. Because of which these books though newly recommended and purchased were not on shelf for users to use or borrow. Unlike journals books do not contain current information. Thus it becomes all the more necessary to place these books for circulation immediately on arrival. The aim of this project was to place close to 8000 books on shelf. After analysing the whole situation, it was decided to sort the books by subjects for quick classification. Authority list was in place, but it had to be modified a bit as per the present need. The various phases of DMAIC six sigma processes were applied. The project was defined, measured, analysed, improved as per changes and controlled to get the final result. The whole project went systematically to get accurate and speedy results.

CASE 2 – STOCK VERIFICATION

Stock Verification for any library whether small or big is a huge challenge. Juhu library conducted stock verification every year but of a particular subject / class. Full stock verification was never done. After 50 years of library existence, library took up the challenge of full stock verification. A thorough planning was required as approximately 83500 books were to be checked.

It was decided not to conduct stock verification in library management software SLIM as there were many minor issues to be tackled. Like error in the initial data entry of books, not all books were entered in the software, wrong entries of books, duplication of numbers as books from Churchgate campus and study centres were shifted to Juhu library when the departments shifted etc.

We had only 15 days to complete the stock with limited staff and resources. Barcode scanners were hired on rent. Groups were made of one professional staff with one peon. Stacks were equally divided among all the groups. Library was closed for borrowing. However return of books was acceptable as not all users were able to return the books in time for stock checking.

The computers with barcode scanner were kept in respective stack with the groups. Books were systematically brought by the peons from the shelf to the table where professional staff was scanning the accession number of the book present on the barcode label. The accession numbers were scanned in an excel sheet only in Row A one below the other. This helped in merging the files present on computers of groups of all the staff.

All problematic books required checking in the accession register or were kept aside for some other reason after registering the accession number.

After all the books were scanned, files of all the groups were merged one after other in the same row i.e. Row A. During this process duplicate accession numbers were found, which were removed after again checking at different records.

Besides the books on shelf, all other categories accession numbers were also recorded like weeded books, lost books, issued books to students, faculty etc, books transferred, if any etc.

The final report showed the total count of books on shelf and all the other categories. This total was subtracted from the total books accessioned in the library to get missing books number. The loss was well within the UGC norms (3 books per 1000 books circulated) and was acceptable by the Library Committee.

CASE 3 - KNIMBUS

The students unless told by faculty to use a particular library resource will never use library, they prefer use of Google. Also with increasing online resources and change of subscribed resources due to budget constraint, library opted for Knimbus a discovery tool. It provide users one point search platform to search across all the subscribed resources, open access resources, online public access catalogue and institutional repository. Knimbus platform is accessible to students from anywhere with their registered user name and password. It is

necessary for users to understand the importance of discovery services in their academics and use these resources. Knimbus or any other discovery tool give direction to users and give libraries a way to draw user attention to its rich resources.

CASE 4 – RENOVATION & SHIFTING

Library had to undergo major civil work of only ground floor urgently as funds obtained from RUSA need to be utilized in limited time period. For this library had to shift to a new place on campus which was on the fifth floor of engineering college. The transition period was of seven months. It was a big challenge to shift the whole library that too on fifth floor. The library team did brainstorming for few days and finally were ready with the strategy on how to go about the same. The task was shifting of books and journals. It was decided to shift limited resources only that was most required by users. Initially all the stacks and its shelves were coded. All the racks were coded horizontally from A to G and each shelf vertically from 1 to 7. Thus rack number one was 1.A.1 to 1.A.7 ; 1.B.1 to 1.B.7 and so on. The books were tied up with a tag of same code of its shelf. With this even if all the bundles were mixed up, it was easy to identify their original place because of the tag on the bundle and same code on the shelf. Unused books, fiction section, areas which were rarely used were shifted to first floor of library. Bound volumes, reference books were untouched as they were not shifted and were housed on the first floor itself. Rest of the books and current journals were shifted. Besides books and journals, circulation counter, reading table & chairs, acquisition & technical department, periodicals department, office & its cupboards with file, computers, printers, photocopying machine etc were also part of shifting.

The shifting process involved initially carrying books, journals, table, chairs and other material up till tempo in a big trolley and from tempo to the room on ground floor of the engineering college building. After all the stacks were empty, they were shifted first and placed in the big hall. There was a pulley tied to carry everything on fifth floor. However few items were carried by stairs.

The shifting process was done by the contractor's labour. It took one and half month for the library to reopen. The other important factors required in place were internet connection, new IPs for use of online resources, purchase of mobile for library use, electrical wiring, etc. Today the civil work is going on and like in other cases after successfully completion of work and shifting back, a detail article will be written for use of others. Hope we get more funds and have compactors to store books & bound volumes.

CONCLUSION

Any challenge can be conveniently overcome and handled smoothly with the principles of management given by Luther Gulick and Lyndall Urwick acronym as POSDCORB - Planning, Organising, Staffing, Directing, Coordinating, Reporting and Budgeting. Though as old as 1937, it is effective even today. These elements were kept in mind and were followed at every step to ensure successful results.

BIBLIOGRAPHY

1. Barbara B. Moran, (2001) Restructuring the university library: a North American perspective, *Journal of Documentation*, Vol. 57 Issue: 1, pp.100-114, <https://doi.org/10.1108/EUM000000007079>
2. Brad Eden, Kenneth J. Bierman, (2002) Knowledge access management at Lied Library: cataloging and Web site reengineering, *Library Hi Tech*, Vol. 20 Issue: 1, pp.90-103, <https://doi.org/10.1108/07378830210420717>
3. Chaucer Chaoyun Liang, (1999), Critical success factors for reinventing the academic library, *Reference Services Review*, Vol. 27 Issue: 2, pp.127-133, <https://doi.org/10.1108/00907329910275132>
4. Dirk Lewandowsk (2010), Using Search Engine Technology to Improve Library Catalogs, in Anne Woodsworth (ed.) *Advances in Librarianship (Advances in Librarianship, Volume 32)* Emerald Group Publishing Limited, pp.35 – 54
5. Ijeoma Juachukiu Ibegbulam, Richard Olorunsola, (2001) Restructuring academic libraries in Nigeria: issues to consider. *Library Management*, Vol. 22 Issue: 8/9, pp.381-386, <https://doi.org/10.1108/EUM000000006062>
6. Jessica Lange, Andrea Miller-Nesbitt, Sarah Severson, (2016). Reducing noise in the academic library: the effectiveness of installing noise meters, *Library Hi Tech*, Vol. 34 Issue: 1, pp.45-63, <https://doi.org/10.1108/LHT-04-2015-0034>
7. Jingfeng Xia, (2004) Library space management: a GIS proposal, *Library Hi Tech*, Vol. 22 Issue: 4, pp.375-382, <https://doi.org/10.1108/07378830410570476>

8. Joseph A. Boisse, , Stella Bentley, (1996), Reorganizing Libraries, in Irene P. Godden (ed.) *Advances in Librarianship (Advances in Librarianship, Volume 20)* Emerald Group Publishing Limited, pp.27 – 45
9. Kwasi Darko Ampem, (2006). Retrospective conversion of serials and card catalogue records: A case study of project management in academic libraries, *Library Management*, Vol. 27 Issue: 3, pp.121-134, <https://doi.org/10.1108/01435120610652879>
10. M. Catherine Hirschbiel, Julie Petzold , (2016), A Space for Everyone and Everyone in the Space: Re-Designing Existing Library Space to Inspire Collaboration, in Samantha Schmehl Hines , Kathryn Moore Crowe (ed.) *The Future of Library Space (Advances in Library Administration and Organization, Volume 36)* Emerald Group Publishing Limited, pp.253 – 283
11. Mark Addleson , (2018), Organizing Intelligence (OQ): The Source of Productive Workplaces, in Debra A. Noumair , Abraham B. (Rami) Shani (ed.) *Research in Organizational Change and Development (Research in Organizational Change and Development, Volume 26)* Emerald Publishing Limited, pp.217 – 263
12. Myoungja Lee Kwon, Kenneth E. Marks, (2002). Construction of the Lied Library, *Library Hi Tech*, Vol. 20 Issue: 1, pp.21-32, <https://doi.org/10.1108/07378830210420663>
13. Ramdas, S. G. (2018). Reengineering of College Library Services through Web Technology. *World Digital Libraries*, 10(1), 55-61.
14. Rane, Vrushali . Technology user study at SNDT WU Library. In A. Parvez & others (eds.). Digital governance: innovation information and libraries: Proceedings of International conference held at IIM Indore on April 2016 (pp.127-130); New Delhi: Asian Library Association. ISBN: 978-93-5258-425-3
15. Rane, Vrushali . Way2sms mobile technology – a boon for libraries. In N. N. Pandey and S. N. Shah, Innovative application of technology in libraries: Proceedings of National Conference held at Dalmia College Malad, 23 September 2016 (pp 267-281). Mumbai: Prahladrai Dalmai Lions College of Commerce & Economics. ISBN: 978-81-926019-7-7.
16. Rane, Vrushali . Discovery Service in Indian Libraries: Librarians Perspective. Pp. 98-103. MANLIBNET 2015 International conference on Managing Library and information systems in the digital world: challenges and opportunities. 7-9 May 2015. T.A.Pai Management Institute, Manipal (TAPMI). 978-93-80574-81-3
17. Rane, Vrushali. Books journey from acquisition to circulation: the six sigma way at SNDT Women's University Branch Library Juhu pp.17-22. NMIMS & TCS National Conference 2015 on 21st Century Librarianship 5th June 2015, NMIMS Mumbai 978-93-85026-13-3
18. Rane, Vrushali . 'Marketing Libraries using Signage'. *International Journal of Information Resources and Knowledge Management*, Vol.1, No.1, January –June 2014. pp. 37-43. ISSN: 2347-663X
19. Rane, Vrushali & Avhad, Vaishali. 'User's study at SNDT Women's University Branch Library'. *Asian Journal of Library and Information Science*, Vol.5, No. 3-4, December 2013, pp. 98-110. ISSN: 0975-315X.
20. Rob McGee, (2006) Information technology (IT) strategic planning for libraries, *Library Management*, Vol. 27 Issue: 6/7, pp.470-485, <https://doi.org/10.1108/01435120610702459>
21. Singh, M. K., & Tripathi, A. (2018). Re-Engineering Public Libraries of Varanasi. *SRELS Journal of Information Management*, 55(1), 51-57.
22. Terence K. Huwe, (1997), Libraries and the Idea of the Organization, in Irene P. Godden (ed.) *Advances in Librarianship (Advances in Librarianship, Volume 21)* Emerald Group Publishing Limited, pp.1 – 24.
23. Thøger Kristensen, (2001), Acquisitions reengineering, in Frederick C. Lynden (ed.) *Advances in Librarianship (Advances in Librarianship, Volume 25)* Emerald Group Publishing Limited, pp.221 – 228.

USE OF FACEBOOK BY THE STUDENTS OF PERFORMING ARTS (INDIAN CLASSICAL DANCE), MUMBAI: A STUDY

Ramyia ShreejeshLibrarian, Nalanda Nritya Kala Mahavidyalaya, JVPD Scheme, Vile Parle (West), Mumbai

ABSTRACT

Social Media is the buzzword amongst the younger generations all over the world. Most of this younger generation constitutes students who are studying at different levels of education, pursuing different fields of specialization etc. They all use social media for interaction, networking, knowledge sharing, entrainment, leisure and so on. Facebook, unlike other social media platforms has gained more popularity amongst the youngsters because of the ease to connect with people .Apart from connecting with their old friends , relatives and alumni they are also using it to connect with domain specific people by joining in “groups “ or “liking a page” of established professionals and institutions. The present study focus on the use of Facebook amongst the students of performing arts (Indian Classical Dance) studying in the college of Nalanda Nritya Kala mahavidyalaya. The survey method using structured questionnaire was distributed amongst randomly selected students. The objectives of the study was 1) to find out how the Facebook has enhanced their experience with their field i.e. Indian Classical Dance and related fields like Music, Drama and other performing arts 2) how the same data collected from the study can be used in the academic library set-up to enhance the services to both the faculty and students of the performing arts (Dance).

Keywords: Social Media, Facebook ,Performing arts ,Nalanda, Indian Classical Dance

1. INTRODUCTION

Due to high-speed bandwidth, low internet charges and cheap smartphones everybody is hooked to World Wide Web. These web users are also users of various social media platforms like Facebook, Instagram, WhatsApp, twitter ,youtube ,Linkedin. Mon(2015) defined that the term “social media” envisions a new type of media that is shared and participatory in nature involving others in the information lifecycle of creation, organization, sharing, finding and use. These social media sites offers variety of digital spaces that provides collective, collaborative and interactive information creation and sharing. Emergence of “Social Media” have revolutionised the way we interact and network with the people which is mostly online. A Particular segment of society which has affected a lot with this “Social Media “Revolution are the students. The way students interact with information today is different from the students ten year ago. It is very important for educators to know how students interact with information in their daily lives in order to know what to teach and how to teach it.

Amongst all the Social Media Sites Facebook has emerged as the most visited social networking sites with over 1.52 billion active users visiting it on a daily basis as per the survey conducted by the statistic portal “statista.com”.The main purpose of this paper is to study how the students of performing arts from Nalanda Nritya Kala Mahavidyalaya are using Facebook to interact and share information with one other with regards to Indian dance, music and other related fields.

2. BRIEF HISTORY OF FACEBOOK

The Mission statement of Facebook says “to give people the power to share and to make the world more open and connected “.Mark Zuckerberg launched Facebook in February 2004.The earlier users were from the Harvard university later it got expanded to include other Boston area colleges and later in 2004 to most universities in the US. On sept 26, 2006 Facebook was made available to anyone over 13 year of age with valid email address.

Today with more than 2 billion monthly active users, Facebook is the most popular social network worldwide. Facebook’s appeal is not only based on its social platform but also on its strong mobile integration and its mobile messaging capabilities.

2.1 Some Powerful Statistics of Facebook

The Statistics below includes the most current information provided directly by Facebook in their reports to Wall Street (Source : www.zephoria.com)

1. There are over 2.32 billion monthly active users worldwide as on December 31.2018.
2. 1.52 billion people on average log onto facebook daily and are considered daily active users .
3. Five new profiles are created every second.

4. Photo uploads total 300 million per day.
5. Every 60 seconds on Facebook: 510,000 comments are posted, 293 ,000 statues are updated, and 136,000 photos are uploaded.

3. ABOUT THE COLLEGE

Nalanda Nritya Kala Mahavidyalaya was established in the year 1973. The college is permanently affiliated to University of Mumbai. It is a grant-in-aid institution recognized by the U.G.C. under 2(f) & 12(b) of the UGC Act 1956. The college has the reputation of being the only college where degrees are awarded to students at the Bachelors, Masters & Ph.D. levels by the University. Here in the college practical side of teaching is still being done in a traditional method and the theory is taken care of by academically trained dancers and professors. The students are systematically taught the shastric sanction and basis of extant dance practice. At the postgraduate level, the students take comparative theory papers on Aesthetics ,world theatrical traditions etc., and gain teaching experience. They have option of taking up a topic for research or choreograph items at the Masters level. Over the years, Nalanda College has created an exceptionally well trained, highly qualified and scholarly generation of dancers who are not only proficient performers but also excellent theoreticians, analysers and teachers. (Kanak, 2006).

4. OBJECTIVES OF THE STUDY

- a. To know how performing arts students interact and exchange information with like-minded people over Facebook.
- b. To enquire how the performing arts students are using Facebook for their growth and development.
- c. To understand whether the relationships developed over Facebook help them in anyway in their field professionally and personally.

5. METHODOLOGY

In order to conduct a study, survey method was chosen .A questionnaire were distributed to randomly selected sample of 30 students out of total 61 students. These students were pursuing graduation and post-graduation in the college. Total 14 questions were framed keeping in view the objectives of the study. The students were allowed to give anonyms feedback. Questions were close-ended in nature.

6. USE OF FACEBOOK BY THE STUDENTS OF PERFORMING ARTS: AN ANALYSIS

Out of the 30 randomly selected students, five students denied having membership on Facebook, so throughout only the response of 25 students are considered for the survey. They however said they were active on some other social networking sites like whatsapp, instagram etc.

Table-1

Total students	No of users	Percentage
Using Facebook	25	84%
not using Facebook	5	16%

The study revealed that though the Facebook remains to be the most used social media tools amongst the students of performing arts (dance) in the college, however there are other social media tools used by the students like given in the **Table 2 below**:

Table-2

Social Media Tools	Students out of 30	Percentage
Facebook	25	84%
Instagram	20	67%
WhatsApp	15	50%
LinkedIn	1	3%
Twitter	1	3%
Snapchat	1	3%

Students were asked apart from Facebook which other social media tools were they using for social networking. The survey showed that 84 percent students used Facebook while 67percent used Instagram and 50 percent WhatsApp. This shows that students prefer Facebook over other social media tools.

6.1 Time-period of using Facebook

Table-3

Time-period	Students out of 30	Percentage
More than 5 year	18	72%
2-5 year	7	28%

It is evident from Table 3 that 72% of users are using Facebook for more than 5 years....

6.2 Frequency of using Facebook

Table-4

Frequency	Students out of 30	Percentage
Daily	15	60%
At least once a week	7	28%
Less than once a week	4	16%

Students were asked how often they access Facebook and It is well evident from Table 4 that 60 percent of students access Facebook daily while 28 percent at least once a week and 16 percent more than a week.

6.3 Total Contacts/Friends on Facebook

Table-5

Total Contacts	Students out of 30	Percentage
More than 500	12	48%
200-500	9	36%
100-200	2	8%
Less than 100	2	8%

Student were asked to mention the total contacts that they have on Facebook of which it is evident from table 5 that 48 percent of students have more than 500 contact which shows that how the current generation is connected more online in terms of personal and professional interests. Followed by 36 percent students having around 200-500 contacts and 8 percent having around 100-200 and less than 8 percent contacts respectively.

6.4 Purpose of using Facebook

Next students were asked various personal purposes of visiting Facebook like to be in touch with friends and relatives, meeting new people, posting comments, to play games, uploading photos, videos etc...

Table-6

Purposes	Agree	Agree to some extent	Disagree
To keep in touch with friends and relatives	22 (88%)	3 (12%)	0
To meet new people	5 (20%)	14 (56%)	6(24%)
Exchange Photos ,videos ,music etc	12 (48%)	9 (36%)	3 (12%)
To post comments or express opinions	11 (44%)	10 (40%)	3 (12%)
To play games etc	4 (16%)	6 (24%)	15 (60%)

And as we can see from Table 6 that 88 percent of students agree and 12 percent of students agree to some extent of using Facebook to keep in touch with friends and relatives. There is no disagreement with respect to this purpose .Whereas 20 percent of students agree and majority of them (56 percent of students) agree to some extent that they use Facebook to meet new people, however 24 percent disagreed using Facebook in this regard. In terms of exchanging photos,videos etc over Facebook 48 percent students agree, 36 percent agree to some extent and 12 percent disagreed. The survey revealed that majority of students considered it ok to post comment or express opinion over Facebook like 44 percent agree and 40 percent agree to some extent in this survey .Just 12 percent felt that they don't use Facebook to post comments or express opinions. When it came to playing games over Facebook majority of them (60 percent) disagreed while 24 percent agreed to some extent and only 16 percent agreed .Table 6 is very much reflective of this generation using social media for social networking.

6.5 Purpose of using Facebook: Dance related

Apart from Purposes mentioned above, students were asked various other purposes of using Facebook which were closely related to their field i.e. Indian Classical Dance, Music and other related fields.

Table-7

Purposes	Agree	Agree to some extent	Disagree
Market your dancing skills	19 (76%)	6(24%)	0
Follow Dance groups	25 (100%)	0	0
Follow pages of other cultural institutions like NCPA ,Kalashetra ,Kalamandalam etc	21 (84%)	4 (16 %)	0
Follow Dance festivals and events	22(88%)	3 (12%)	0
To network with people of Indian classical dance and related fields like Music ,theatre ,folk art etc	23 (92%)	2 (8%)	0
To search for field-related courses ,fulltime/part time jobs etc	18 (72%)	4 (16%)	3 (12%)
Going live with your or others dance performances etc.	7 (28%)	9 (36%)	9 (36%)

As we can see from the Table 7 that majority of the students are using the medium of Facebook for various Dance-related activities like marketing of their dance skills, following different Dance groups and cultural institutions like National Council of Performing Arts ,Kalashetra ,Kerala Kalamandalam etc., Follow different Cultural and Dance festivals and events happenings at various levels ,Follow pages of Classical Dancers ,to network with people pursuing Indian classical dance ,Music and Drama. The survey also found out that there were few students who searched for Full-time/Part-time job opportunities (Dance-related) on Facebook and some like using the “Live” feature of Facebook for their own or others Dance performances.

OTHER FINDINGS

1. Students preferred “Smartphone” to access Facebook.
2. All students were aware of College having a Page on Facebook.
3. Most of the students spent less than 1 hour on Facebook.

CONCLUSION

The study findings reveal that there is a widespread use of “Facebook” amongst the performing arts students. Majority of them use “Facebook” for academic purposes as stated in the Table 7. Taking this findings into consideration the library can have its own dedicated page on Facebook on which apart from the information and services on library resources, various Indian dance related information can be published like by 1.) Following aforesaid “Groups” and “Pages” of Artists and Cultural institutions 2) Posting Various Cultural Events and Festivals published in various print and non-print medium 3) Providing links to various scholarly articles and news pertaining to Indian classical dance and other allied subjects like Music ,Drama and Theatre.

REFERENCES

- Howard, H., & Huber, S. (2018, March). Academic libraries on social media: finding the student and the information they want. *Information technology and libraries*, 37(1), 8-18. Retrieved from EBSCO HOST
- Huppe, A. (2011, 5). An Exploratory study of student use of facebook and other communication modulates. *Digital Library*. Retrieved from <https://digital.library.unt.edu/ark:/67531/metadc67992/>
- Husnabeen, A. N. (n.d.). Use of facebook by students of fine arts (Mysore University). Use of facebook by students of fine arts (Mysore University). Retrieved from eprints.uni-mysore.ac.in/17228/
- Kanak, R. (2006). Classical indian dance in university education. *University News*, 98-103.
- Mostofa, M. I. (n.d.). Usage Pattern of facebook by the students of Dhaka University: a study. doi:<http://op.niscair.res.in/index.php/ALIS/article/download/8162/434>
- Top 20 Facebook Statistics - Updated January 2019. (2019, 01). Retrieved from <https://zephoria.com/top-15-valuable-facebook-statistics/>

ELECTRONIC LIBRARY AND LIBRARY NETWORKS IN INDIA

Rohidas B. Rathod¹ and Dr. Shilpa Gawande²Research Scholar¹, S. P. Pune UniversityLibrarian², DIMR, Pune

ABSTRACT

This paper discusses the Electronic library its characteristics, advantages and the types of library network helps to link member libraries through e- Technology.

Keywords: Library networks, e-library, digital library, e-resources etc.

PREAMBLE

Electronic library or E-library is a library, which exists, in an electronic form where the information is selected, acquired, processed, organizes, stored and retrieved in electronic form. Nowadays libraries are in the infant stage of the electronic revolution. Electronic library helps to improve the e-learning refers to the delivery of training by electronic means including text, audio-video, graphics, animation, live interaction with a facilitator and/or other students exercises and texts. E-libraries may be found to operate worldwide, their shapes and form being variable; depending on the country and the areas they serve (e.g. India, rural, semi-urban areas). Today electronic libraries and mobile library services provide information, materials and references to such places, where modern information is used and used by people in the community. E-Libraries not only cover text in machine readable form but also Graphics, Photographs, Audio-Video, CD-ROM and so on. Nowadays most of the textbooks are available in the electronic form. Electronic libraries are to be used either online or offline.

CHARACTERISTICS OF ELECTRONIC LIBRARY

1. Electronic libraries have collections that are well-organized and managed; are big and have time; there are many formats; contain some objects that are digital as origin.
2. Electronic library includes all the processes and services offered by traditional libraries, it is necessary to improve this process to adjust the difference between electronic and paper media.
3. Electronic library is not a single entity; it may also provide access to electronic material and resources from outside the actual confines of any mobile library.
4. Electronic libraries support quick and efficient access to a large number of distributed but interlinked information sources that are seamlessly integrated.

ADVANTAGES OF ELECTRONIC LIBRARY

1. The resources will never be out on loan and will be available at anytime, anyplace, and anywhere.
2. The need for added library space may decline.
3. Cost of retrieving and re shelving materials will be reduced.
4. SMS notification services; User-friendly Aid; Personalised Service; Ability to Access Information; Time Saving, User Participation; Location Awareness; Limitless Access and access to Print-disabled Users

LIBRARY NETWORKS IN INDIA

The literature deluge and paucity of funds in libraries worldwide gave birth to the concept of library cooperation for promoting the exchange of their resources for mutual benefit of libraries. If we look back into the history it is found that the first efforts in this direction was made in Calcutta and (CALIBNET) Calcutta Libraries Network was developed. Later on (DELNET) in 1988 at Delhi and the 1990's have also seen the initiation of some more city library network like the (BONET) in Bombay, the Pune Library Network (PUNENET), the Madras Library Network (MALIBNET), the Ahmedabad library Network (ADINET) and the Education Research Network (ERNET) came into being. In 1991 (INFLIBNET) was established which has flourished continuously but during last five years it has made multi-dimensional development as far as its programmes and services are concerned. The following are the important library networks to promote sharing of resources among the libraries in India

1. EDUCATION AND RESEARCH NETWORK (ERNET)**URL: www.ernet.in**

ERNET was initiated in 1986 by the Department of Electronics (DoE), with funding support from the Government of India and United Nations Development Program (UNDP), involving eight premier institutions

as participating agencies NCST (National Centre for Software Technology) Bombay, IISc (Indian Institute of Science) Bangalore, five IITs (Indian Institutes of Technology) at Delhi, Bombay, Kanpur, Kharagpur and Madras, and the DoE, New Delhi. ERNET began as a multi-protocol network with both the TCP/IP and the OSI-IP protocol stacks running over the backbone. Since 1995, however, almost all traffic is carried over TCP/IP. ERNET (Education and Research Network) has made a significant contribution to the emergence of networking in the country. Operations of National Academic and Research Network: Providing a world class reliable, robust and state-of-the-art Network Services to Academic and Research institutions of the country.

2. DEVELOPING LIBRARY NETWORK (DELNET)

URL: www.delnet.in

Delnet is celebrating Silver Jubilee Year since June, 2017. It is a non-governmental resource sharing library network in India. DELNET was started at the India International Centre Library in January 1988 and was registered as a society in 1992. It was initially supported by the National Information System for Science and Technology (NISSAT). It is located in Jawaharlal Nehru University Campus, New Delhi. Delnet is a major resource sharing library network in South Asia, connecting more than 6300 libraries in 33 states and 8 other countries. Delnet is devoted to the modernisation and networking of libraries since 1988. At present name is changed to Developing Library Network on 13th September 2000, Delhi library Network became-Developing Library Network. The main objectives of Delnet are to promote resourcesharing among members-libraries by collecting, storing and disseminating information and by offering networking services to users. Delnet arranges tutorials, workshops, lectures and training programmes every year from time to time for library and information science professionals in the country. NACLIN which was started in 1998 and organised every year at premiere institutions around the country. Delnet has co-ordination units in Bangalore, Hyderabad and Pune.

Delnet provides number of e-resources to the researchers. Delnet are providing more than three crore bibliographic records of books, periodicals, articles, theses, dissertations, video recordings, sound recordings and other databases and also provide e-books, e-journals, e-articles, e-theses, e-dissertations in all fields and other services such as Inter Library Loan (ILL), Document Delivery Service (DDS) retro conversion, reference services, professional trainings, technical supports, open access journals etc. also provide DELPLUS software to the member libraries. Delnet gives training in the use of Koha an Open Source integrated library system and DSpace for building digital libraries. Delnet at present has libraries as its members of

Information and Library Network (INFLIBNET)

URL:- <https://www.inflibnet.ac.in/>

A dream project of University Grants Commission of India and the then UGC Chairman Prof. Yashpal INFLIBNET (Information and Library Network) was initiated in 1991. The basic object of INFLIBNET was to facilitate the enhancing capabilities regarding information handling and resource sharing among the libraries of institutions of higher education, especially university libraries in India. Presently INFLIBNET is located at Ahmedabad. INFLIBNET has developed SOUL (Software for University Libraries). INFLIBNET has created IndCat for Books and Theses available in member libraries. This service is popularly known as UGC - INFONET J-Gate Custom Content for Consortium. Also provides N-LIST Programme for College Libraries, OJAS (Open Journal Access System), SHODHGANGA, SHODHGANGOTRI and conference proceedings of CALIBER.

3. CALCUTTA LIBRARY NETWORK (CALIBNET)

URL: <http://www.calibnet.org/>

It is started in 1992 at Calcutta. Actually CALIBNET was the first library Network visualized and started by NISSAT in 1986. To promote sharing of resources among the libraries in Calcutta by developing a network of libraries, by collecting, storing and dissemination of information and offering computerised services to the users and found accounting.

4. BOMBAY LIBRARY NETWORK (BONET)

BONET was established in 6 November 1992. It was setup at the National Centre for Software Technology (NCST), Mumbai. The Network is sponsored by NISSAT. The main objective is to build a low cost of library information system which can possibly be used by members or participants of Bombay Library Network (earlier it was BOSLA).

6. PUNE LIBRARY NETWORK (PUNENET)

It is started in 1992 at Pune. PUNENET - Pune Libraries Networking is a joint programme of the University of Pune, National Chemical Laboratory (NCL) and Centre for Development of Advanced Computing (C-DAC) funded by National Information System for Science and Technology (NISSAT), Department of Scientific and

Industrial Research (DSIR), Government of India. It is hosted in the Bioinformatics Centre in University of Pune. It had maintained a centralized database of information resources available in the member libraries of PUNENET.

7. MADRAS LIBRARY NETWORK (MALIBNET)

The need for interconnecting libraries and information centres in Madras was visualized in 1991. MALIBNET is a registered society of Tamil Nadu Government (Reg. No.45/1993). It was founded in 1993. The main aim and objectives behind establishing network is to undertake scientific research in the field of library and documentation evolves a network of libraries and information centres in India.

8. AHMEDABAD LIBRARY NETWORK (ADINET)

URL: <http://www.alibnet.org>

ADINET is a network of libraries and information centres in Gujarat which was established in 1994. It was established by National Information System for Science and Technology (NISSAT), Department of Science and Industrial Research, Government of India, New Delhi. The main aim of ADINET is to join libraries for resource sharing.

9. MYSORE LIBRARY NETWORK (MYLIBNET)

Mysore Library Network (MYLIBNET) was established at Mysore in the year 1995 and the Central Food Technological Research Institute (CFTRI) Mysore, being an active member of Mysore City Library Consortium (MCLC) and hosting this network in its premises. The Mysore Library Network was set up under the financial assistance from NISSAT. The main objectives are to prepare a catalogue of periodicals, to facilitate document delivery services, to promote Inter Library loan, to create Centralized database etc.

10. CONCLUSION

In this age of information explosion there is need of sharing of information therefore, it is essential to development library networks. Due to ICT it is possible to share information globally. In electronic libraries information is store and access in electronic forms. It also provides remote access and available instant in electronic form. Electronic library save the time of the users and cost is also affordable.

REFERENCES

- ❖ Doust, Robin W. (1999). "Provision of School Library Services by Means of Mobile Libraries: the Zimbabwe Experience." IFLA Journal, 25, (3), 148-51.
- ❖ Georgios Bikos and Panagiota Papadimitriou (2014). Mobile Libraries in Greece: Historical Perspectives and the state of the art. Procedia - Social and Behavioral Sciences 147, 376 – 382
- ❖ Aswal, R. S. , ed. (2003). Information Network in India. New Delhi: EssEss Publication.
- ❖ https://www.ripublication.com/gjal/gjalv3n1_04.pdf
- ❖ http://shodhganga.inflibnet.ac.in/bitstream/10603/50907/13/13_chapter%206.pdf

**LIBRARY AUTOMATION: AN OVERVIEW IN RATNAGIRI DISTRICT COLLEGE LIBRARIES
AFFILIATED TO MUMBAI UNIVERSITY****Subhash S. Mayangade**Librarian, Athalye-Sapre-Pitre College, Devrukh

ABSTRACT

This paper is focused on the overview and status of library automation in Ratnagiri District College Libraries affiliated to Mumbai University. The Automation of libraries its need for changes in modern age. The specific objectives are to know the status of library automation in college libraries, and to promoting the IT based services, The impact of ICT has changed the library operation and its functionality in to a fast to faster mode. Automation has reduced the man power and saving the time of users. The Survey methods was used in this study. Well structured, open as well as closed questionnaire use for this study. Suggested Library and Information Centre cannot function without computer and information technology. To fulfil the information, need of users, library should provide computer facility with uninterrupted internet to its users.

Keywords: Library Automation, ICT, OPAC, Library Software

INTRODUCTION

Best libraries have always been considered as good Assets and “**Heart of Institutions**” and the channels of information centres. The value of the library is found in its collection of information resources and its services. In the age of ICT has brought dynamic changes in information and dissemination of knowledge to its end users. It is important to know the perception and use of computer & Internet services in general and the electronic resources in particular LIS professionals. Library Automation is needed today in the ICT era for providing the needed information to all types of the user community. The Automation has become the bare necessity for each and every library; hence all library professionals needs to have basic knowledge of library automation. The main purpose of including this to direct the LIS Professionals that will allow them to discover the material they work with fellow users to understand the curriculum.

The primary objective of the library is to promote the use of its resources. Library services bring together the document or Information sources and their users by personal efforts of the library staff. User’s information requirement depends upon the purpose for which he/she is seeking information. Library services satisfy information need of users through dissemination of information resources.

MEANING OF LIBRARY AUTOMATION

The word ‘Automation’ has been derived from a Greek word ‘Automate’ which means something which has the power of spontaneous motion or self-movement (Webster’s Third New International Dictionary of English Language, 1966). The term ‘Automation’ was first introduced by D.S. Harder in 1936, who was then with the General Motor Company in the United States. He used the term automation to mean automatic handling of parts between progressive production processes.

According to Encyclopaedia of Library and Information Sciences “Library Automation is the use of automatic and semiautomatic data processing machines to perform such traditional library activities as acquisitions, cataloguing, and circulation. These activities are not necessarily performed in traditional ways, the activities themselves are those traditionally associated with libraries; library automation may thus be distinguished from related fields such as information retrieval fields such as information retrieval, automatic indexing and abstracting and automatic textual analysis” (Kent, 1977).

OBJECTIVES

- To Know the Status of Library Automation in College Libraries.
- To Promoting IT based services in the Rural Area College Libraries.
- To improve the Quality of Library Services.
- To Know the Present status of NAAC Accredited colleges in Ratnagiri District and its impact on library services.

NEED OF LIBRARY AUTOMATION

- To save the time of Library users/readers.
 - Bibliographical record keeping of documents.
-
-

- To provide the access of Information in faster way and single click.
- To avoid duplication work.
- Flexibility in information searching.
- Participating in resource sharing and union catalogue.
- Speedy processing of information and its retrievals.
- Improve the quality of existing services and to reduce routine and time consuming clerical works.

SCOPE AND LIMITATION OF RESEARCH STUDY

In Ratnagiri district, nearby 28 senior, 2 IT, 4- Hotel Management, 6, polytechnic colleges, 4 Engineering Colleges, 3 Pharmacy, 3 B.Ed., 1 Law, 3 College of Education and one University Sub-Centre, affiliated to Mumbai University is extending the educational facilities to the patronage. The scope of the present study is to ascertain the Status of Library Automation in Ratnagiri district of Maharashtra. Therefore, 16 senior colleges from 9 talukas of Ratnagiri district, which are affiliated to University of Mumbai are select for this study.

METHODOLOGY

Present study has used survey method. Survey method plays a significant role in research as can be seen from the statement. “The survey method is one of the most effective and sensitive instruments of research. Survey research can produce much needed knowledge” (Kasyap, 1969).

The steps in the research methodology included:

DATA COLLECTION

Researcher collected the data with the help of structured questionnaire. While preparing the questionnaire, use both types of questions, viz, structured (open-ended and closed-ended). This facilitated the researcher to collect the requisite data in the useful format.

DATA ANALYSIS & INTERPRETATION

The collected questionnaires are analysed and put in the form of tables and graphs with the help of statistical analysis software i.e. SPSS package and presented data in from.

Table No. 01: Distribution of Colleges by year of establishment

Year of Establishment	Number of Libraries	Percentage
1945-1970	02	12.5%
1971-1990	03	18.75%
1991-2010	11	68.75%
Total	16	100%

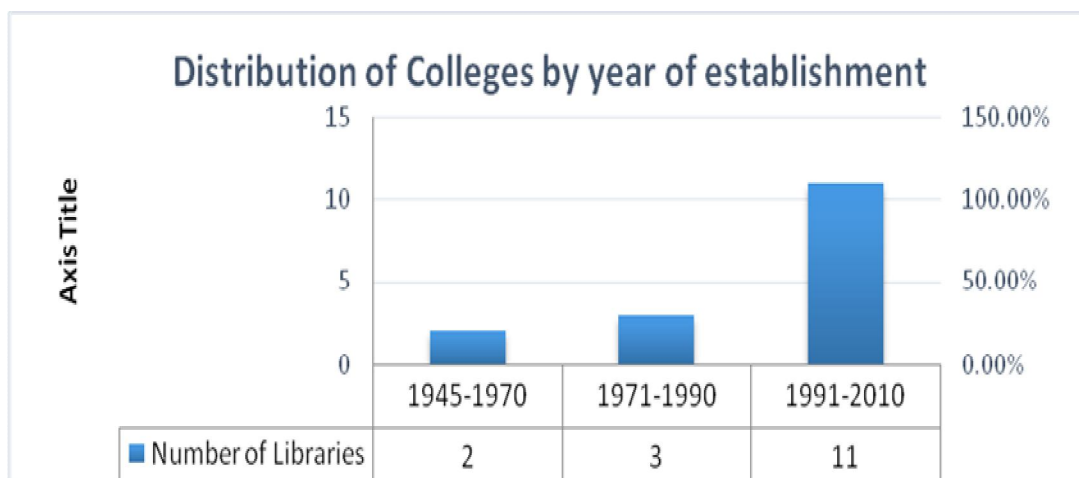
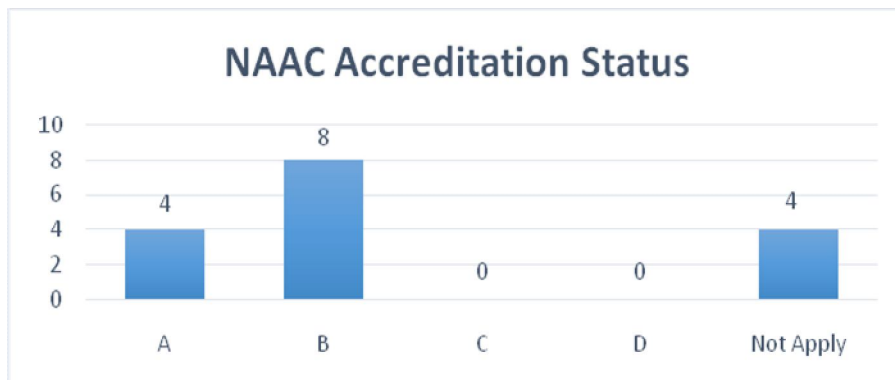


Table No. 02: Present status of NAAC Accreditation for selected Colleges in Ratnagiri Districts

NAAC Grade	Responds	Percentage
A	4	25%
B	8	50%

C	0	0
D	0	0
Not Apply	4	25%



It is observed from Table No. 01 and Table No. 02 that, colleges established before 1997 were got NAAC accreditation and colleges established after 1997 were not gone through procedure of NAAC accreditation in Ratnagiri District. Also above table showed that total 4 (25%) colleges are got “A” grade in NAAC Reaccreditation 3rd Cycle. And 8 (50%) colleges are got “B” grade in NAAC Accreditation. And 04 (25%) colleges are not gone through procedure of NAAC accreditation.

LIBRARY USERS RESPONDENTS

Table No. 03 : Male and Female Librarian percentage in different Degree Colleges in Ratnagiri District

Users	Male	Female	Total
Librarian	12	4	16
%	75%	25%	100%

We have got 16 colleges’ library data which is recorded in the Table No. 03. The above data shows that, a total of 12 (75%) male Librarians and 4 (25%) female Librarians have Responded the questionnaires, and the data reveals that male Librarians are more than female librarian in Ratnagiri District Libraries.

• Library Automation

There are so many commercial and open source software’s are available in market and its use by libraries for smooth functioning library services. The researcher tried to know the status of library automation with the help of the following sections.

1. Number of Computers are available in the Library
2. Software Used
3. Status of Automation
4. OPAC (Online Public access Catalogue)
5. Barcode facility available for Circulation
6. Status of serial Control
7. Institutional Repository
8. SMS Alert system
9. Library attendance system using software/biometric
10. Digitization Unit
11. Website/portal /Blogs

• Number of Computers are available in the Library

Computers can perform library work very fast and accurately and the service can be made available fast to the users with the help of computers.

Therefore, researchers tried to know the number of computers are available in the library.

Table No. 04: Number of computers available in the Library

No. of computers	Respondent	Percentage
1	2	13.13%
2	5	33.33%
4	2	13.13%
6	1	6.67%
9	1	6.67%
10	1	6.67%
22	1	6.67%
NA	2	13.13%
Total	15	100%

From the above **Table No.04** it is noted that the majority of 86.67% libraries have computers to perform various services/work in the library. Out of the responding libraries, some 46.67% libraries have one or two computers, 26.67% libraries have 4-9 computers, whereas 13.33% Libraries have more than10 computers to perform various work.

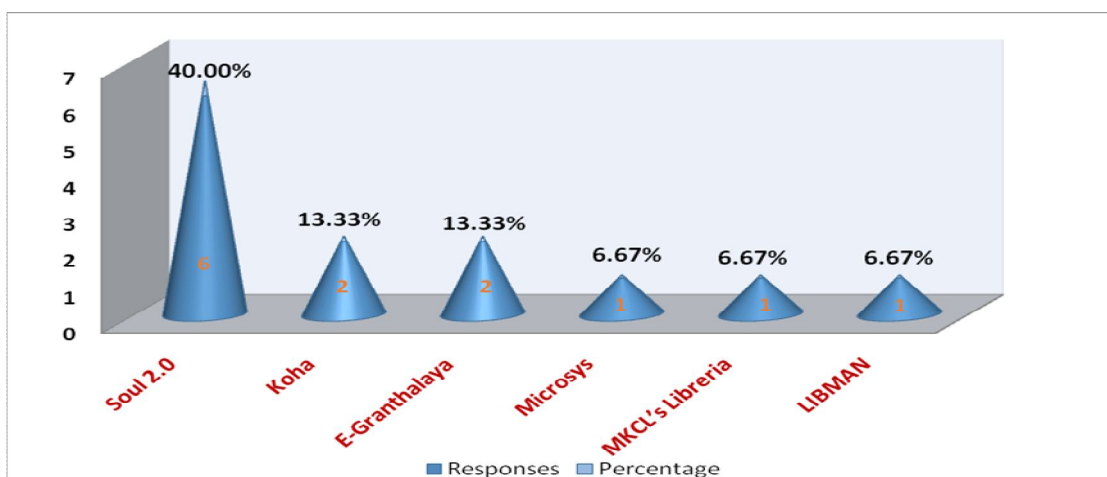
• **Software Used**

Software is an important thing in the library automation. Therefore, researcher has tried to know how many libraries have purchased or developed software for the automation purpose. From the data of surveyed libraries, it is observed that more than 60% libraries have purchased software from other agency. And 26.67% libraries are used open source software. Not a single library has developed in-house software for the automation.

Further the researcher has tried to know name of the software purchased by the library. It is noted that majority 40% responding libraries have purchased Soul Software. (26.67%) libraries are use Open source Software like Koha and E-Granthalaya. A few libraries have purchased Microsys, MKCL’s and Libman software for Library Automation.

Table 05: Software used for Computerization of the Library

Software Used	Soul 2.0	Koha	E-Granthalaya	Microsys	MKCL’s Libreria	Libman
Responses	6	2	2	1	1	1
Percentage	40%	13.33%	13.33%	6.67%	6.67%	6.67%



Computerization of library with standard digital software is very important as per NAAC guidelines. Libraries were asked to furnish information regarding the library application software being used by them and the response obtained is depicted in Table 05. It is found from the said response that 40% libraries are using Soul 2.0 Software developed by the INFLIBNET, Ahmedabad, followed by 13.33% libraries using Koha, and E-granthalaya software each, 6.67% libraries using Microsys, MKCL’s Libreria, and LIBMAN, software each. The study reveals that Soul 2.0 Software enjoys the greatest popularity in Ratnagiri District, while the popularity of other software is not mentionable.

• **Status of Library Automation**

The respondents were asked to mention the status of library automation. From the data of the surveyed libraries it is noted that (60%) Libraries were completely automated whereas (26.67%) libraries were partially in automation process or started to work on computerization.

• **OPAC (Online Public access Catalogue) /Web-OPAC**

Web OPAC is a catalogue of library material which tells us that the required material is availability or not. Online Public Access Catalogue is a catalogue consisting of a collection of bibliographic records in machine readable form maintained on a dedicated computer that provides uninterrupted interactive access via terminals or work stations in direct, continuous communication with the central computer. Most OPACs are searchable by author, title, subject headings and key words.

The data received in respect of terminals used for OPAC, shows that 66.67% college libraries have OPAC using a separate terminal for OPAC to increase the use of document and that for the sake of convenience of the users.

Table No. 06: Search mode of the OPAC/WEBOPAC in the Library

Search Mode	Author	Title	Subject	Class No.	ISBN	Publisher	Accession No.	Boolean Search
Responses	10	10	10	9	5	7	9	5
Percentage	66.67%	66.67%	66.67%	60%	33.33%	46.67%	60%	33.33%

From the above Table No. 06, it is noted that (60%) college libraries have completed Computerization or it is in progress. From there libraries almost all of them have OPAC. It is also observed that 100% college libraries have search mode like author, title, subject and accession number in the OPAC. Whereas (60%) college libraries have search mode like publisher and class number; 27 (33.33%) college libraries have search mode like Boolean Search and ISBN. The data can prove that, (40%) college libraries use soul software or these libraries were actually using OPAC. because soul software has all these above-mentioned search modes in the OPAC.

• **Automated Circulation**

In manual circulation mistakes, may occur, for reducing manual mistakes, computerized circulation is a good option. Therefore, respondents were asked to mention whether the library circulation is automated. In the response, the researcher tried to know the fields of circulation computerized. It is observed that (66.67%) responding libraries have computerized issue / return, renewal and reservation fields of circulation.

• **Bar-Code technology for circulation**

The researcher has tried to know how many libraries use bar-code technology for circulation work. From the responses, it is found that (53.33%) responding libraries use bar-code technology for circulation work wherever (46.67%) responding libraries not use bar-code technology for circulation work.

• **Automation for Serial Control**

Automation of serial control is quite a headache job rather than the automation of books and other documents. Therefore, respondents were asked to mention whether the libraries have completed automation / computerization of serial control work. The data of responding libraries reveals that the position or progress in serial control of the surveyed libraries was very poor. It is noted that only (33.33%) libraries have automated serial control whereas 10% libraries tried to computerize their serials.

• **E – Resources available in the Library**

E-resources play a vital role in storage and retrieval of information. Academic libraries should facilitate these types of resources to their users. Therefore, respondents were asked to mention e-Resources available in the library.

Table No. 12 shows that (80%) libraries provide e-journals and E-books to their users with the help of N-list program whereas (20%) college libraries had not subscribed N-list program.

Table No. 07 : Membership of N-LIST Database

E-Resources	Yes	No
N-List	12	3
%	80%	20%

From the collected data of the surveyed libraries, it is Observed that those colleges are covered under 12B section of UGC act are subscribed these Database. In Ratnagiri District 12 (80%) Private aided College are

subscribed N-List E-resources whereas only 3(20%) private un-aided college Libraries are not subscribed this e-resources due to insufficient funds.

- **Institutional Repository**

An institutional repository is a web based database of any Colleges scholarly resources. Institutional Repository may include thesis and dissertations, images, data sets, course materials, Journals articles accepted for publication, Seminar/conference/workshop papers, teaching aids/learning materials, student projects, free online journals, free e-books, photographs, audio/video recordings on concerned subjects, annual report/activities of the Colleges, course wise syllabus, semester wise previous exam question papers, reports of the academic/cultural programs of the institution, institutional data/information, committee reports and memoranda, surveys, annual report of the library. The main task of the Institutional Repository is to collect the scholarly materials to store and disseminate in digital format for wider use.

From the collected data of the surveyed libraries, it is observed that only (33.33%) colleges are libraries were provided Institutional Repository using DSPACE or any other software whereas (66.67%) colleges are not provided this Service to its users.

It can be concluded that position of Institutional Repositories in the college libraries in Ratnagiri district are very poor.

- **Digitization of Documents**

Digitization is the conversion of materials that were originally created in another format into an electronic form. Digital conversion of library material has advanced rapidly in recent years. It is important to resist the urge to digitize everything in a library or archival collection to save the space of the library. Digitization is an excellent way of providing access to library materials to the readers. Digitization has proven to be possible for nearly every format and medium presently held by libraries from map to manuscripts and moving images to sound recordings. Copyright assessment plays a defining role in digitization of library materials and must be taken permission from the original publisher/author/editor. Before digitization, librarian has to decide what materials to convert into digital form; intellectual quality of source material; rare materials, original books, manuscripts, photographs, paintings etc.

The researcher has tried to know how many libraries digitized their rear documents in their library. From the surveyed data it is observed that only one single library digitized documents. It is clear that the process of digitization is yet to start in the college libraries in the Ratnagiri District.

It can be concluded that position of digitization in the college libraries in Ratnagiri district are so poor.

- **Mobile Phone service-SMS Alert service**

Now a days SMS Alert service is very important tools for the quick communication via telecommunication to customers. It is a great revolution in the 21st century. Many libraries are using SMS alert service facility to deliver alert service to its users. Various types of services library can provide to the SMS facility. SMS can be sent to the users at the time of book issue, book return, reminders, news announcement, brief notice, etc. In every 90% of the college students have own mobile for Communication. So library provides SMS alert service through Library Software.

The researcher has tried to know how many libraries are provide their SMS alert system to its users. From the surveyed data, it is observed that not a single library provided this service in the Ratnagiri District College Libraries.

- **Library Attendance System by Using Barcode Scanner/Biometric**

As per NAAC new guidelines, there is essential to compute per day usage of library and library services by teachers and students. This system is helpful to reduce paperwork and save the time of library users. Also, library usage defiantly increase after attract and satisfaction with this using technology.

It is found that not a single library in Ratnagiri district using this system in Library.

- **Internet Service**

Internet is good technological tool to improve library services. It increases vision of the Librarian. Internet stores and retrieves information as on effective communication medium. It is a virtual library without wall which provides everything everywhere and every time. The basic aim of the college library is to provide information to its users; therefore, college libraries should be connected online with internet to render better services to the users. Data of the surveyed libraries reveals that (66.67%) colleges' libraries have connectivity of internet and they provide internet services to their users.

FINDINGS

From the above research work, the researcher has drawn following certain findings.

1. It is found that 28 senior colleges in Ratnagiri district are affiliated to Mumbai university. From these affiliated colleges 13 colleges were found accredited by NAAC, Bangalore. Almost all accredited colleges were established between 1945-1999. Majority of the colleges were old and they all are (100%) NAAC accredited. Out of which 7 colleges got 'B' grade and 2 Colleges got 'B+' grade in 3rd Reaccreditation whereas 4 colleges got 'A' by NAAC Accreditation.
2. From the surveyed colleges were found 8 colleges got 'B' Grade and 4 colleges had got 'A' grade in NAAC Accreditation. 3 colleges are private un-aided. They are not applying for NAAC. All Surveyed colleges were established between 1945-2009.
3. It is noted that 86.67% libraries are using computers to perform various activities in the library. But very few numbers of computers are available in library for Student and faculty use.
4. **Software Use for Automation/computerization:** Almost 86.67 % libraries have use commercial or opensource software for library operations. From these responded libraries majority of libraries purchased Soul 2.0 software from infibnet, Ahmedabad whereas few libraries purchased Libman, MKCL's Libreria and Microsys software and some libraries are use open source software like Koha and E-granthalay.
5. From the surveyed libraries 60% libraries completed library automation/computerization whereas 40% libraries are in progress or they partially completed or they just started process of Library computerization.
6. **Bar-code Technology:** It is noted that 53.33% libraries having computerised circulation module and all these are using bar-code technology for circulation operations.
7. **Serial Control:** It is noted that only 33.33% libraries have automated serial control whereas Very few 20% libraries have been trying to automate serial control operation in the library using software.
8. **OPAC/Web-OPAC:** 66.67 % college libraries have OPAC using a separate terminal for OPAC/Web-OPAC to increase the use of document and that for the sake of convenience of the users.
9. **Website/Blog:** Website or blog is most promoting and marketing tools of library. It is found that few libraries in Ratnagiri have own web Page. And its uncompleted or its not regular updated.
10. **E-Resources:** 66.67% libraries have resources in the form of CDs/DVDs, and 80% libraries subscribed N-List E-resources (E-journals and E-books) for their users.
11. **Institutional Repository:** It is found that only 33.33% libraries are providing institutional repository using DSPACE or any other software.
12. **Digitization Document Unit:** Only Gogate -Joglekar College, Ratnagiri has Digitisation unit for digitising their manuscript and rare books. It can be concluded that position of digitization in the college libraries in Ratnagiri district are so poor.
13. **Mobile Phone service-SMS Alert:** From the surveyed data, it is observed that not a single library provided this service in the Ratnagiri District College Libraries.
14. **Library Attendance System by Using Barcode Scanner/Biometric:** It is found that not a single library in Ratnagiri district using this system in Library for users usage record. All the libraries are use manually visitors In/Out Registers for maintaining usage record but users are not promptly enter his/her name in In/Out Register while using or visit library.
15. **Internet Service:** Data of the surveyed libraries reveals that (66.67%) colleges libraries have connectivity of internet and they provide internet services to their users. But the number of computers are available in Libraries are very poor.

RECOMMENDATIONS/SUGGESTIONS

The findings and suggestions of this study provide effective insights for library to take essential steps to strengthen the existing services and facilities to optimise the use. Based on results / findings of the study, following are the Suggestions were made for the academic library to provide committed services to the users:

1. As per NAAC new guidelines effective from July 2017, there is essential to maintain usage record and analyse use of library and library services by teachers and students using computing method. So All the

college libraries should use the computerised attendance system for usage record and save the time of library users.

2. Today, Library and Information Centre cannot function without computer and information technology. To fulfil the information, need of users, library should provide computer facility with uninterrupted internet to its users. Also provide backup for computers.
3. Library Orientation programs should be conducted to make the uses aware of the library resources.
4. Training on use of e-resources for users in highly essential.
5. Access to e-resources must be quicker.
6. Every library should have Dynamic library website or blog for promoting and marketing of Library resources and services.
7. Make available computer services to all sorts of readers to avail themselves of e-books, e-journals etc. and to make use of Modern Information Service.
8. The library should improve services with ICT technology.
9. A separate audio-visual section must be in the Library.

CONCLUSION

It is observed during the course of investigation that there is variation in the use of IT as a tool for library services between rural and urban as well as between aided and un-aided colleges. The aided urban colleges are at the forefront in the use of IT whereas others are lagging behind.

The study reveals that most of the libraries in Ratnagiri district are aware about use of ICT applications in library. The computer and internet technology has brought revolution in the library services and created positive impacts among the library users. The impression of ICT is clearly visible on information resources, services and users in the library in the region. Although, the use of ICT is increased in the library related services in the district, it is far back as compared to the colleges of Metropolitan region. Hence, it is suggested to extend the use of ICT in the library services as per their requirements.

REFERENCES

1. Sharma, R.N. (1986), "Indian Academic Libraries and S. R. Ranganathan: A Critical Study", Sterling Publication.
2. Jadhav, U.S. (2012), "Library & Information: Sources and Service", Regency Publications.
3. Kumar, G. K. Sampath (2012), "Digital Library and Information Technology: Changing Concepts", Altar Publishing House.
4. Dandavate, Vrushali (2013), "Application of Six Sigma in Library and Information Science", EssEss Publications, New Delhi.
5. Waghchoure, ShilpaSatish,(2016), " Best Practices in Academic Libraries", EssEss Publications, New Delhi.
6. Singh, Gurdev,(2015)" Academic Library System & Services", EssEss Publications, New Delhi.
7. Chopra, H.S. (1996),"Information Marketing", Rawat Publications.Gower.
8. Brophy, Peter. (2000). The Academic Library, London: CA,224 P.
9. Ghumre, Shivshankar Kondiba. (2012), "College Library Services in Marathwada", Dr. Babasaheb Ambedkar Marathwada University, Aurangabad.
10. More, Sudhir, (2015). "Information seeking behaviour of Under-graduate students in Ratnagiri District Colleges, affiliated to university of Mumbai".
11. Prasad, H.N. (2016), Librarianship in 21st Century, EssEss Publications, New Delhi.
12. Mittal, Arvind, (2017), "Emerging Technologies and their Impact on theLibraries"
13. <http://www.lisbdnet.com/library-automation-concept/>
14. dce.kar.nic.in/.../4TH%20SEP%20The%20College%20Library%20Manual.pdf

EVALUATION OF WEB BASED SKILLS AMONG COLLEGE LIBRARIANS

Dr. Sachin J. ShastriLibrarian, V. K. Krishna Menon College of Commerce and Economics and Sharad Shankar Dighe College of Science, Bhandup (East), Mumbai

ABSTRACT

The role of libraries and librarians changed from storehouse of information and care taker to actual learning centre and Information Manager and at the same time the forms and distribution of information also took new shape and way. This is due to advancement in information and communication technology. Due to this change, library professionals job also require some of the special skills and competencies apart from the basic skills and practices of librarianship. Hence the library professionals must able to provide traditional library services in effective way with the help of new technology available and developed for it and also have ability to design and develop web-based content for online use and ability to build digital library. The researcher wanted to know that what type of web-based skills college librarians are having and are used in their daily working in libraries. So the study was conducted which was sponsored by the University of Mumbai during the year 2017-2018

The scope of the research was limited to the colleges affiliated to the University of Mumbai. It was found that more than 80% librarians are aware of the fact that ICT is very much important in the libraries. 90% and above respondents tried to acquire the latest skills and knowledge about ICT to apply in their libraries. They are doing additional courses and attending trainings, workshops at their ends. Only 7 to 8% librarians are aware about the web-designing skills. Researcher found that even in rural areas also libraries and librarians are well equipped with the latest technologies and skills to provide the library services and facilities.

Researcher wants to suggest that there are should be a proper training programme at the university level to train the librarians in using ICT. It is also suggested that in-course training to be introduced to train the future librarians.

To conclude the research project, it is stated many of libraries now a days are possessing the latest ICT skills and web-based skills and the future of the libraries and librarians are very bright and challenging as well, as they have to be updated frequently to keep the pace of the latest advancements in technologies.

Keywords: Web-based skills, professional competencies, ICT tools for libraries, College Librarian

1. INTRODUCTION

Information and communication technology (ICT) has changed the landscape of libraries and librarianship. Libraries are being transitioned from the four walls to the cyber environment. Library resources are being transformed from print to digital and web resources. Information has been disseminated speedily around the globe due to advanced means of telecommunication. The growing ICT-driven information services have posed challenges to library and information professionals. In this ICT-oriented environment, library professionals must become ICT literate in order to survive. Education Testing Service (2007) defined ICT literacy as “using digital technology, communications tools, and/or networks to access, manage, integrate, evaluate and create information in order to function in a knowledge society” (p. 17). II.

According to Sarrafzadeh (2005), if LIS professionals remain reluctant to gain new skills, they will become irrelevant to their organization and will probably lose out in competition for employment to people of other fields like scientists, engineers and IT professionals. Thus, LIS professionals must encounter rapidly changing environments that require diverse skills, new thinking and broader perspectives and must be prepared to develop innovative ideas for the capture, process and sharing of knowledge and demonstrate good management practices if they want to remain relevant in the emerging knowledge age (Smythe, 1999). Hence, the present day library professionals apart from their educational based practices, required different types of soft skills and competency to provide right information to right user at right time. This paper will elaborate the soft skills and competencies required for the library professional to increase visibility and effectiveness of the libraries in the 21st century

2. OBJECTIVES OF THE STUDY

- 1 To Investigate the proficiency of ICT skills of librarians' working in colleges affiliated to University of Mumbai
- 2 To find out the areas in which library professionals need to acquire ICT skills

3 To explore the relationship between library professionals' ICT skills and gender, and between urban and rural areas

3. SCOPE OF THE STUDY

- The scope of the research would be limited to the colleges affiliated to the University of Mumbai.
- The data collected from the colleges affiliated to the University of Mumbai, located in rural and urban areas to achieve the objectives of the research.

4. RESEARCH METHOD, DATA COLLECTION TOOL AND SAMPLE

The descriptive research methodology was used. The survey method includes questionnaires as well as personal one-to-one meeting/s were conducted. The librarians of colleges affiliated to the University of Mumbai was contacted and met personally by the researcher to collect the data. The Google Form tool was used as an online collection of data through a well stated questionnaire from among the librarians of the colleges affiliated to the University of Mumbai.

As there was more than 800 colleges affiliated to the University of Mumbai (Data from official website of University of Mumbai), the stratified sampling method was applied. The Government grant-in-aid colleges was considered for the study. There were around 300 colleges found as aided colleges. Librarians of these 300 colleges were contacted to find out the status of ICI use and awareness in their libraries as well as the skills they acquire. A well framed questionnaire through google form was circulated among the librarians. Also some of librarians were contacted personally and met them to collect the data and their views on the issues. During the month of May and June 2018 the data was collected. In all 102 librarians out of 300 responded. The data collected was finalised for the study.

5. IMPLICATIONS OF STUDY

The study aims to assess the proficiency of ICT skills of library professionals at College Librarians' affiliated to the University of Mumbai. The obtained results would be useful for library schools, professional library associations, and other relevant authorities for the planning of training programs and refresher courses. The findings may also be helpful for library educators to develop curriculum that meets the needs of library professionals.

6. REVIEW OF RELATED LITERATURE

Batool and Ameen (2010) studied the status of technological competencies of librarians at Punjab University. Their findings revealed that all librarians there had word processing skills but not very skilful in computer hardware expertise, that they knew how to use basic Internet functions but not advanced services, and that they had expertise in using web Dewey, OPAC, and MARC records. The researchers pointed out that lack of coverage in the curriculum, lack of refresher courses, and lack of training workshops were major problems in learning of technology. Safahieh and Asemi (2010) observed that the majority of librarians at Ispahan University, Iran did not have good computer skills. 46.3% regarded their level of skills as fair. None of the librarian perceived their level of skills as very good. However, 48.8% librarians got computer training from formal IT program.

Babu, Vinayagmoorthy, and Krishan (2007) assessed the ICT skills of 171 librarians of engineering educational institute of Tamil Nadu. Their findings revealed that 48% of librarians had some knowledge of library automation software but were weak in web page design and electronic bulletin board.

Adomi and Anie (2006) analyzed the computer skills of professional librarians at Nigerian universities. Their findings showed that librarians were not highly computer literate, as most of them had recently been introduced to computers in libraries. Computers were used mostly for cataloguing and for serials on a limited scale. Adeyoyin (2006) investigated on the ICT literacy level of library staff in West African universities. His findings showed that in Anglophone countries, 48.38% of professional staff were ICT literate whereas 51.62% were not ICT literate.

Bakar (2005) surveyed information professionals in Malaysia on their IT competencies in 13 categories from basic competencies like Word processing, emails, Internet and intranet, graphics, presentations, publishing, spreadsheets, and project management to system maintenance, system analysis, and programming

A survey undertaken between January and March 1998 by Barlow and Graham, (1999) investigated the use of information and communication technologies in a sample of 120 industrial and commercial libraries. Ninety-six per cent of the organizations which responded to the questionnaire use computers for some aspect of their library and information services.

Bollano, (1999). The paper reports the REMUX development cycle highlighting its fast evolution from the prototype based on an embedded system to the System on Chip realization 0.25 cm, ST Microelectronics CMOS technology, mainly focusing on the effective design methodology based on the CSELT Intellectual Property library (VIP) and system emulation. The lack of a vision, policies, programs, subsidies or support from the government or private firms to promote and facilitate the development of ICTs in Peru, it constitutes a good practice example in terms of access to the new technologies.

Fernández-Maldonado, (2002). Information and Communication Technologies (ICTs) have become central to education and training in Library and Information Science/Service (LIS) because of the great influence of these technologies on the professional world. This study on Kenya is part of a larger doctoral research project that aims to map and audit the types, nature and diffusion of ICTs in LIS education and training programmers in Africa. The findings indicate that all LIS schools in Kenya have embraced the use of ICTs, but there are major variations in terms of application. All but one LIS School offers a wide range of relevant ICT courses, many of them as core modules. However, not all of them offer, or are able to offer, practical hands-on experience for their students. In teaching and learning, only a few LIS schools use ICTs to deliver lectures, the majority still favouring age-old methods of face-to-face classroom teaching. In research, the lack of ICT facilities has resulted in partial and minimal use of ICTs, especially since academic staff have to pay (individually, from private funds) to access the Internet. For the same reasons electronic publishing of research results on the Internet is low.

Minishi-Majanja, and Ocholla, (2003). Some challenges that science and technology libraries have to face, caused by the evolution from classical libraries towards more electronic and digital libraries Nieuwenhuysen, (2004). This is a consequence of the fast evolution in information and communication technology (ICT) that has led to more applications of ICT, not only to manage classical libraries, but also to create, distribute and access information resources in digital format through computer networks. Information Technology (IT) has become an indications of a country's wealth level. Countries which fails to prepare for information technology and do not use it properly, are likely to lose their global competitiveness. Muslim countries have paid little attentions to leverage the benefits offered by the IT use in their library and information centres.

7. DATA ANALYSIS AND INTERPRETATION

a. Introduction

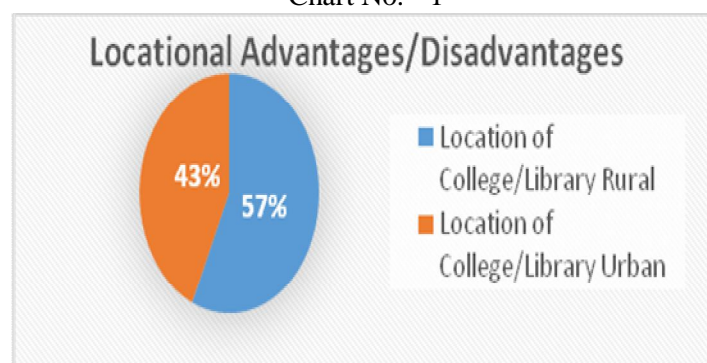
As the researcher wanted to find out the ICT skills among the college librarians, the researcher collected the information through scientifically designed questionnaire. The Likert scale was used to collect and analyse the data. The google form along with personal interaction/s and interviews with the librarians were the tool for data collection. The researcher collected the data between the month of April and June 2018. The data is analysed and interpreted to achieve the objectives of this project and conclude the findings of this research. The researcher tries to analyse the data in to various themes stated hereunder for better interpretation and the findings of the study are stated in next to the analysis and interpretation.

b. Analysis and Interpretation

1. Locational Advantages / disadvantages

To develop the ICT skills and facilitate the ICT based services and facilities in libraries researcher wanted to find out the location of the college libraries and its advantages or disadvantages in getting the ICT based skills and facilities, the question was asked. The following chart no. 1 shows the result.

Chart No. - 1

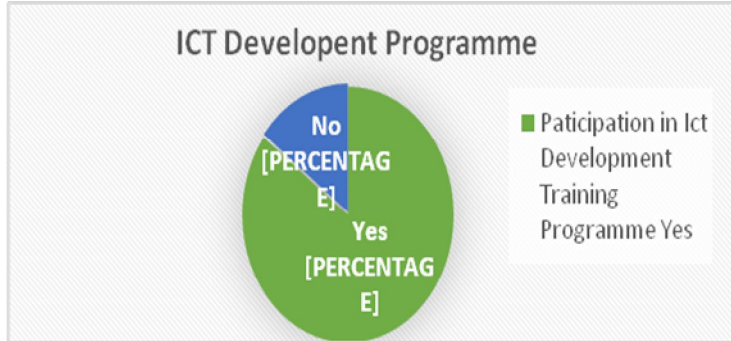


The 57% libraries are situated in the rural areas but are good enough to acquire the latest ICT skills and provide the ICT based services to its users as the infrastructure facilities to these institutions are better because of having the location near to the Metro City Mumbai.

2. ICT Development Programme

Researcher wanted to find out whether the librarians have acquire any training in ICT or done any certificate/diploma course in computers or networking along with their basic qualifications. The question was asked and the responses are stated hereunder in Chart No. 2

Chart No. 2



The above chart shows the result as 85% librarians possesses the require skills and applying in their libraries as well. This shows that now a days librarians are well aware of the fact that they need to have the ICT skills along with their basic qualifications and they trying hard to achieve by attending training programmes, workshops as well as doing the certificate/ diploma courses in computer applications and networking, etc.

3. Web-based Skills

With the advancement in ICT the services and facilities provided by the libraries are very much on the web. Therefore it was thought to ought that how and when the librarians acquire the web-based skills among themselves and applies the same in their library facilities to the users. The following table shows the result provided in Table No. 1.

Table No. - 1

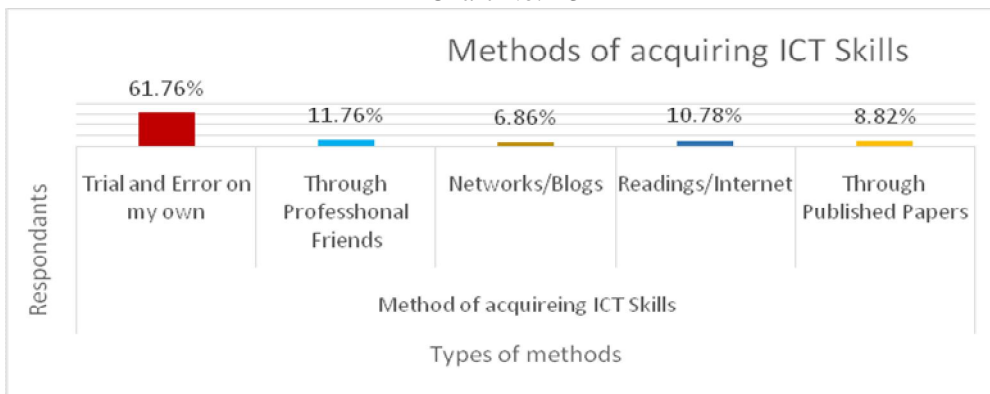
Description	Web Based Skills	
	Regular Participation	Occasional Participation
Respondent	79	23
	77.45%	22.55%

The above data speaks that now a days librarians are possessing the web-based skills by attending the related programmes on a regular basis. More than 77% respondents are stated that they attend the web-based skills programmes on a regular basis and applying the same in their libraries with the help of their technical staff and supporting staff as well.

4. Method of acquiring the ICT and Web-based Skills

Researcher wanted to know that, in which way the librarians gain the knowledge of ICT and web-based skills. So he enquire about in the questionnaire and the results are stated in the following chart no. 3

Chart No. - 3



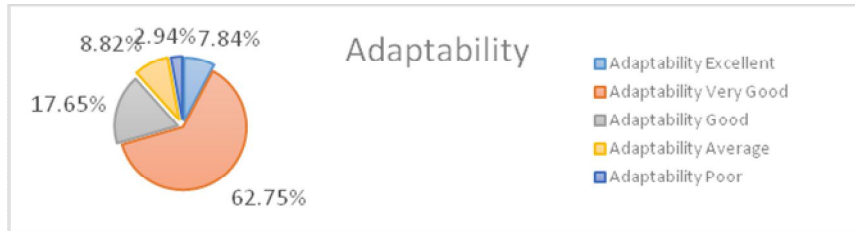
The above chart explains that more than 60% librarians acquire the ICT skills on their own by doing the trail and errors in their daily routine work in the library, where as others gain the knowledge by way of contacting professional friends, through networks/blogs, social media and through readings on internet, etc. This shows that librarians are trying hard in acquiring the ICT Skills and applying in their libraries.

5. Areas of ICT knowledge and skills

Researcher was interested in knowing the ICT knowledge and skills among the librarians in various areas like, adaptability, creativeness, professional interactions, communication skills, problem solving, training skills, research skills, presentations skills, web-design skills, MS office tools skills, institutional repository development skill, information retrieval skill, skills on open source software, bibliographic tools, digital right management skills, etc. Therefore, researcher gathered the information using the 5 point Likert scale and in following charts as well as tables it is shown which is self-explanatory. The data is shown by the way of charts and tables for the above mentioned areas as follows.....

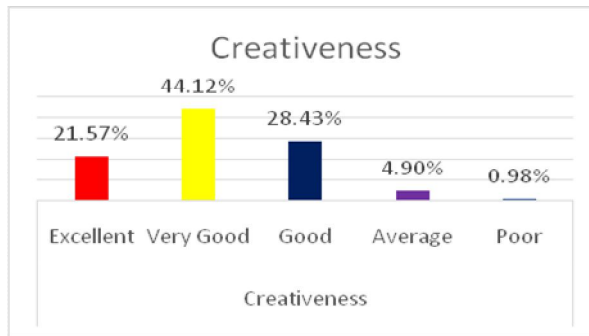
1. Adaptability

Chart No. - 4



2. Creativeness

Chart No. - 5



3. Professional Interaction

Table No. - 2

Professional Interaction				
Excellent	Very Good	Good	Average	Poor
52.94%	28.43%	10.78%	5.88%	1.96%

4. Communication Skills

Table No. - 3

Communication Skills				
Excellent	Very Good	Good	Average	Poor
6.86%	10.78%	54.90%	25.49%	1.96%

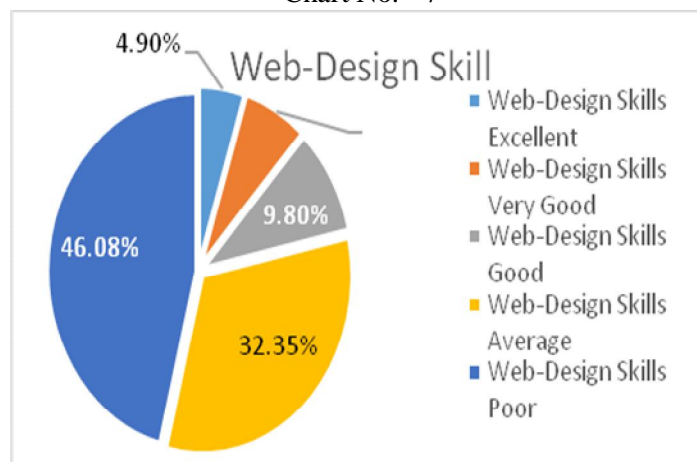
5. Training Skills

Chart No. - 6



6. Web-Design Skills

Chart No. - 7



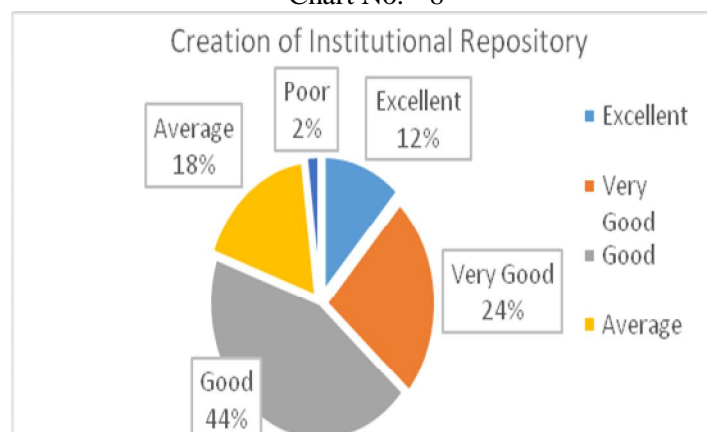
7. MS Office Tools Skills

Table No. - 4

MS Office Tools Skill				
Excellent	Very Good	Good	Average	Poor
22.55%	31.37%	42.16%	3.92%	0.00%

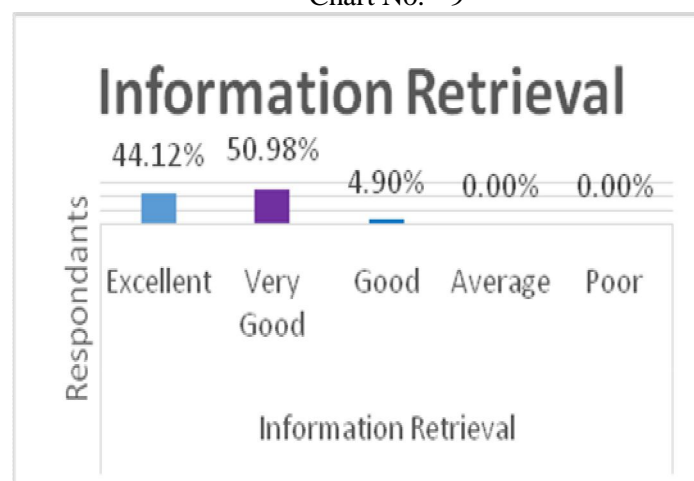
8. Creation of Institutional Repository

Chart No. - 8



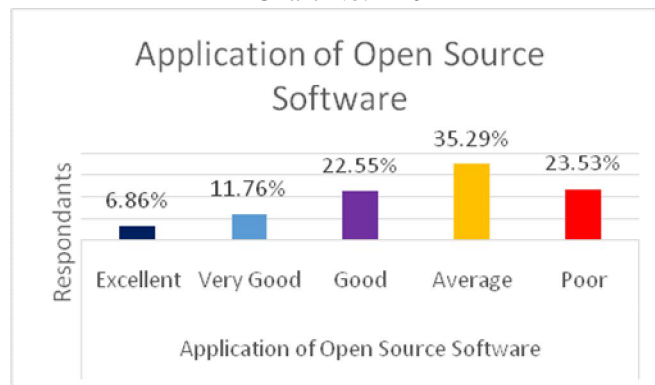
9. Information Retrieval

Chart No. - 9



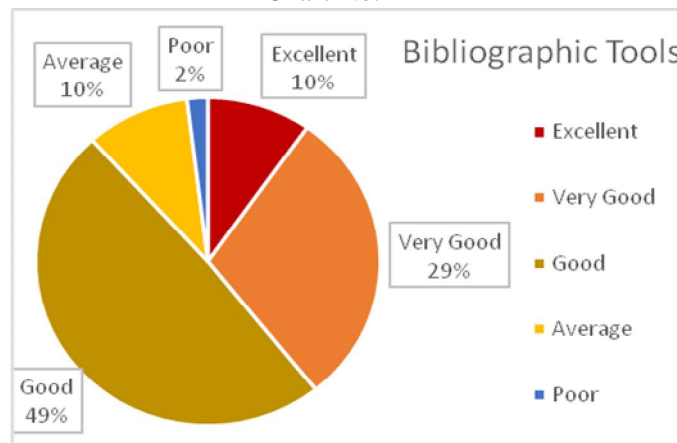
10. Application of Open Source Software

Chart No. - 10



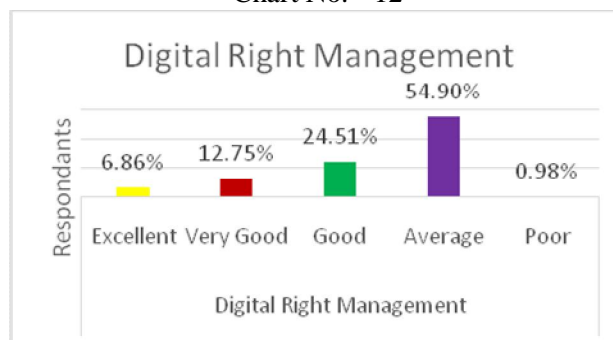
11. Bibliographic Tools

Chart No. - 11



12. Digital Right Management

Chart No. - 12



The above data was self-explanatory and it was found that more than 70% librarians are equipped with the latest ICT and Web-based skills and remaining are trying hard to acquire it and apply these in to their libraries.

8. FINDINGS

- More than 80% librarians are aware of the fact that ICT is very much important in the libraries
- 90% and above respondents tried to acquire the latest skills and knowledge about ICT to apply in their libraries. They are doing additional courses and attending trainings, workshops at their ends.
- Only 7 to 8% librarians are aware about the web-designing skills
- Researcher found that even in rural areas also libraries and librarians are well equipped with the latest technologies and skills to provide the library services and facilities
- It was also found that around 60% librarians are aware about the various open source software availability, but the fact is that only 9 to 11% are actually using or applying in their libraries.

9. SUGGESTIONS

- Researcher wants to suggest that there are should be a proper training programme at the university level to train the librarians in using ICT
- It is also suggested that in-course training to be introduced to train the future librarians
- It is also suggested that one course of ICT developments of 3 to 4 week to be made compulsory after every 5 years of service.

10. CONCLUSION

To conclude the research project, it is stated many of libraries now a days are possessing the latest ICT skills and web-based skills and the future of the libraries and librarians are very bright and challenging as well, as they have to be updated frequently to keep the pace of the latest advancements in technologies.

11. LIST OF REFERENCES / BIBLIOGRAPHY

- Abdul Azeez T A (2004), "TKM College Of Engineering Library Automation System", *Annals of Library and Information Studies*, 51(2), pp. 52-57.
- Adekunle, Paul Adesola, Omoba, Rosnold Ogle and Tella, Adeyinka (2007) "Attitudes of Librarians in selected Nigerian University towards the use of ICT", *Library Philosophy and Practice*.
- Ahmad, Naveed and Fatima, Nishat (2009) "Usage of ICT products and Services for Research in Social Sciences at Aligarh Muslim University", *DESIDOC Journal of Library and Information Technology*, 29(2), pp.25-30.
- Akinfoliarian, W. A. (1998), "Automation in the Adeymi College of Education Library, Ondo", *Library Management*, 19(1), pp 26-28.
- Ayere, M.A., Odera, F.Y., Agak, J.O. (2010) "E-learning in secondary schools in Kenya: A case of the NEPAD E-schools", *Academic Journals, Educational Research and Reviews*, 5 (5), pp. 218-223.
- Barlow, Lisa J. and Graham, Margaret E. (1999), "The use of information and information communication technologies in commercial libraries in the U K", *Program*, 33(2), pp. 109-128.
- Bhatia , MPS And Khalid , Akshi Kumar (2008), "Information retrieval and machine learning :supporting technologies for web mining research and practice", *Webology*, 5 (2).
- Carpenter, J. (1999), "Struggling to define the library of the future: some observations on what makes a digital librarian?" *New Review of Information Networking*, 5, pp. 91-108.
- Dominic, J and Nirmala, P.J (2004), "Impact of web OPAC of KIT library", *Indian Journal of Information, Library and Society*, 17(3-4), pp145-155 92
- Ebrahim, Rahman, (2009), "The effect of Information and communication technology (ICT) on Teaching Library and Information Sciences", *Library Philosophy and Practice*.
- Fernandez-Maldonado, A.M. (2002), *Diffusion and use of new information and communication technologies in Lima*", *Flux*, 47, pp. 20- 34.
- Gowda, Vasappa and Shivalingaiah, D (2007), "E-sources of information: a study of attitudes of research scholars", *International Caliber*, pp652- 662.
- Gupta, Vibha and Ansari, Mehtab Alam (2007), "Impact of Information Technology On Societal Development And E-Governance", *Electronic Journal of Academic and Special Librarianship*, 8(1). (spring).
- Haneefa, M. (2007), *Application of information and communication technologies in special libraries in Kerala (India)*", *Library Review* 56 (7), pp. 603-620
- Hughes-Hassell, Sandra and Hanson- Baldauf, Dana (2007), "Information and Communication Technology use by North Carolina School Library Media specialist: perceived competencies and barriers", *American Association of School libraries Vol.11*.
- Husain, Shabahat and Ansari, Mehtab Alam (2007), "Library automation software packages in India : a study of the cataloging modules of Alice for Window , Libsys and Virtua", *Annals of Library And Information Studies* , 54(3), pp.146-151.

-
-
- Islam, Md. Shariful and Islam, Md. Nazmul (2007), "Use of ICT in libraries: an Empirical study of selected libraries in Bangladesh", *Library Philosophy and Practice*.
 - Issa, Abdulwahab Olanrewaju ,Blessing , Amusan and Daura,Umma Dauda (2009), "Effects of information literacy skills on the use of E-library resources among students of the university of Ilorin, Kwara state, Nigeria" *Libraries Philosophy And Practice*.
 - Jacob, Ancy and Sornam, S. Ally (2011), "Consortium of Fishery Institute Libraries in Kerala: a proposal", *Library Progress International*, 31(1) pp19-26
 - Jayaprakash, M. and Balasubramani, R. (2011), "Status of Automation in University Libraries of Tamil Nadu: A Survey", *European Journal of Scientific Research*, 53 (1), pp.17-24.
 - K., Mohammed Haneefa (2007), Use of ICT based resources and services in special libraries in Kerela", *Annals of Library and Information Studies*, 54 (1), pp. 23-31.
 - Kaur , Simardeep and Singh , Sewa (2005), "Digital libraries Development in the 21st century with reference to India", *Proceeding Of National Conference in Recent Trends in Libraries and Information Science*, pp .82-87
 - Kavitha, T., Esmail, S. Mohamed and Nagarajan, M. (2011), "Use of ICT Among the Faculty Members of Health Care Institutions in Puducherry", *Library Progress International*, 31(1) pp 27-33.
 - Khan , Mohammad Haroon and Waris , Rao Ashher Kamal (2008), "Use of internet services and resources in the departments and centers of Aligarh Muslim University , Aligarh ; a study", *NACLIN, Developing Library Network* ,4-7 Nov., pp 225-245.
 - Komolafe, H.O., Onatola, A. (2008), "Information seeking habits of clinical information by nurses at Nigeria's premier university teaching hospital: A survey", *Journal of Hospital Librarianship*, 8 (2), pp. 175-192.
 - Kosiedowski, M., et al., (2009), "Medical digital library services as an improvement of the teleconsultation system in the regional health network", *Proceedings - International Conference on eHealth, Telemedicine, and Social Medicine, IEEE eTELEMED 2009* , art. no. 4782650, pp. 154-159.
 - Maharana, Bulu, Biswal, Swarupanjali and Sahu, N. K. (2009), "Use of Information and communication technology by Medical Students: a survey of VSS Medical College, Burla, India", *Library Philosophy and Practice*.
 - Minishi-Majanja, M.K., Ocholla, D.N. (2003), "Information and communication technologies in library and information science education in Kenya", *Education for Information*, 21 (4), pp. 243-262.
 - Mulla,K.R and Chandrashakara, M.(2007) "Internet users ; a study at Mysore University", *ILA Bulletin*, 43(3), pp.29-40. Nieuwenhuysen, P. (2004), "Challenges in the evolution of scientific and technological libraries: Adaptation and synergy for survival and success", *IATUL Proceedings Volume 14 (New Series) 2004: Library Management in Changing Environment*, pp. 103-110.
 - Okiy, R.B. (2005), "Strengthening information provision in Nigerian university libraries through information communication technologies", *Electronic Library*, 23 (3), pp. 311-318.
 - Omona, W., Ikoja-Odongo, R. (2006), "Application of information and communication technology (ICT) in health information access and dissemination in Uganda", *Journal of Librarianship and Information Science*, 38 (1), pp. 45-55
 - Othman, R., Halim, N.S. (2004), "Retrieval features for online databases: Common, unique, and expected", *Online Information Review* 28(3), pp. 200-210
 - Oyewusi , Fadehemi Omobola and Oyeboade, Samuel Adeolu (2009), "An empirical study of accessibility and use if library resources by undergraduates in a Nigerian State university of Technology", *Library Philosophy And Practice*. www.webpages.uidaho.edu/~mbolin/usi-oyeboade.html
 - Rao, Siriginidi Subba (2001), "Networking of libraries and information center : challenges in India" *Libraries Hi Tech* , 19(2), pp.167-179.
-
-

-
-
- Roknuzzaman, M. (2006), "A survey of internet access in a large public university in Bangladesh", *International Journal of Education and Development Using ICT*, 2(3).
 - Saarti, Jamo (2003), "The Acquisition and maintenance cost association with Library Automation systems in Finnish Public Libraries", *Electronic Library and Information Systems*, 37(1), pp.25-30.
 - Singh, S.P. (2005) *The role of technology in the emergence of the information society in India*, Electronic Library, Emerald Group Publishing Limited, 23 (6), pp. 678-690
 - Sirisha, B.S., et al., (2009), "A personalized information support system for searching portals and e-resources", *Program*, Emerald Group Publishing 43 (1), pp. 77-93
 - Sreekumar, M. G (2001), "User issues in the electronic information environment", *DRTC/ IST, DLIS/ university of Mysore joint workshop on Digital Library*, 12th-16th march, 2001.
 - Tholkappian , S. and Chandran D. (2007), "Role of e-books in academic libraries; towards virtual library", *International Caliber*, pp. 663-667.
 - Vasishta, Seema (2007) "Digitizing the academic libraries in India - need of the hours", *International Caliber* , 8-10 Feb , pp 56-64.
 - Vijayakumar, J.K., Vijayakumar, M. (2003), "Knowledge, connections, and communities: A special reference to Indian University Libraries", *International Information and Library Review*, Elsevier Science Ltd 35 (2- 4), pp. 375-382
 - Williams, Teresa D., Grimble, Bonnie J and Irwin, Marilyn(2004), "Teachers links to electronic resources in the library media center : a local study of awareness, knowledge , and influence", *ALA*, 72. www.ala.org/ala/mgrps/divs/aasl/aaslpubsandjournals/slmrb
 - Womboh, Benks S. H. and Abba, Tukur (2008), "The State of Information and Communication Technology (ICT) in Nigerian University Libraries: the experience of Ibrahim Babangida Library, Federal University of Technology, Yola", *Library Philosophy and Practice*.
 - Yazit, N., Zainab, A.N. (2007), "Publication productivity of Malaysian authors and institutions in LIS", *Malaysian Journal of Library and Information Science*, 12(2), pp. 35-55.

GENERIC STUDY ON "DIGITIZING AND INTERPRETING OLD MANUSCRIPTS" – EXEMPLARY OF THE INDIAN ANCIENT SCRIPTS WITH SPECIAL REFERENCE TO AYURVEDA**Disha Roshan Bhakta**

Assistant Professor, S. M. Shetty College of Science, Commerce & Management Studies, Mumbai

ABSTRACT

Bibliotheca is the most ancient and fascinating place which stores the deepest knowledge on how the world operates, what it conserves and how it evolved. Bibliotheca is a Greek Latinized word which describes a public place for reading books, magazines and other scripts. Many great and life-changing phenomenons have taken place on this earth since the time of its inception. The only way to see what happened in past and have an imagination of it is to visit Bibliotheca. People have recorded what they have seen in form of writing. The paper talks about the ancient writings and how Bibliotheca has preserved it. It also emphasis on how digitized world is helping for a better conservation and preservation. The paper focuses on the older manuscripts of Indian heritage revealing information on Ayurveda and its peripherals. Ayurveda is a conventional medicinal system having its roots in India. It comprises of knowledge and science together which helps in living life in longevity. This paper helps to understand on whether the manuscripts can be made public and if technology can help to interpret them. Also how technology can derive knowledge from them and help future connecting the past assets.

Keywords: Library, manuscripts, Sanskrit scripts, Ayurveda manuscripts, Digitization, digital library, manuscripts digitization, ayurveda, knowledge systems.

SCOPE

The paper focuses on study of Indian manuscripts which are not yet digitized. It takes in consideration the ancient scripts which needs preservation. Ayurveda scripts are the major component the paper is considering. It also emphasizes on how technology and artificial intelligence can help in preserving and understanding the manuscripts in an easy and efficient way. The paper limits its area to Indian academic and monastic libraries, although there are many Indian manuscripts outside India. Ancient paintings and scriptures are not taken into consideration. Artificial system will gradually develop considering the available knowledge and new inputs provided by researchers.

INTRODUCTION

Languages have played a great role to the world that we see today. Library is a place which is outcome of the languages evolved. However the languages that we use today for communication, reading, writing have their evolution. When we say these the very first image that comes to our mind is the manuscripts written by ancient people. In India Sanskrit is referred as an oldest and the powerful language. Information from the past is a major bridge to what we see in present. There have been many events which had taken place in Indian history and the source of them could be the ancient manuscripts which may now have been published in variety of languages. In ancient times the way to record the events was to write it and preserve it for the next generation. The writing was used to be on various leaves, wood and at times even stone. In a very diligent way it was preserved and passed on. Indian history holds a very special place in these writings as they are something which reveals some fundamental aspects of life. Some special references are "Bhagwad-Gita", "Upanishads", "Vedas", "Manuscripts by Saint Kabir" and many more on religious grounds. India also has a large literary collection of old manuscripts. "The constitution of India", "Rare letters of Mahatma Gandhi" is some of the manuscripts which hold a great place with respect to political grounds. Indian history holds a special place in field of medicinal science as it is the biggest reservoir of Ayurvedic scripts. Library is place where we get an opportunity to see all these great work and we can also feel them. Researchers always are in quest of this information and their interpretation as they reveal some of the rare things. Various bodies like National Mission for Manuscripts (NMM), Manuscript conservation center (MCC) are working in collaboration with libraries to preserve the scripts. Many academic libraries are having sections for these scripts which can be studied. Initially these libraries were known as Monastic Libraries.

OBJECTIVES

- To study the status of the manuscripts in the libraries.
- Understanding the method by which these libraries store these manuscripts and how they preserve them.
- Challenges faced while preserving the scripts.
- How frequently readers, researchers and academicians get an access to these scripts

- Does the ayurvedic scripts are referred by the pharmaceutical companies who have their brand name in Ayurveda.
- How digitization of these scripts will help the libraries as well the readers and researchers
- How technology can help in better understanding of these scripts and how we can extract better knowledge from it.
- How Indian preserved knowledge can reach out a global scope by digitizing it.

RESEARCH METHODOLOGY

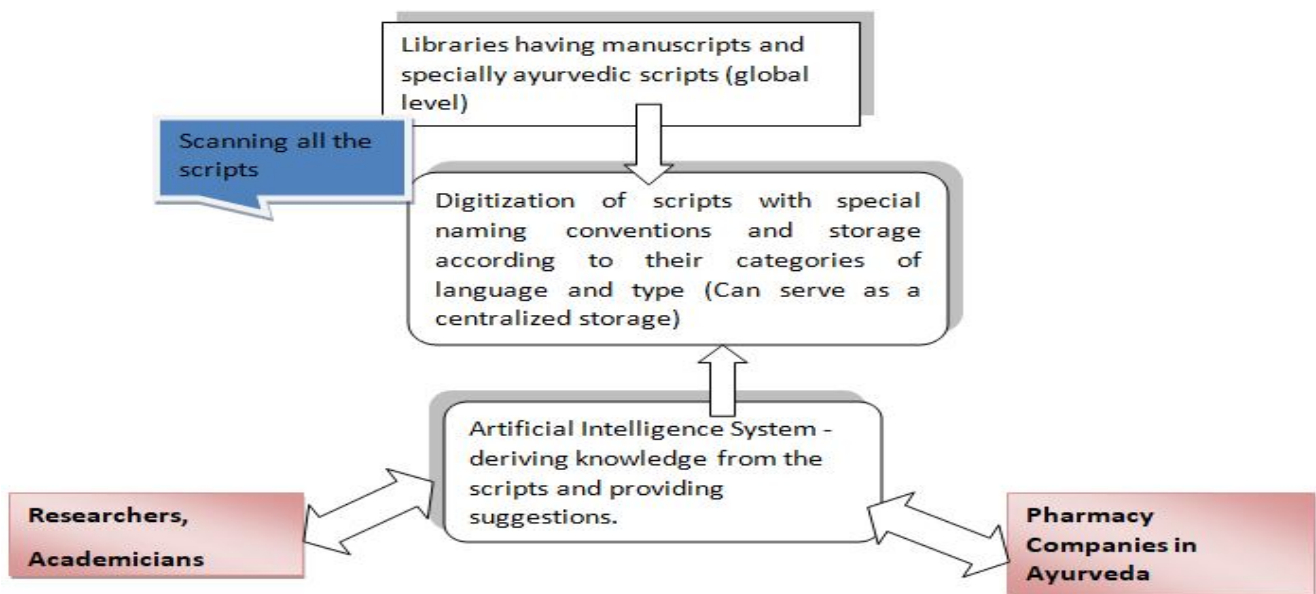
The first step required it to collect the information on how many and which types of manuscripts are available. It has to be found out to which libraries hold these manuscripts and their preservation techniques need to be understand. There are many libraries outside India also which has a large preservation of Indian manuscripts.

According to Scindia Oriental research Institute, India the total manuscripts available in India in 5 million approximately. Indian manuscripts available in European countries are 60,000 approximately and an Indian manuscript available in Asian counties is 150,000 approximately. As per the Department of Archaeology, Government Oriental Manuscripts Library and Research Center has a preservation of 50,180 palm leaf manuscripts, 22134 manuscripts and 26,556 rare printed books (Department of Archaeology - <http://www.tnarch.gov.in/>). Ministry of Culture is having Manuscript Resource Centers and Manuscript Conservation Center in collaboration with National Culture Fund, Incredible India, and Museums of India. Libraries in all the zones of India as well as outside India have manuscripts with the writing in Sanskrit with which a medicinal branch Ayurveda has come. These libraries and manuscripts have to be identified as they will be used for the research scholars’ understanding Ayurveda across the globe.

The current system will take information of these and also segregate the information on the basis of its storage and language used. The system will have provision to scan all the manuscripts received and store in an appropriate way without its originality being lost.

An artificial intelligence system can work on these scripts and help us to derive the knowledge the scripts are embossed with. This system will also help to compile and connect the existing knowledge with the knowledge the scripts are providing. It can prove very useful to the pharmaceutical companies and their researchers who are working under Ayurveda medicines. The system can always take new knowledge derived by researchers and can pass on it to next level. This will help all the scripts to be located at one place and allowing all the global researchers to have an access on it. There by passing the knowledge preserving it in a better way.

Brief Model On Working Of The System



The model has two works on two levels. Initial level will be gathering the information and next level will be proper storage of it. For the first phase also technology can help to collect the information of such manuscripts from the libraries and ask them to put the images of them by scanning them at a specialized storage. Libraries not having such facility can always take aid from the organizations funded by Government which are working in these areas.

Once the information is collected it can be stored at a centralized server with proper naming conventions. The naming conventions will help to quickly access them. The next step is to design software that can access the information and present to the user as and when required. Also the model will have proper authorization levels to do so. The information will be segregated to its type. Even Ayurveda itself has many levels, so the system will also aid in keeping the information to that levels. By this stage information of the manuscripts is digitized and is accessible.

Artificial Intelligence will play a role in learning these scripts and deriving knowledge from them. Also it will help in translating the scripts to different languages. Once the knowledge is generated it can get clubbed with the knowledge of research scholars and a better study can be performed. Years by years the knowledge will be rich enough for growth on Ayurveda. Pharmaceutical companies can be beneficial by this knowledge. Also small medium entrepreneurs can take Ayurveda to a next level. And lastly all the day to day remedies can be suggested by this system.

INTERPRETATION AND SUMMARIZATION

The model will help digitization of Indian manuscripts which are holding special information on ayurvedic medicinal branch. It will aid academicians and scholars as this information can be used and some inventions in field of ayurveda can be possible. The information will aid readers to use Ayurveda and its remedies in their daily life as first level cure. The artificial system using Natural Learning will become much stronger and in turn can support as a back bone and central platform for ayurvedic learning. The advantage is that the knowledge and information from other sources can be linked at a single place thereby providing much broader view of the content.

FUTURE SCOPE

The model can integrate the information on a global level. It can club with Internet of Things providing a visual realization of the knowledge derived. Libraries can share information on a global platform. The geographical boundaries in doing a research can get a different level. Libraries will be a source of information provider as well as knowledge generator.

REFERENCES

- Divya Jyothi, Deepak K, Shyamasundaran K : Ayurvedic Manuscripts - A Review, Ayurpharm Int J Ayur Alli Sci. Vol. 7, No.4(2018) Pages 57-63, ISSN 2278-4772
- Dr. Sarita Bhattacharjee: Storage and Handling of Manuscripts, International Journal of Humanities and Social Science Invention ISSN (Online): 2319-7722, ISSN (Print): 2319-7714, www.ijhssi.org, Vol.6 Issue 2, February 2017, pp. 30-32
- Sahoo, Jyotshna Lecturer; Sahoo, Bismita M. Phil. Scholar; Mohanty, Basudev Assistant Librarian; and Dash, Nrusingh Kumar Librarian, "Indian Manuscript Heritage and the Role of National Mission for Manuscripts" (2013), Library Philosophy and Practice (ejournal).984.
- Anil Kumar Jain, Sudhir Kumar, Subhajit Choudhury, Keerti Bala Jain, Bal Krishna Sharma : Rare handwritten manuscript collection in Indic Languages at Scindia Oriental Research Institute(SORI), India published at IFLA WLIC 2013, Singapore
- Dr. Ramesh C Gaur, Mrinmoy Chakraborty: Preservation and Access to Indian Manuscripts: A Knowledge Base of Indian Cultural Heritage Resources for Academic Libraries, ICAL 2009 – VISION AND ROLES OF THE FUTURE ACADEMIC LIBRARIES
- Dominik Wujastyk: Sanskrit Manuscript Collections outside India, with special reference to Ayurveda, The National Seminar on Medical Manuscripts, Foundation for the Revitalization of Local Health Traditions, Bangalore, October 5–6, 2005.
- Narayan: History of Manuscriptology: Study of medical manuscripts, Bull.Ind.Inst.Hist.Med, Vol.XXXV-2005. Pp 61 to 76
- Sudha Gopalkrishnan: Manuscripts and Indian Knowledge Systems: The Past Contextualizing the Future, Mow 3rd International Conference
- Origin of Monastic Libraries in India, Vidyabhusan, Amulya Charan. Pracin Bharater Sanskrit-o-Sahitya, p. 122.

RE-ENGINEERING LIBRARY PROFESSIONALS WITH STRESS HEALING TECHNIQUES

Dr. Yojana PatilLibrarian, D. T. S. S. College of Commerce, Malad, Mumbai

ABSTRACT

Rapid Development in Technology has done a marvelous job in the information world, but as a result many Library Professionals need re-engineering of their stressed out mind. Though some are very much excited to learn new things, it's also true that they have to handle the Trinity of Stressors namely New Advanced Technology, Old Generation (Management Members) as well as the New Generation i.e. Teenage Students especially in a College Library. As a result, present library professionals are more in need of stress healing methods or techniques than their colleague teachers. Knowledge of 'Stress & Stress Healing Techniques' is really required for the Library Professionals, in this era to lower their new tensions to work peacefully.

This paper mainly discusses the types of stress healing techniques with special reference to the College Library Professionals and their work; and how to use these healing techniques or methods while working. According to the author stress healing methods or techniques has to be dealt with a touch of Spiritual Knowledge or Spiritual Consciousness as a permanent and effective solution.

The researcher has also included the answers received to her questions about above topic from the Scholars of Research Gate.

In conclusion, mere desire or aspiration to manage stress in life is not enough; it should be chased through for the betterment. And for that, stress healing spiritual techniques must be widely used by the professionals today. So that the Library Professionals may emerge as peaceful and good leaders in their chosen fields and be active and calm at the same time.

Keywords: Stress Healing Techniques, Library Professionals, Spiritual Techniques, Research Gate Scholars.

RESEARCH METHODOLOGY

Secondary data collected from various research materials and web resources.

Goal: To show the importance of Spiritual Stress Healing Methods & Techniques for Re-engineering Library Professionals.

INTRODUCTION

Library Professionals are those who have achieved the required qualifications to enter into the library profession and who is in service in libraries, be it academic or public.

Library professionals ('academic' here) have to face challenges everyday in their day to day service life. These challenges may give them stress if they are not compatible with the issues related to New Advanced Technology or Human Resource Management or solving the Student's or Faculty's problems, or dealing with the upline Management. When stress comes to these library professionals, it can affect their health by Reducing Productivity, Contribution to Premature Ageing and Worsening Current Health Issues. Many Librarians are aged i.e. above 50, so they can be struck by this stress more than the young professionals. Stress Patterns like Muscle Tension, Anxious, Faster Heart Rate, Increased Blood Pressure, Knots in Stomach or tightness in the area, Indigestion, Dilated pupils, Chest Pain, Dry mouth, Fatigue, Tension in the Neck or Shoulder Muscles, Lack of Sleep, Constipation, or Diarrhea, Lack of Concentration, Frustrated, Worrying about things-not-controllable, Procrastination etc.. . To best control stress, it is wise to start by being aware of our own symptoms. Stressor is an incident, event or change where we feel like we can't cope. Since this demand may deplete tangible physical and mental resources, it can create stress and havoc in librarian's lives. Therefore, librarians should prepare to de-stress themselves with various techniques.

DEFINITIONS OF De-STRESS

Definition of *de-stress* given by Merriam Webster is "to release bodily or mental tension"

De-stress definition and meaning by Collins English Dictionary. "to become or cause to become less stressed or anxious"

While working, to become less stressed or to release tension is what is required by the stressed out library professionals.

STRESS HEALING TECHNIQUES

1. ABCD technique

Swami Sukhbodhananda in his book 'Stress Management' gives a best way to deal with the stress i.e. to apply the ABCD technique. I would like to recommend to my fellow professionals to read this book if they really want to know the healing Techniques for de-stressing them.

A - Attitude: Possess an attitude that uplifts others as well as yourself.

B - Belief: Have a powerful belief not limiting belief.

C - Commitment: Operate with commitment to your work not with complaint.

D - Devotion: Dare to enter the world of Devotion and not limit yourself to the world of your own knowledge.

While going through the links suggested by google the author of this paper found many articles related to de-stressing the professionals.

2. One article "20 Scientific Backed ways to de-stress right now" written by Meredith Melnick in the Huffpost, who has nicely elaborated. He says: Go For A 10 Minute Walk, Breathe Deeply, Visualize: try to picture a peaceful scene: a future vacation, your favorite beach, he quotes Dr. Drew Ramsey, an assistant clinical professor of Psychiatry at Columbia University College of Physicians & Surgeons "After all, stress is a brain and immune system mediated phenomena, and your gut is the largest organ in your immune system", Buy Yourself A Plant: Researchers have found that simply being around plants can induce your relaxation response, Step Away From The Screen, A good laugh is a fine relaxation technique etc... many techniques are explained in this article, which will prove a better solutions to our stressful situations.

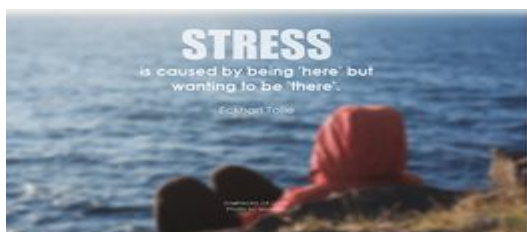
3. In another article "10 Ways to De-stress Your Mind and Body" written by Melissa Eisler, from The Chopra Center gives 10 ways including Exercise & Meditation. She further advice to have Nourishing food, have enough sleep, take Annual Vacations, create a Gratitude Practice, Leave yourself enough time between getting from point A to point B, Smile More, Get Guidance from the Soul.

4. In the article "25 Simple and Proven Ways to De-Stress" from Entrepreneur India the author has given 25 proven ways to de-stress. Some techniques apart from the one mentioned above are - Take a 10 minute walk, rise early, dry skin brushing, chew some Gum, WOOP (i.e. Wish, Outcome, Obstacle, Plan). This involves closing your eyes, imagining your wish coming true for a few minutes, and then thinking about the main obstacle that's in your way, After that, envision the action that you would take to remove the obstacle. This WOOPing technique is far better than Positive Thinking according to a psychologist Gabriele Oettingen, author of *Rethinking Positive Thinking: Inside The New Science Of Motivation*, Count: counting numbers gives your mind something neutral to focus on, Hugging might be an effective means of reducing the stress, Unplug: Turning off all of your devices, visiting your best friend, Clutter and disorganization cause chaos and stress, so clearing the clutter is a good solution to de-stress, Get Crafty: try crafts like knitting or cross-stitching or make jewellery, sing your favorite song since that releases endorphins and oxytocin, mild exercise of rocking in a rocking chair can release endorphins, improve mood, and even reduce pain.

5. **Default Mode Network:** In 2001, Dr. Marcus Raichle from Washington University, first used the term "default mode" to describe resting brain function. The default mode network (DMN) involves low-frequency oscillations of 1 fluctuation per second. When we concentrate or focus on a task that time the brain goes into the task positive network (TPN). And the DMN deactivates. If you want to de-stress then you have to change the default mode into the active or task mode. Do something which requires your attention. And that will de-stress your brain. One simple solution is just keep your one hand on your heart and the other on stomach, and just observe the breathing and hands. At the same time your DMN will be de-activated and you will feel fresh within minutes.

Stress is caused by being 'Here' but wanting to be 'there'

So, Pause and Come Back 'Here'.



GLIMPSES OF RESEARCH GATE: QUESTION & ANSWERS

The author of this paper asked the question on the Open Access Social Networking Site for Scientists & Researchers.

The first question was as follows

Can anybody give examples of using Spiritual Healing Techniques to De-stress the Library Professionals?

Received total 12 Answers from various Researchers and Scholars. Some of those are as follows:

Vicki Patterson answered "Hypnosis"

Marc De Leon recommended the use of a music therapy and/or art therapy using whatever medium that brings comfort and therapeutic effect.

Marc De Leon again answered to the author's question 'what is Art Therapy' that "Dr. Patil, I have no specific art therapy modality for the library professionals, but there is an online site where you can get broader information about this type of therapy. On your browser, type "100 Art Therapy Exercises." Thanks.

Mahdi Movahed-Abtahi suggested to Take a spiritual journey! In such journey, a passenger should evaluated himself/herself psychologically, then ethically, then transcendently! After that, he/she can rearrange and reorder spiritual needs and spiritual resources. Now, you are experiencing the process of spiritual augmentation!

Kay McCulloch Added an answer:- Guided Meditation and Music Therapy or Sound Therapy. I have used both in my healing clinic since the early 1990s. Also, reconnecting with nature, such as going for a bush walk or walking in the sand near the beach (being near the ocean will allow an individual to uptake negative ions which are good for us). Also, Laughter therapy (as simple as watching a funny movie). And as Mahdi Movahed-Abtahi said - taking a spiritual journey or even a shamanic journey to sacred sites.

Massage therapy: Field, T., Hernandez-Reif, M., Diego, M., Schanberg, S., & Kuhn, C. (2005). Cortisol decreases and serotonin and dopamine increase following massage therapy. *International Journal of Neuroscience*, 115(10), 1397-1413. In this article the positive effects of massage therapy on biochemistry are reviewed including decreased levels of cortisol and increased levels of serotonin and dopamine. Thus the massage therapy can reduce & release stress, so this therapy is also recommended by the author of this paper for library Professionals.

CONCLUSION

Mere desire or aspiration to manage stress in life is not enough; it should be chased through for the betterment. And for that, above mentioned stress healing spiritual techniques must be widely used by the professionals today. So that the Library Professionals may emerge as peaceful and good leaders in their chosen fields and be active and calm at the same time.

REFERENCES:

1. "De-stress | Definition of De-stress by Merriam-Webster." <https://www.merriam-webster.com/dictionary/de-stress>. Accessed 16 Nov. 2018.
2. "De-stress definition and meaning | Collins English Dictionary." <https://www.collinsdictionary.com/dictionary/english/de-stress>. Accessed 16 Nov. 2018.
3. "Stress Management... - Stress Management... - Swami" <http://friendslibrary.in/books/detailedinfo/16918/Stress%20Management....> Accessed 25 Jan. 2019.
4. "20 Scientifically Backed Ways To De-Stress Right Now | HuffPost Life." 9 Sep. 2013, https://www.huffpost.com/entry/stress-relief-that-works_n_3842511. Accessed 16 Nov. 2018.
5. "10 Ways to De-stress Your Mind and Body | The Chopra Center." <https://chopra.com/articles/10-ways-to-de-stress-your-mind-and-body>. Accessed 16 Nov. 2018.
6. "25 Simple and Proven Ways to De-Stress - Entrepreneur." 27 Jun. 2017, <https://www.entrepreneur.com/article/296344>. Accessed 16 Nov. 2018.
7. "Cortisol decreases and serotonin and dopamine increase following" <https://www.ncbi.nlm.nih.gov/pubmed/16162447>. Accessed 19 Nov. 2018.

CLOUD COMPUTING AND LIBRARIES**Dr. Jayshree S. Gohad**Anantrao Thopte College, Bhor

ABSTRACT

Cloud Computing refers to group of technologies that provides on demand storage data or computing power through the Internet. It's a new technique of information communication technology because of its potential benefits such as reduced cost, accessible anywhere, anytime as well as its elasticity and flexibility. Its a new term and growing very fast. Cloud based information services in libraries play an active role in knowledge delivery. The diversity of library user's requirement and changing scenario of library resources need a drastic change over to fulfillments the gap of demand and supply of users end and timely instant library services. Present paper describe the meaning, characteristics and role of Cloud Computing in libraries with its advantages and drawbacks.

Keywords: Cloud Computing, Characteristics, Role of Cloud Computing in libraries, Cloud base library services.

INTRODUCTION

Cloud Computing provides people the way to share distributed resources and services that belong to different organizations or sites. It share distributed resources via the network in the open environment. It is a virtual pool of computing resources through internet. Cloud Computing is broken down into three segments : 1) Application 2)Storage 3)Connectivity.

Libraries are using computers for running services such as Integrated Library Management Software, Website or portal, digital library or institutional repository, etc. Now cloud computing has become a new buzzword in the field of libraries, which is blessing in disguise to run different ICT services without much of a problem as third-party services will manage servers and undertake upgrades and take backup of data. Cloud Computing contains features of different technologies including utility computing, grid computing ,unified computing , web 2.0, service oriented architecture etc. Cloud Computing technology is offering great advantages for libraries to connect their services not only promptly but also in new formats with the flexibilities such as pay as you use model, access any where any time and so on.

DEFINITION

According to Wikipedia, Cloud Computing refers to the delivery of computing as a service rather than a product, where by shared resources, software, and information are provided to computers and other devices as a metered service over a network, typically the internet. OR

A model for enabling ubiquitous, convenient, on-demand network access to shared pool of configurable computing resources (e.g. networks, servers, storage, applications and services)that can be rapidly provisioned and released with minimal management effort or service provider interaction.

CHARACTERISTICS OF CLOUD COMPUTING

AS per definition of cloud computing by the national institute of Standards and Technology (NIST) there are five characteristics of Cloud Computing.

1) On demand self –service: Cloud services such as email, applications, database, storage,computing,network or server service can be provided without requiring human interaction with each service provider. E.g. Amazon web service, Microsoft, Google,IBM etc.

2) Broad Network Access : Cloud deliverables are available over the network and accessed though standard mechanisms that promote use by heterogeneous thin or thick client platforms such as smart phones, tablets, laptops and desktop PCs.

3) Resource Pooling : The provider's computing resources are pooled together to serve multiple clients using multiple tenant model, with different physical and virtual resources dynamically assigned and reassigned according to client demand. There sources include, among others, storage, processing, memory, network bandwidth, virtual machines, etc. This characteristic also gives a degree of location independence in wherein the client generally has no control or knowledge over the exact location of the provided resources but may be bale to specify location at higher level of abstraction.

4) Rapid Elasticity: Usage of resources in cloud services can be rapidly and elastically provisioned, which can be also done automatically, to quickly scale out and rapidly released to quickly scale in. the capabilities available for provisioning often appear to be unlimited to the consumer and can be purchased in any quantity at any time.

5) Measured Service: Cloud Computing resource usage can be measured controlled, and reported providing transparency for both the provider and consumer of the utilized service. Cloud Computing services use a metering capability which enables to control and optimize resource use.

LIBRARY AND CLOUD COMPUTING

Today we are living in the age of information. Information technology plays a very vital role in handling library resources ranges from collection, storage, organization, processing and analysis of information dissemination. Library field facing many challenges in the profession due to application of information technology. New concepts and technologies are being added to ease the practices in the libraries and satisfy the needs of the knowledge society. With the advent of information technology libraries have become automated which is the basic need towards advancement followed by networks and more effort is towards virtual library. The emergence of digital library, internet usage, web tools application for libraries, consortium practices leads to the advancement in library profession. Cloud Computing is a completely new IT technology and it is known as the third revolution after PC and Internet in IT. The later technology trend in library science is use of Cloud Computing for various purposes and also the application of Cloud Computing in library science. Cloud Computing offers many interesting possibilities for libraries that may help to reduce technology cost and increase capacity reliability and performance for some type of automation activities. Cloud Computing has made strong inroads into other commercial sectors and is now beginning to find more application in library science. The Cloud Computing pushes hardware to more abstract levels. Most of us are acquainted with fast computing power being delivered from systems that we can see and touch.

ROLE OF CLOUD COMPUTING

Cloud Computing has large potential for libraries. Libraries may put more and more content into the cloud. Using Cloud Computing user would be able to browse a physical shelf of books, CDs or DVDs or choose to take out an item or scan a bar code into his mobile device. All historical and rare documents would be scanned into a compressed, easily searchable database and would be accessible to any researcher. Many libraries already have online catalogues and share bibliographic data with OCLC. Data storage could be main function of libraries, particularly those with digital collections storing large digital files can stress local server infrastructures. The files need to be backed up, maintained and reproduced for patrons. ;this can strain the data integrity as well as hog bandwidth. Moving data to the cloud may be a leap of faith for some library professions. ;It's a new technology and on the surface it is believed that library would have some control over this data or collections. However, with faster retrieval times for patron's requests and local server space it could improve storage solutions for libraries. Cloud Computing or IT infrastructure that exists remotely, often gives users increased capacity and less need for updates and maintenance, and has gained wider acceptance among librarians.

ADVANTAGES OF CLOUD COMPUTING

Cost reduction – Ability to increase or decrease the consumption of hardware or software resources immediately and in some cases automatically.

Unlimited storage capacity: The cloud offers virtually limitless storage capacity but at any time you can expand your storage capacity with a small additional charge on you monthly fee.

Scalability –“ Pay as you go” allowing a more efficient control of expenditures. Only those employees actually using an application need access to that application in the cloud.

Lower Investment & reduced risk – Maintenance costs also will be reduced using Cloud Computing since both hardware and software maintenance for organizations of all sizes will be much less. e.g. fewer servers are necessary in the organization which means that maintenance costs are immediately lowered. As to software maintenance, there is no software on the organization's computer for the IT staff to maintain.

Support included – Enjoyment of the most advanced security procedures, availability and performance of providers with experience and knowledge in this type of service. There is no point to worry for disk failures or a disaster at your office. All the data is stored in the cloud.

Better performance: Due to the fact that no programs or files are loaded on the local PC, users will not experience delays when switching on/off their computers and also the internal network will be much faster since no internal traffic will occur.

Greater security and accessibility – Access to resources from any geographical point and the ability to test and evaluate resources at no cost. When using Cloud Computing , you can use the Cloud Computing power since you are no longer limited to what a single desktop computer can do.

Latest version availability: One more thing in relation with documents is that when you edit one document at the office and then you go somewhere else and open it, the latest version will displayed since as I already aforementioned all the work is done centrally in the cloud.

DRAWBACKS OF CLOUD COMPUTING

The disadvantages are actually the same as those encountered by institutions that have information hosted outside of the entity. In case of digital data there is still a huge fear of putting our information in the hands of third parties. This fear arises due to issues such as confidentiality, theft, loss etc. Yet people are increasingly more likely to do so now that the use of Web 2.0 and social networks has become so widespread. An institution might take the decision to progressively move towards Cloud Computing by uploading applications which are not very sensitive such as : messaging, the booking of rooms, meeting management, the liquidation of costs and other such management. Following this learning process, more valuable information involving the corpus of the institution, i.e."Business Intelligence" might be uploaded to the cloud. In case of libraries and information centers, this information would include management funds and network transactions.

APPLICATION OF CLOUD COMPUTING IN LIBRARIES :

Libraries are shifting their services with the attachment of cloud and networking with the facilities to access these services anywhere and anytime. In the libraries, the following possible areas were identifies where cloud computing services as applications may applied.

- 1) **Building Digital Library/ Repositories:** In present era, every library needs a digital library to make their resources, information and services at an efficiency level to ensure access via the network . In connection to cloud based digital library software, Duraspace is having two software i.e. Dspace and Fedora Commons but Dspace is widely used for building digital libraries/ repositories relative to Fedora Commons. Dura cloud provides complete solutions for developing digital libraries or repositories with standard interfaces and open source colds for the both software.
- 2) **Searching Library Data :** OCLC is one of the best example for making use of cloud computing for sharing libraries data for years together. OCLC is offering various services pertain to circulation, cataloguing, acquisition and other library related services on the cloud platform through the web share management system.
- 3) **Website hosting :** Website hosting is one of the earliest adoptions of cloud computing as may organizations including libraries preferred to host their websites on third party service providers rather than hosting and maintain thir own servers. Google Sites serve as an example of service for hosting websites outde the library servers and allowing for multiple editors to access the site from varied locations.
- 4) **Library Automation :** For Library Automation purpose, Polaris provides various cloud based services such as acquisitions, cataloguing, process system, digital contents and provision for inclusion of cutting edge technologies used in libraries and also supports various stand ads such MARC21, XML,Z39,Unicode and so on which directly related to library and information science area. Apart from this, now a days many of the software vendors such as EX-Libraries, OSS Labs are also offering this services on the cloud and third party services offering hosting of this service on the cloud to save libraries from investing in hardware for this purpose.

CLOUD BASE LIBRARY SERVICES

- ✓ Cloud based storage tools
- ✓ Cloud based presentation
- ✓ Cloud based form
- ✓ Social Media
- ✓ Cloud based blogging
- ✓ Cloud based operating system
- ✓ Library Automation
- ✓ Library Website/ Portal

-
- ✓ Android application
 - ✓ Digital library/ Institutional Repository
 - ✓ Web scale Discovery Service
 - ✓ Reference Management Tools
 - ✓ Data Collection Tool
 - ✓ Cloud based Learning Tools

CONCLUSION

Libraries are moving towards Cloud Computing technology in present days and taking advantages of Cloud based services especially in digital libraries, social networking and information communication. Therefore this is a better time for libraries to think seriously for services with cloud based technologies and provide reliable and rapid services to their users. The diversity of users expectations regarding academic libraries will be fulfilled by cloud computing.

REFERENCE

- 1) Kaushik, A & Kumar, A (2013), application of cloud computing in libraries. International Journal of Information Dissemination and Technology,3(4), 270-273
- 2) Kumar, D.A., & Mandal, S (2013).Development of Cloud computing in integrated library management and retrieval system. International Journal of Library and Information Science, 5(10), 394-400
- 3) Mohamed, Arif; A history of cloud computing : computer Weekly.com ([http://www.computerweekly.com/Articles/2009/06/10/A-history-of-cloud-computing .htm](http://www.computerweekly.com/Articles/2009/06/10/A-history-of-cloud-computing.htm))
- 4) Bhattacharjee,N.,& Das Purkayastha,S.(2013). Cloud computing and its applications in libraries. E-library science Research Journal,1(7)
- 5) Reena,Karen(2012).Libraries and the cloud : Evolution no revolution.Panlibus Magazine,23,8-14

SEARCH ENGINES WITH REFERENCE TO INFORMATION RETRIEVAL: A CASE STUDY OF LIBRARY AND INFORMATION SCIENCE STUDENTS UNIVERSITY OF MUMBAI

Rosy S. KhanStudent, University of Mumbai, Mumbai

ABSTRACT

Search engines plays an important role for retrieving Information available on web. The society where we are living is considered as Information society. Now growth of every filed is depend upon availability of Information and knowledge of the people by using those Information. All search engines are helping people to get information which they want. People retrieve Information according to their needs. Directly or indirectly we all are depended on search engines. This study is conducted to know literacy of search engines among Library and Information science students. Questionnaire is prepared to collect data from respondents and evaluated. The findings show that students are aware about search engines and they are using search engines for various purposes.

Keywords: Search engines, Information, Information retrieval, Internet, WWW.

1. INTRODUCTION**1.1 Internet**

A network of networks, joining many government, university and private computers together and providing an infrastructure for the use of E-mail, bulletin boards, file archives, hypertext documents, databases and other computational resources.

The vast collection of computer networks which form and act as a single huge network for transport of data and messages across distances which can be from one place to another anywhere in the world.

1.2 WWW

It is a system of interlinked hypertext documents on the Internet, which can be accessed through a browser. The web pages may contain text, images, video and other multimedia objects. World Wide Web is abbreviated as WWW or W3 and it is simply called a Web.

1.3 Search Engines

Search engine is a service that allows internet users to search for content via the World Wide Web (WWW). A user enters keywords or key phrases into a search engine and receives a list of Web content results in the form of websites, images, videos or other online data. The list of content returned via a search engine to a user is known as a Search Engine Result page (SERP). Today, there are many different search engines available on the internet, each with their own abilities and features. Today the most popular and well-known search engine is Google. Other search engines are AOL, Ask.com, Baidu, Bing, and Yahoo.

‘Oxford Advanced Learner’s Dictionary of Current English’ defines Search Engine “a computer program that searches the Internet for Information, especially by looking for documents containing a particular word or group of words”.

According to computing dictionary "search engine is a program that allows users to locate specified information from a database or mass of data. Search engine sites are extremely popular on the world wide web because they allow users to quickly sift through millions of documents on the internet."

1.4 Information

- Acharya had defined is as “it is organized, systematized data”
- Dixon”it is data that has been stored, analyzed, and displayed”
- Dickerson”it is data that is meaningful or useful to someone”

1.5 Information Retrieval

Information retrieval is mainly considered as a component of computer science that deals with the representation, storage, and access of information. The main aim of information retrieval model (IR) is to “finding relevant knowledge-based information or a document that fulfill user needs”.

2. REVIEW OF LITERATURE

Amjad J. Khalil &Fadi k. Abu Alrub (2013) in their paper ‘Comparison of search engines Features and Mechanisms’ explanation is given about that u have to first understand search engines in order to achieve

highest satisfaction and also they have evaluated five search engines, comparison done between those five search engines.(Google, Yahoo, Bing, Ask, DuckDuckGo)

Vivekanand Jain & Dr. Sanjiv Saraf (2006) in their work ‘Google search engines and their usefulness to Library professionals’ this article covers the development of Google search engine from 1999 till date. It also includes features of google scholar and books search on Google.

Hussain, A. (2015) in his paper title “Search Engines as a Effective Tool for Library Professionals” paper discusses about the various aspects of search engine including background of search engines, how search engine work. Also, it analyses the Internet search techniques, i.e Basic, Advance and refine search. The paper highlights the effective use in searching Information on Internet on the basis of Boolean operators AND, OR, NOT and proximity searching, etc. Finally, it highlights the categories of search engines.

3. AIM AND OBJECTIVES OF THE STUDY

3.1 Aim

A study of search engines with reference to information retrieval and Literacy among Library and Information Science students, University of Mumbai.

3.2 Objectives

To achieve the above-mentioned aim, the objectives are as follows

- To study which search engines Library and information science students using for retrieving various types of information.
- Study what are the benefits of search engines (today/ Future).
- Find out what are the limitations and drawbacks of search engines.

4. RESEARCH METHODOLOGY

Best (1977) describes Research Methodology as what must be done, how it will be done, what data will be needed, what data gathering will be employed, how sources of data will be selected and how the data will be analysed, and conclusions reached.

According to Kothari (1990) “When we talk of research methodology we not only talk of the research methods but also consider the logic behind the methods we use in the context of our research study and explain why we are using a particular method or a technique and why we are not using others, so that research results are capable of being evaluated either by the researcher himself or by others”.

According to Krishan Kumar (1992) “a questionnaire is a written document listing a series of questions pertaining to the problem under study, to which the investigator requires the answers”.

For this paper Case study method is used and data collection tool is questionnaire. Which is manually filled and collected.

Library and Information Science students less in quantity as compared to other streams. For this study I was selected First year and second year students. (Department of Library and Information Science, University of Mumbai). MLISC-I: 24 students and MLISC-II: 20 students. So, the total number of respondents are 44 data collected and analysed of these students.

5. DATA ANALYSIS

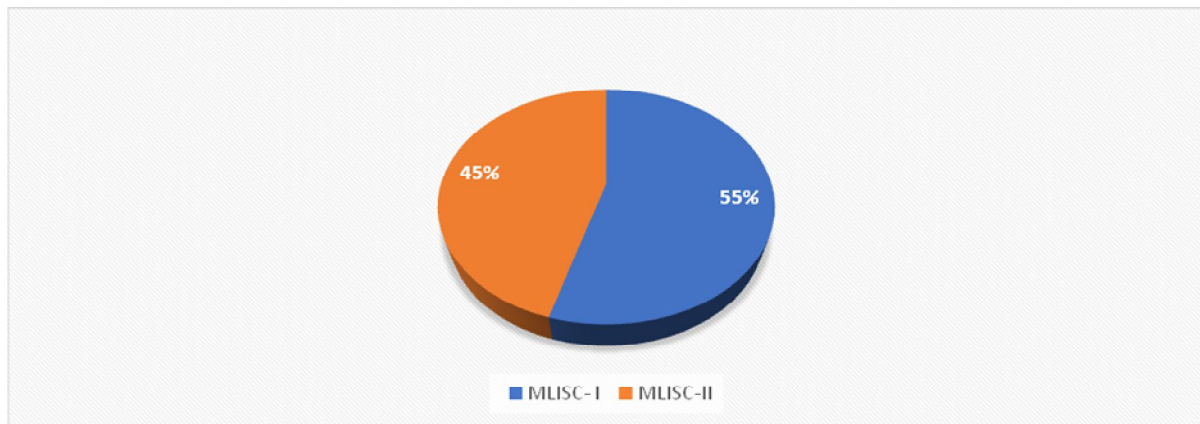
The paper deals with the analysis and Interpretation of data which were collected through questionnaire. Data analysis means systematic gathering, recording and summarizing of data to find answer to the research problems.

The collected data has been organized and tabulated by using tables, pie chart, histogram etc.

I. GENERAL DETAILS OF RESPONDANTS

MLISC-I	MLISC-II	Total
24	20	44

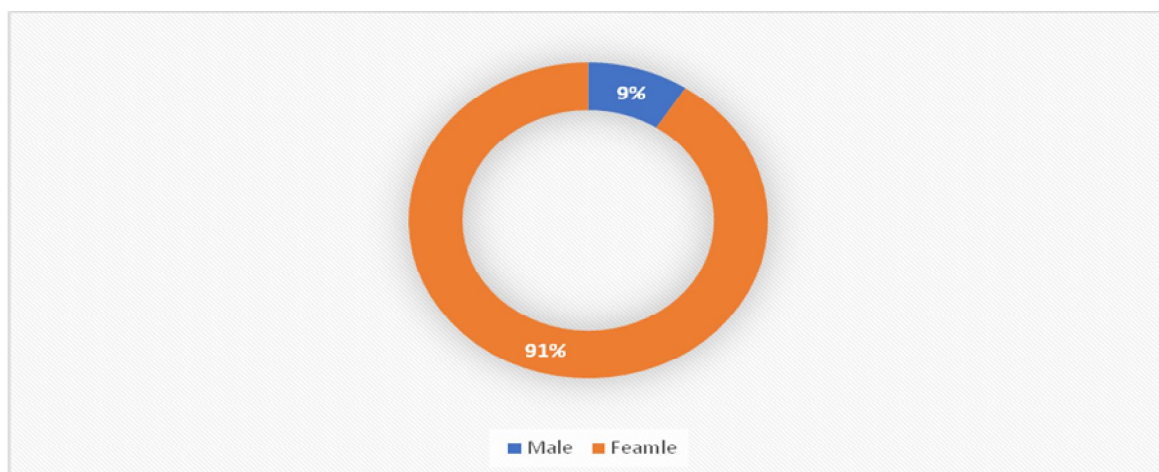
Table-5.1



In table 5.1 total number of Library and Information Science students of University of Mumbai those who given their responses, which includes MLISC-I is 55% and MLISC-II is 45%. So the students are more in First year.

Table-5.2: Male and female respondents’ details.

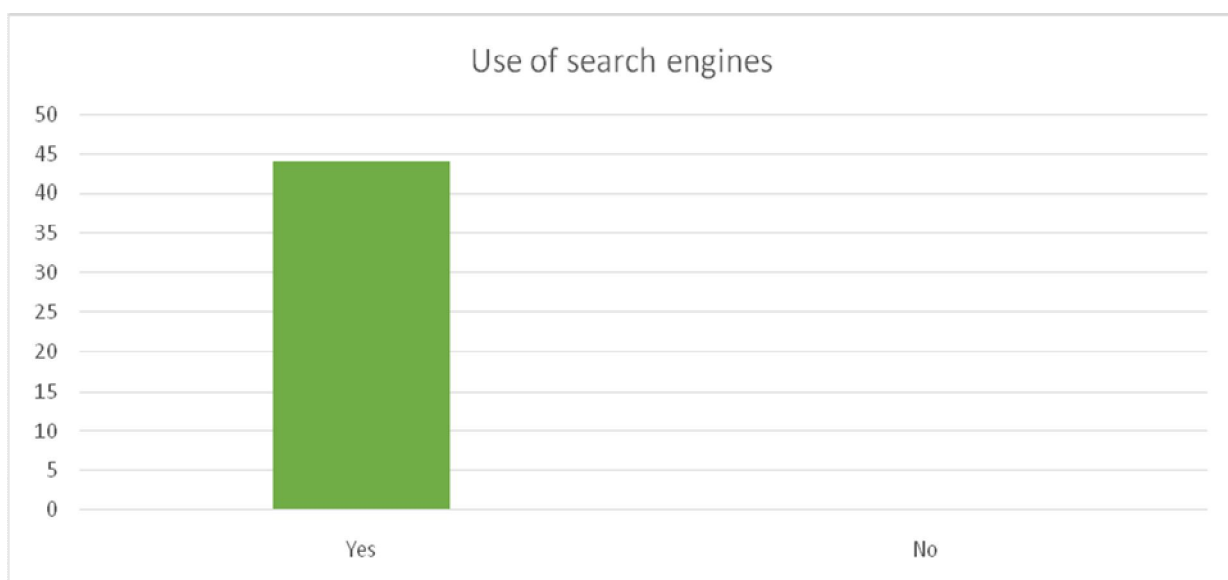
Male	Female	Total
4	40	44
9%	91%	100%



This 5.2 table indicates total number of students i.e. Mlisc-I & Mlisc-II is divided into two parts. It shows that male is only 4% and Females are 91%. So, the rate of female’s students is high and male students are very less.

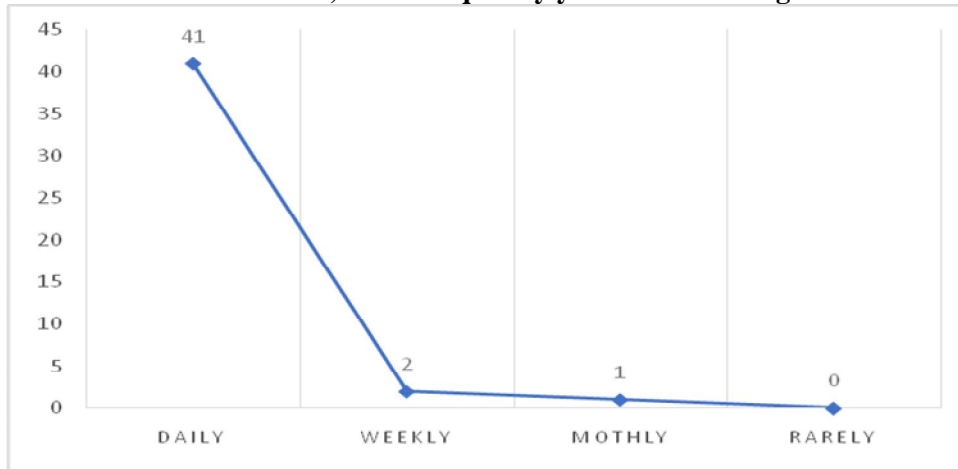
II. USE OF WEB SEARCH ENGINES

Table-5.3: Do you use search engines (like Google, Yahoo)



Here it is clear that all Library and Information science students are using search engines. Table 5.3 shows that 100% students are aware about search engines, it shows 100% literacy about search engines.

Table-5.4: If Yes, How Frequently you use search engines?



In table 5.4 examined that the researcher asked about frequency of using search engines, where 41 students are using daily and 2 students are using weekly, monthly only 1 student is using search engine. This result shows that not only Library science students using search engines but they are using it daily basis.

Table-5.5: Why do you use Search engines?

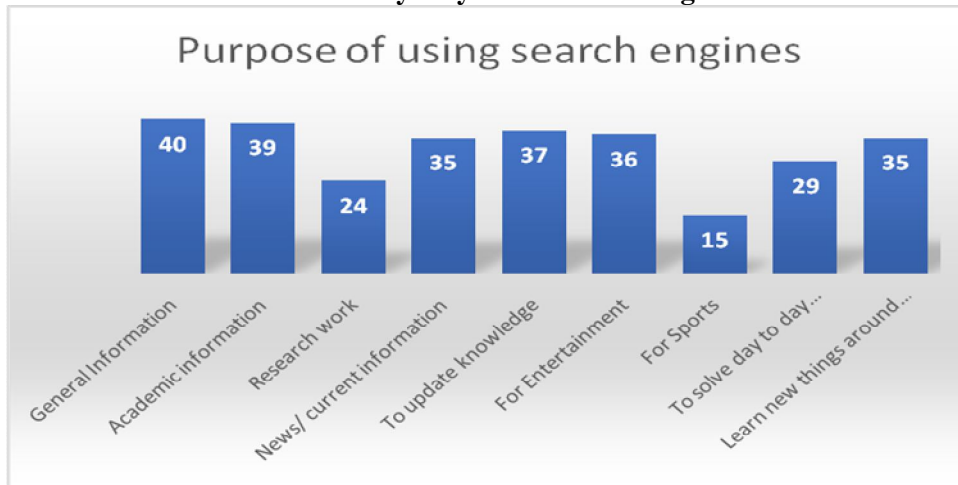


Table 5.5 indicated the reasons why students are using search engines. Search engines are used for retrieving various types of information, here 40 students are using search engines for General purposes , 39 students are using for Academic Information.

Table-5.6: Which search engines is used to retrieve various types of information?

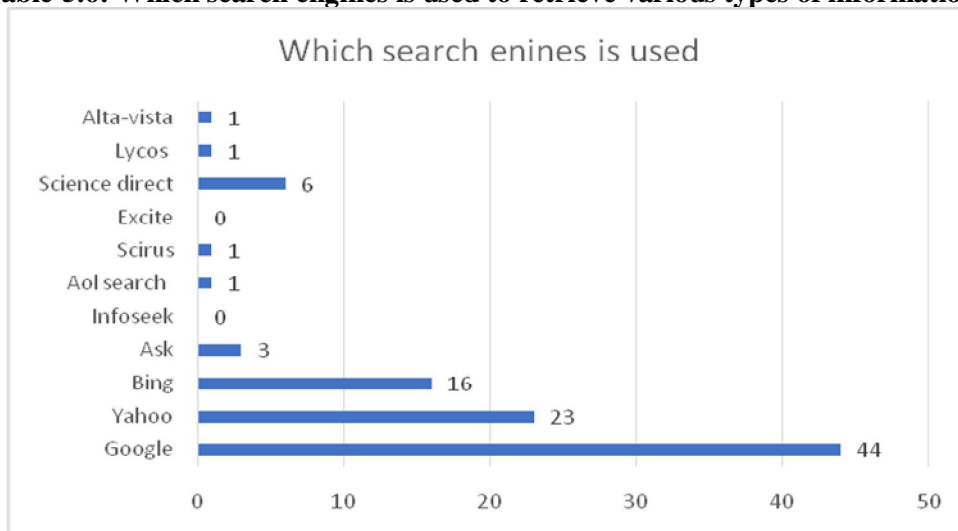
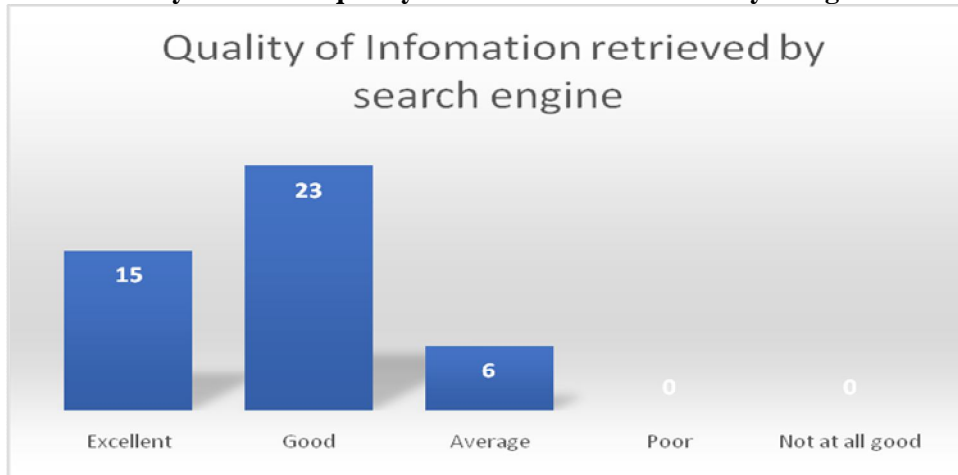


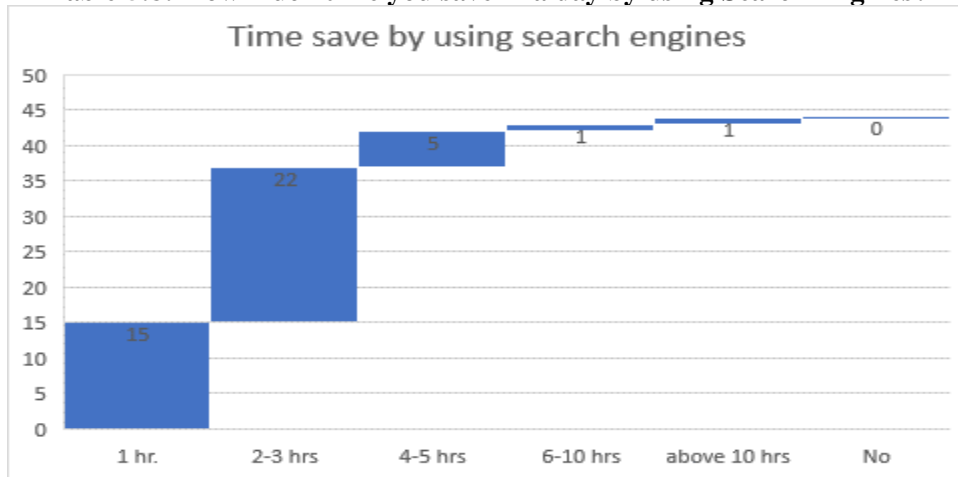
Table 5.6 shows the details which search engines are used for retrieving various types of Information, it is clear that all 44 students are using Google for retrieval of Information from web. Some students i.e 23 are using Yahoo and 16 students are using Bing, science direct is also used by 6 students.

Table-5.7: How do you rate the quality of information retrieved by using Search Engine?



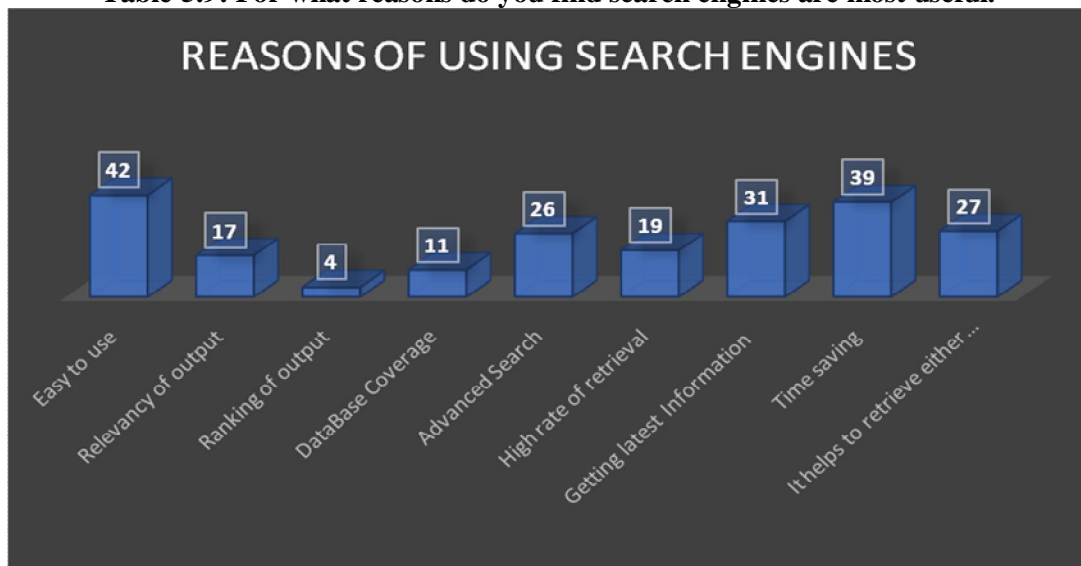
The quality of Information retrieved by search engines is shown in table 5.7 which indicated that 23 students are saying it is Good and 15 students say that it is Excellent.

Table-5.8: How much time you save in a day by using Search Engines?



How much time save by using search engines is shown in table 5.8, here 15 students save 1 hr. and 22 students save 2-3 hrs.

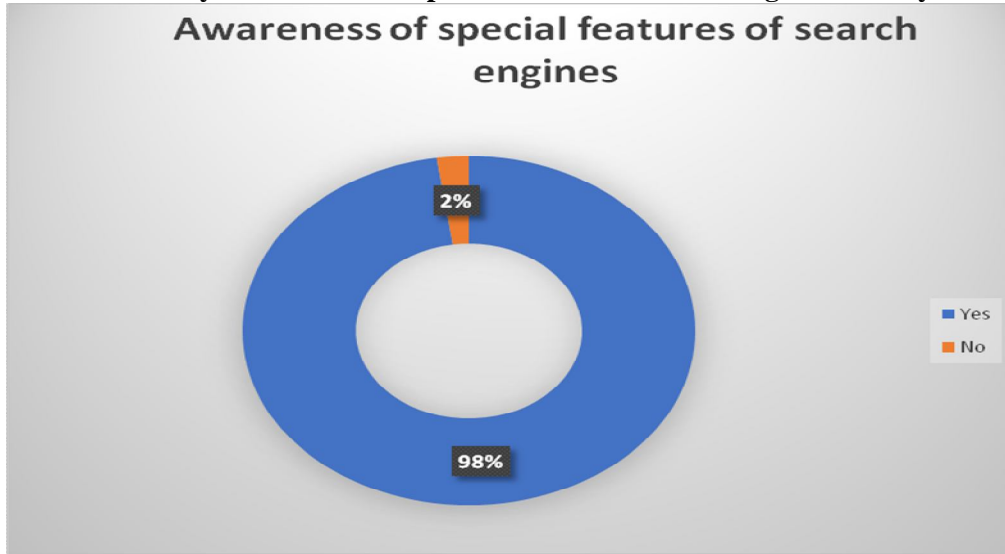
Table-5.9: For what reasons do you find search engines are most useful.



For what reasons students think that search engines are most useful. Here in table 5.9 calculated and it indicates that 42 students find it very easy to use. 39 students say it saves the time of the user.

III. SPECIAL FEATURES OF SEARCH ENGINES

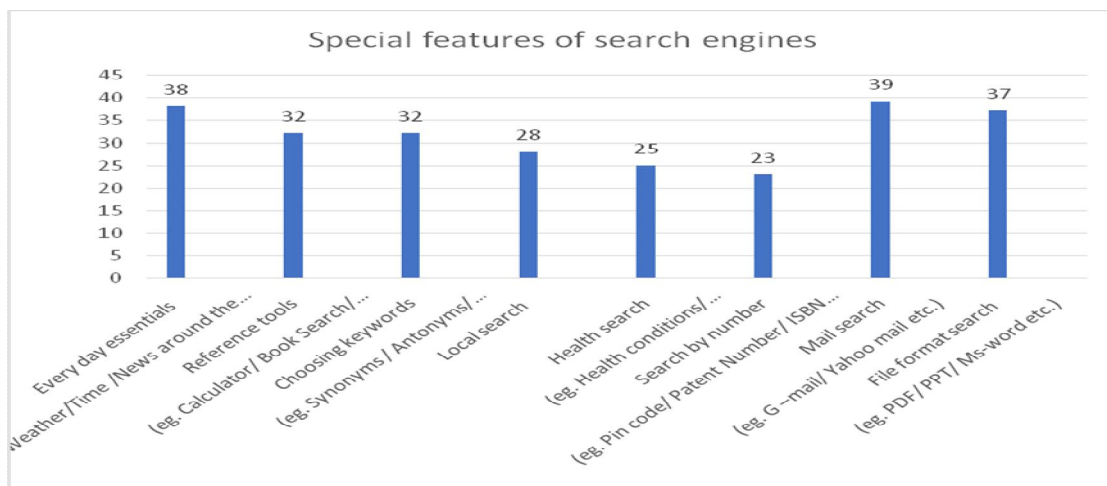
Table-5.10: Are you aware of the special features of search engines which you use?



Here in table 5.10 question asked about awareness of special features of search engines and 98% students says yes only 2% are not aware about special features.

Table-5.11: If yes, do you use the following special features of search engines?

Sl. No.	Special Features	√
a)	Every day essentials (eg. Weather/Time /News around the world etc))	38
b)	Reference tools (eg. Calculator/ Book Search/ Earthquakes etc)	32
c)	Choosing keywords (eg. Synonyms / Antonyms/ Definitions/ Spell checker etc.)	32
d)	Local search (eg. Business/ Restaurants/ Movie show times etc.)	28
e)	Health search (eg. Health conditions/ Medicines/Poison control etc.)	25
f)	Search by number (eg. Pin code/ Patent Number/ ISBN Book number etc.)	23
g)	Mail search (eg. G -mail/ Yahoo mail etc.)	39
h)	File format search (eg. PDF/ PPT/ Ms-word etc.)	37



If they about special features do they use those special features of search engine. Here table 5.11 indicates 38 students are using search engines for every day essentials. 32 students are using Reference tools and same 32 students are using for keywords also.

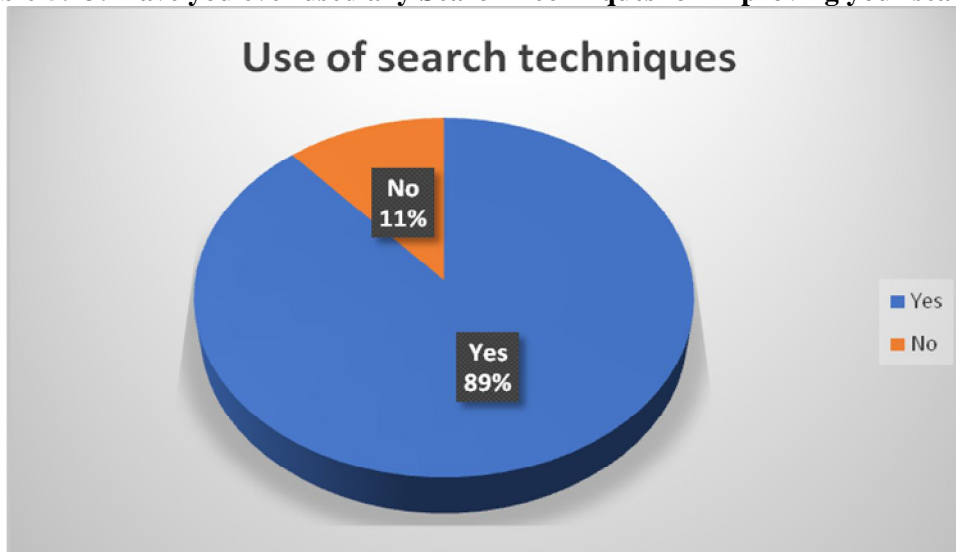
Table-5.12: What extend you are satisfied with special features of search engine?



In table 5.12 given details about what extend students are satisfied with special features of search engine, here 21 students are satisfied and 15 are fully satisfied.

IV. SEARCH TECHNIQUES/ STRATEGIES

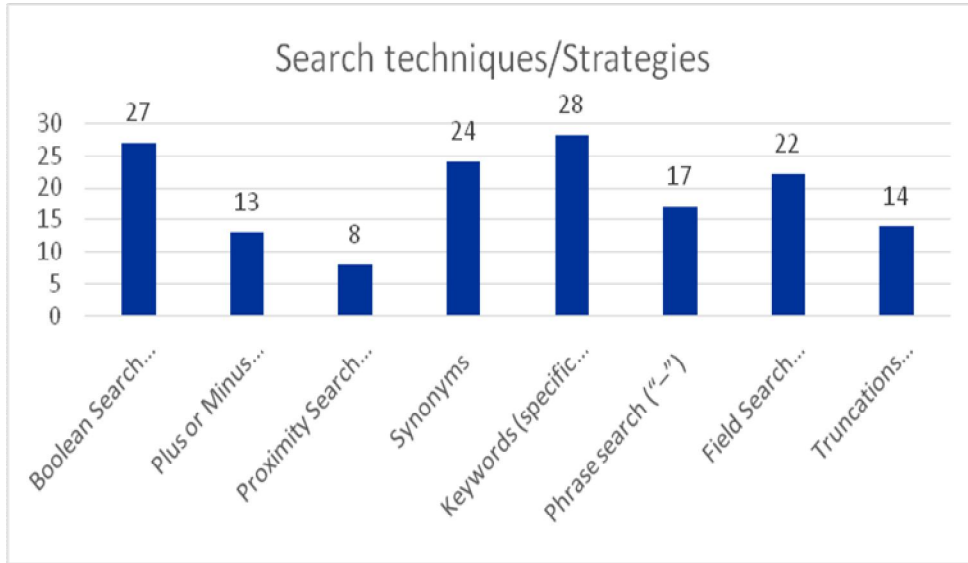
Table-5.13: Have you ever used any Search Techniques for improving your search?



The question is asked about use of search techniques for improving search in table 5.13 shown that 89% students are used search techniques only 11% students not used.

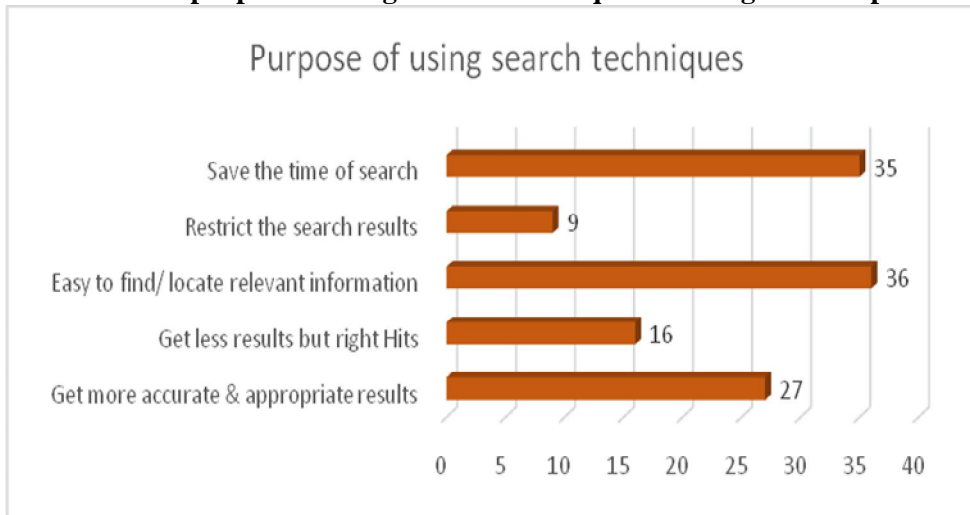
Table-5.14: If yes, which Search Techniques / Strategies are used for improving your search?

Sl. No.	Search Techniques	√
a)	Boolean Search (AND, OR and NOT)	27
b)	Plus or Minus Operator (+, -)	13
c)	Proximity Search (tilde ~symbol)	8
d)	Synonyms	24
e)	Keywords (specific keywords)	28
f)	Phrase search (“-”)	17
g)	Field Search (author, title, subject terms etc)	22
h)	Truncations (*,!,?,\$,,:)	14



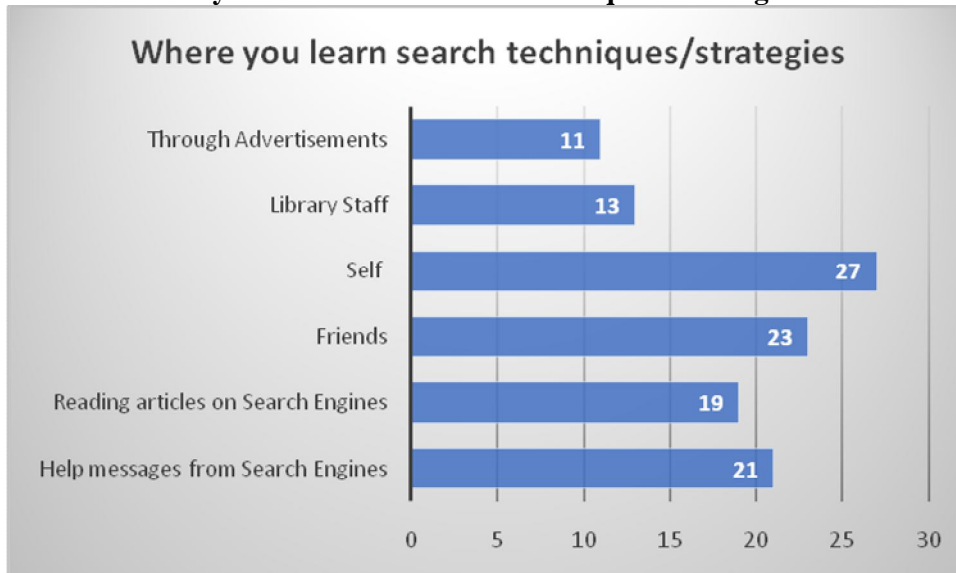
If students are using search techniques so which techniques they are using is explained in table 5.14, here 28 students are using keyword and 27 students are using Boolean search operators like AND, OR etc.

Table-5.15: Mention the purpose of using Search Techniques / Strategies while performing search.



Here purpose is explained why students used search techniques in table 5.15, 35 students says it save the time 36 students says using search techniques helps to locate relevant information.

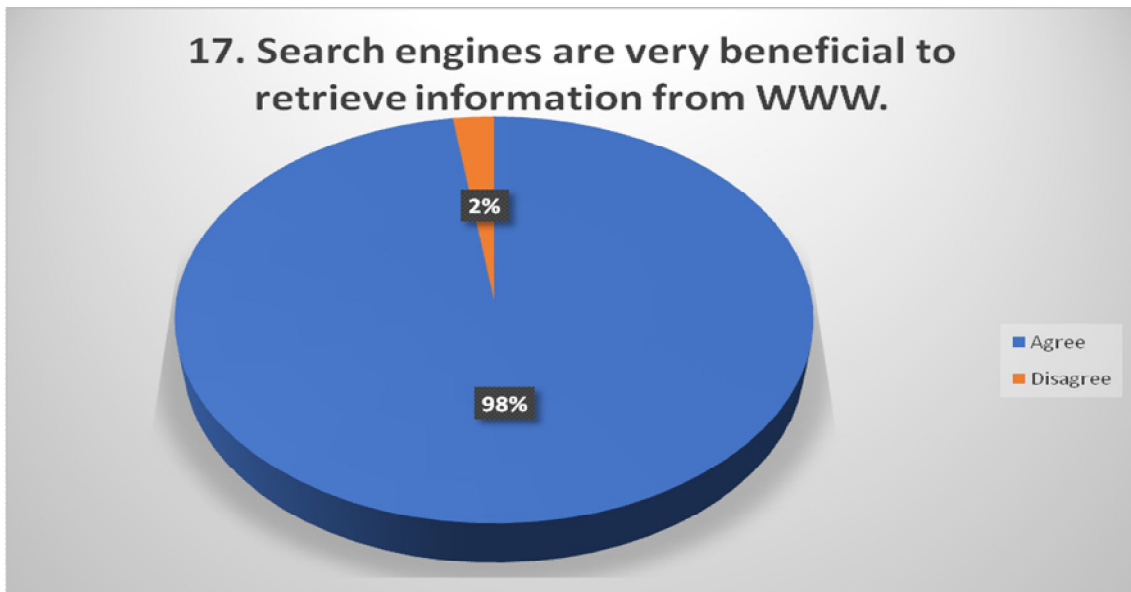
Table-5.16: How did you learn to use Search Techniques / Strategies of search engine?



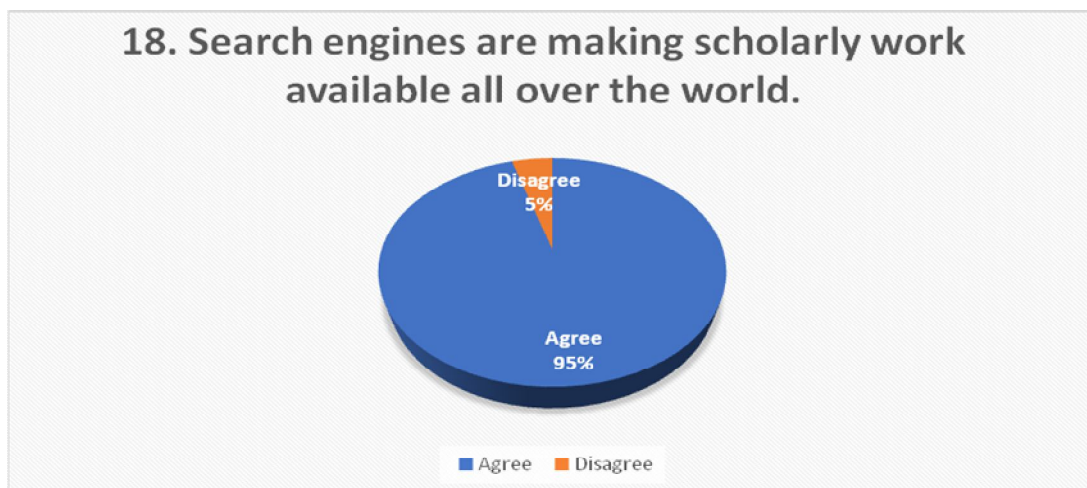
In table-5.16: Shown that how students learn about search techniques, here 27 students learn by self and 23 students from friends.

V. Benefits of Search Engines (Today/ Future)

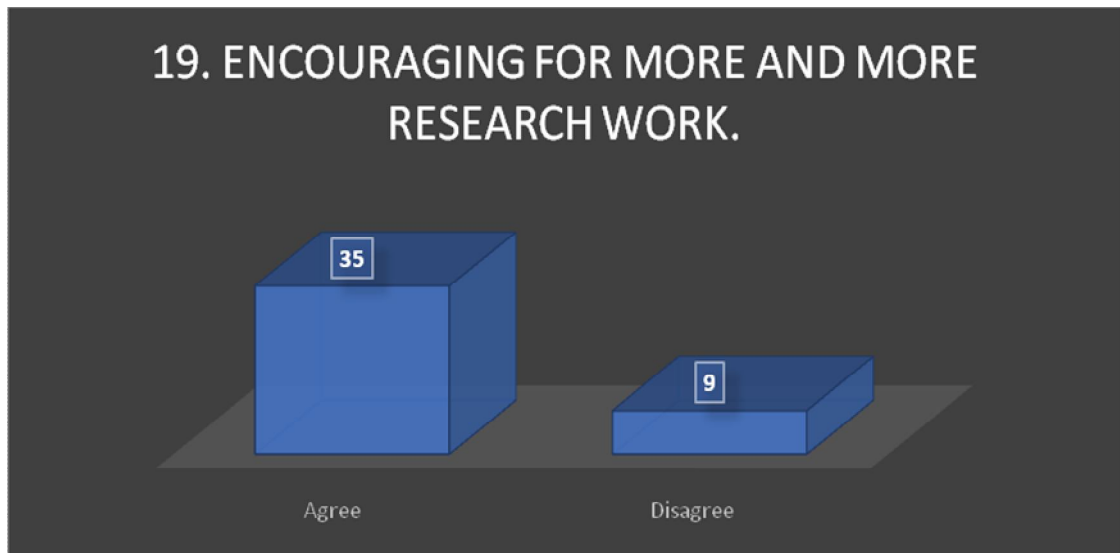
Sl. No.	Benefits	Agree	Disagree
Table 5.17	Search engines are very beneficial to retrieve information from WWW.	43	1
Table 5.18	Search engines are making scholarly work available all over the world.	42	2
Table 5.19	Encouraging for more and more Research work.	35	9
Table 5.20	Contributes in the Growth of the Information society.	42	2
Table 5.21	Also, it leads to better Education and Learning Environment.	41	3
Table 5.22	Search engines providing all the latest and important news.	39	5
Table 5.23	It helps to learn our interest areas.	40	4
Table 5.24	All type of subject knowledge available which we can access by search engine.	36	8
Table 5.25	Search engines making us think wide and learn new inventions in every field.	42	2



In table 5.17 asked that search engines are beneficial to retrieve Information from World Wide Web (WWW). 98% students say yes, they agree with this only 2% are disagree.



In table 5.18 where 95% students are agreed that search engines are making scholarly work available all over the world.



In table-5.19 indicates that 35 students agree that search engines helps to Encourage for more and more Research work.

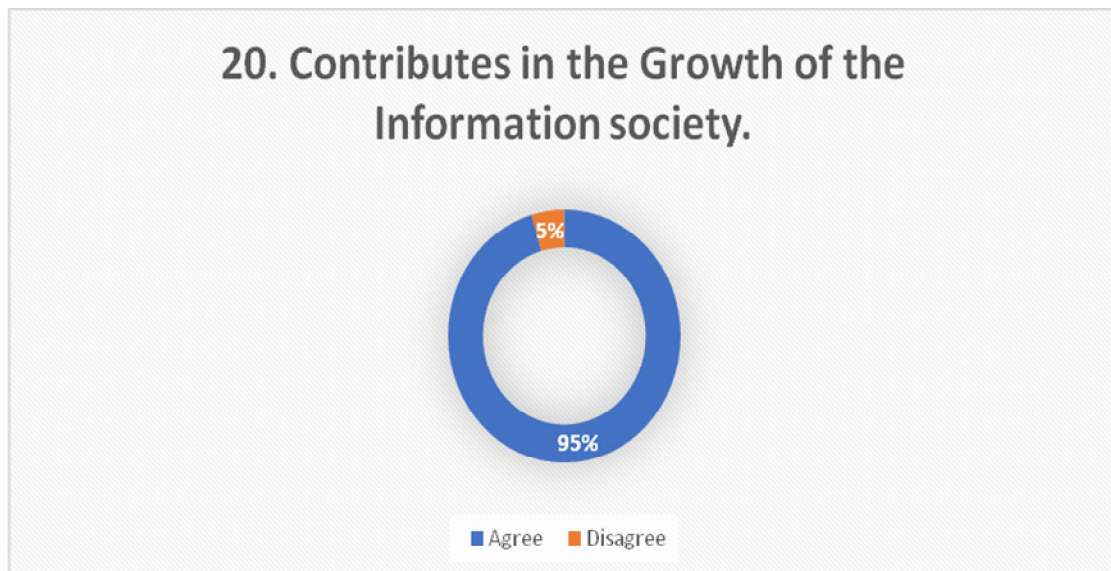
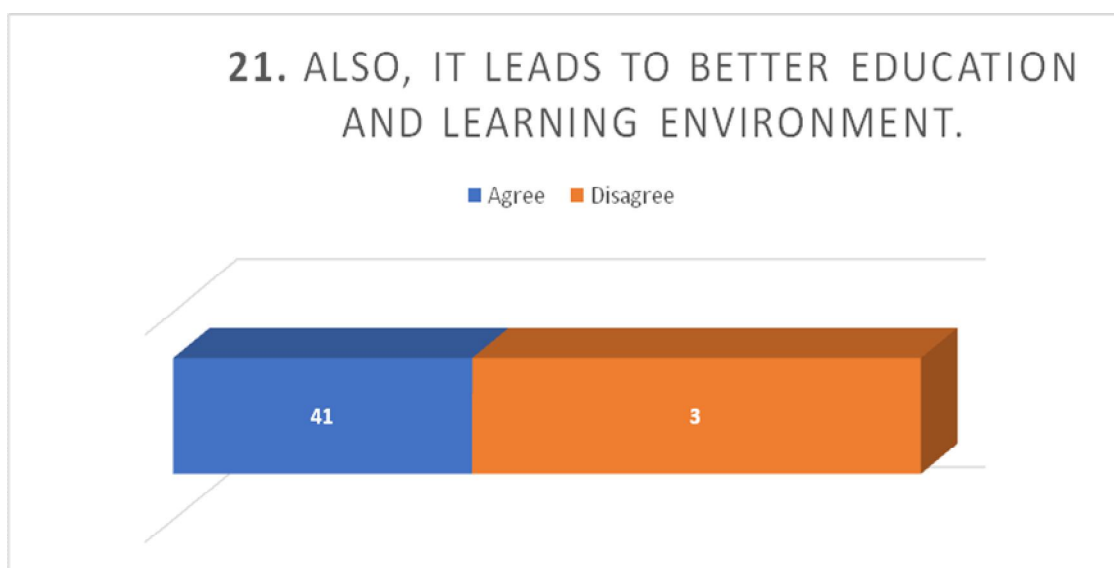
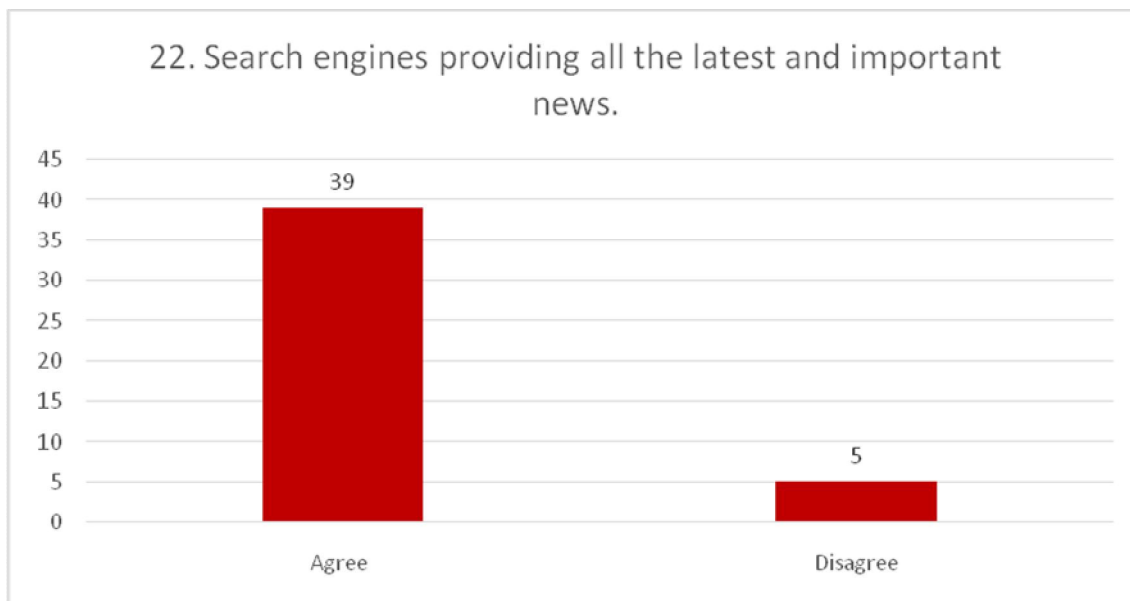


Table-5.20 shown that 95% students agree that it Contributes in the growth of the Information Society.



Here table 5.21 it leads to better Education and learning environment, 41 students agree with this statement and 3 are not agree.



In table-5.22 find out that 39 students are agree that search engines are providing all the latest and important news.

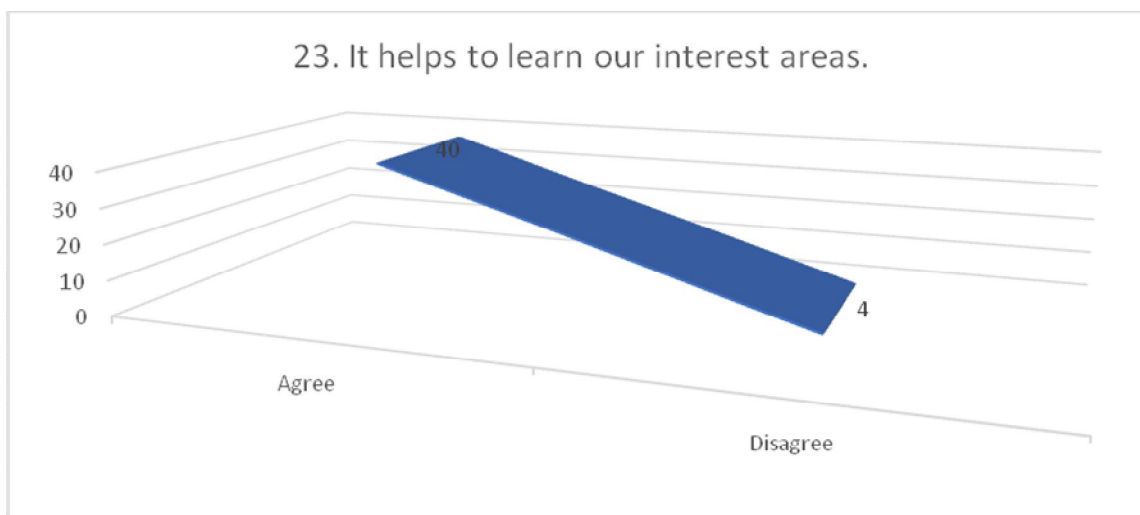


Table-5.23 indicates that 40 students agree that search engines helps to learn our Interest areas.

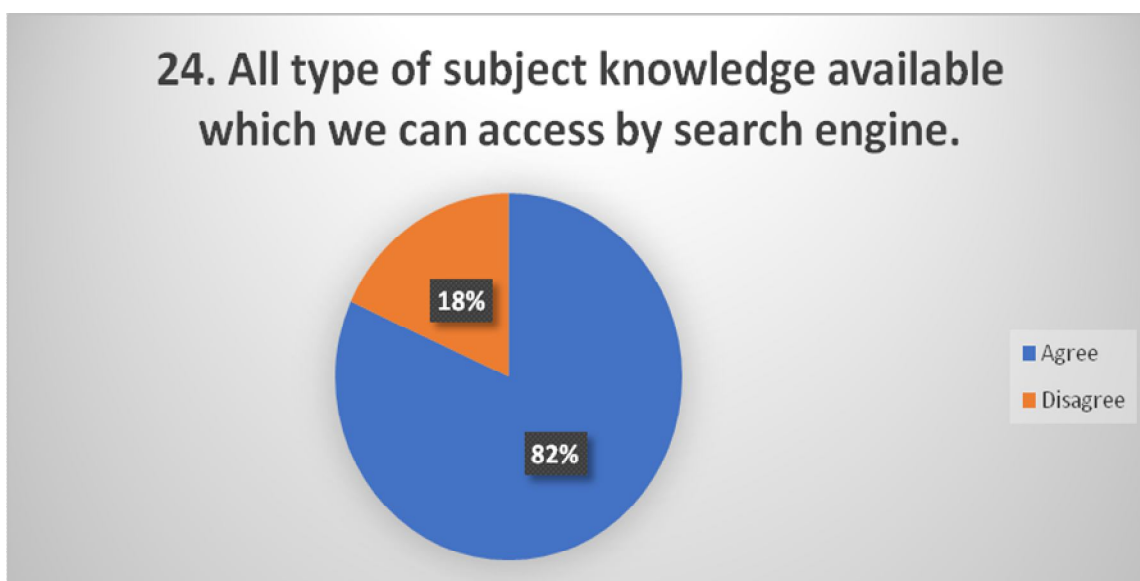
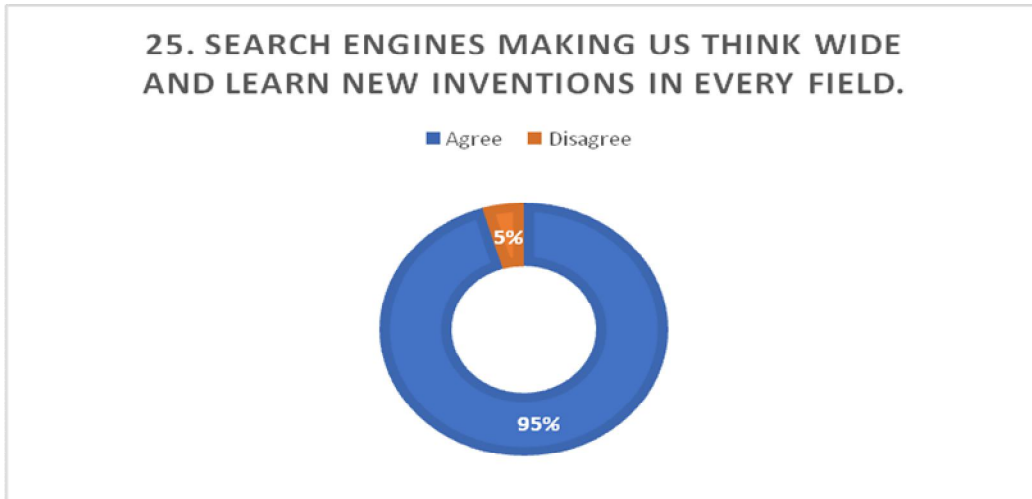


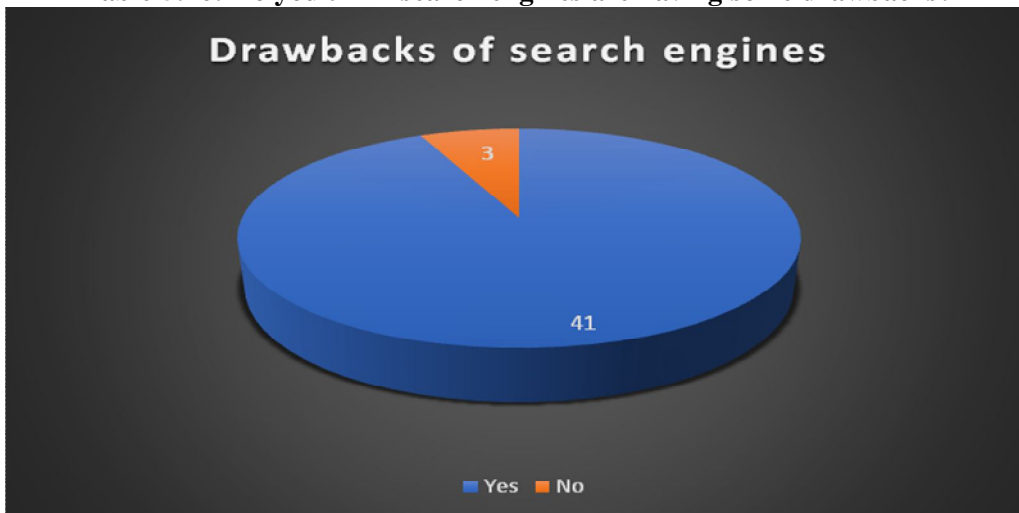
Table 5.24 question asked that All types of subject knowledge available which can be access by search engines, 82% students agree and 18% students Disagree with the statement.



Here table 5.25 shows that 95% students are agree that search engines making us think wide and learn new inventions in every field.

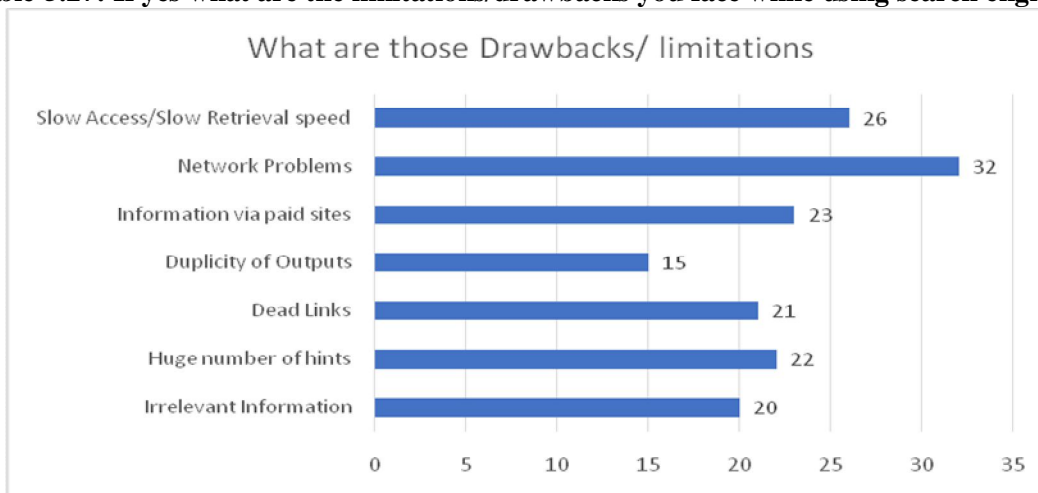
VI. LIMITATIONS/ DRAWBACKS OF SEARCH ENGINE

Table-5.26: Do you think search engines are having some drawbacks?



In table 5.26 shown that when researcher asked about drawbacks of search engines 41 students says yes that search engines are having some drawbacks.

Table-5.27: If yes what are the limitations/drawbacks you face while using search engines?



If yes then what are the drawbacks shown in table 5.27, students facing various problems while retrieving the information 32 students face network problem, and 26 students are saying it retrieve slow also 23 students say that most of the important information is available via paid sites only.

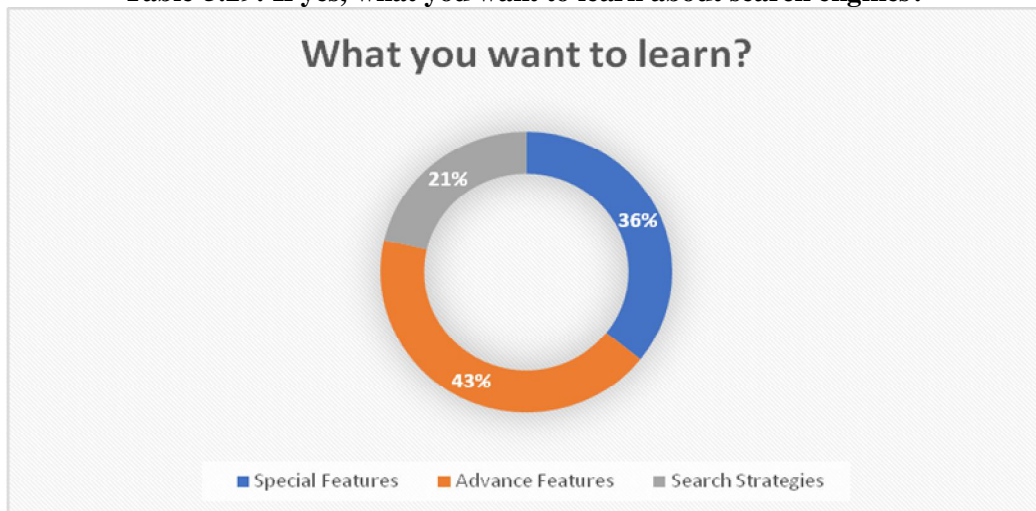
VII. TRAINING ON SEARCH ENGINES

Table-5.28: Do you feel there is a need for providing training on the use of web search engines?



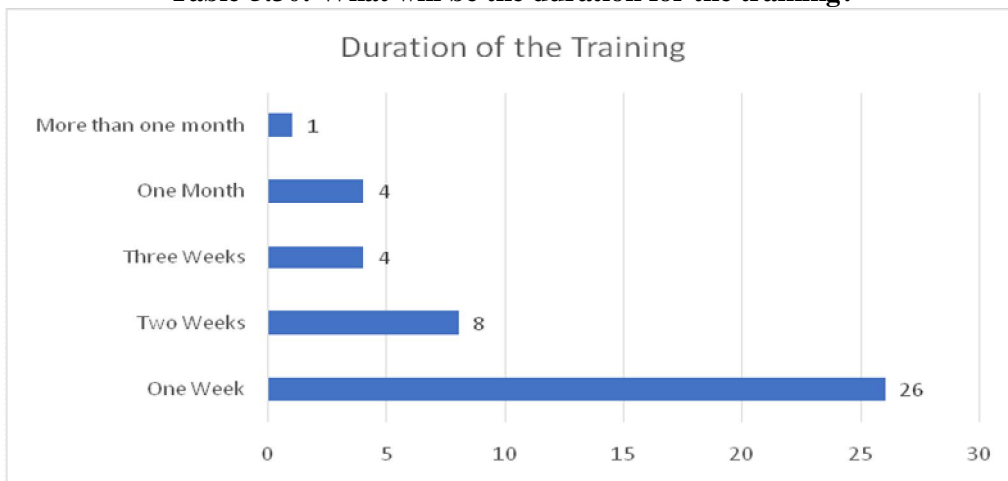
When researcher asked about that training on use of search engine is required 95 % students says yes and 5% students do not want any training.

Table-5.29: If yes, what you want to learn about search engines?



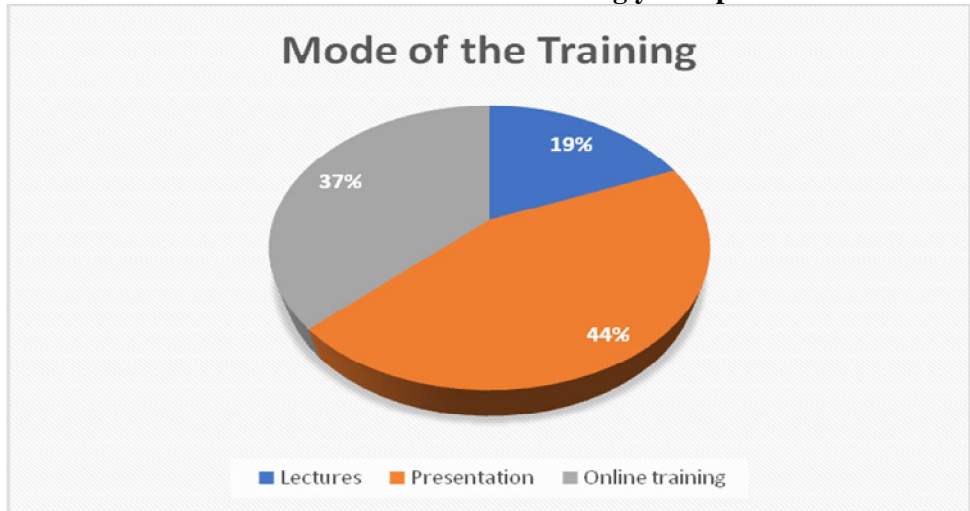
If yes then what you want to learn that is explained in table 5.29 where 43% students want to learn about Advance features, 36% is Special features and 21% want to learn Search strategies used to retrieve information.

Table-5.30: What will be the duration for the training?



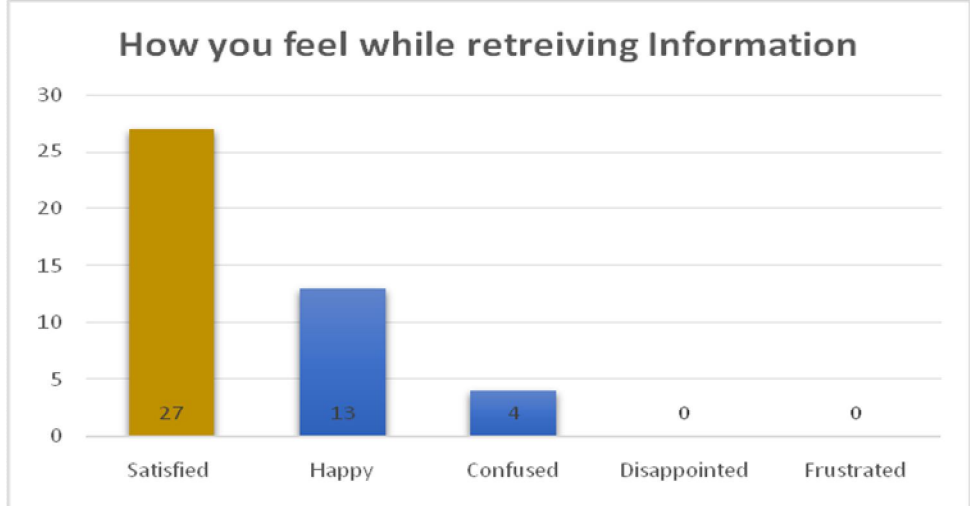
In table 5.30 asked about duration of the training so 26 students want to learn in One week, 8 students are saying for 2 weeks and 4 students want to learn for Three weeks or One month.

Table-5.31: What mode of training you expect?



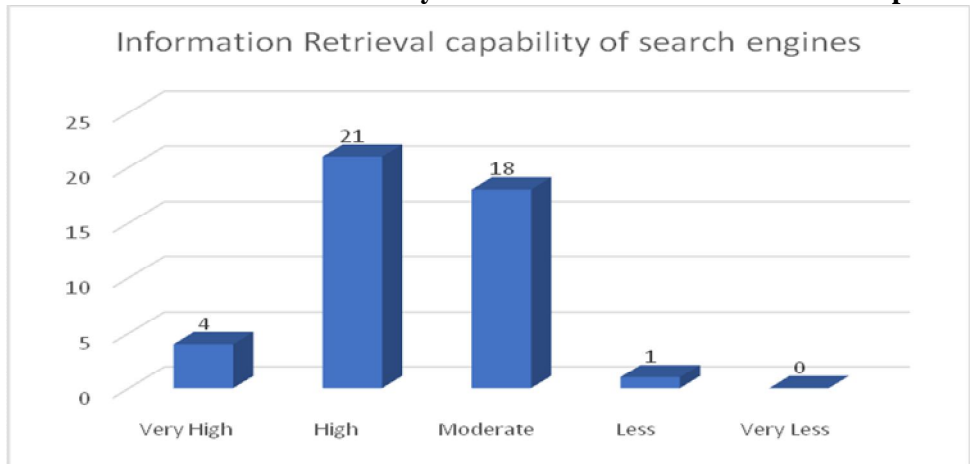
What will be the mode of training it is shown in table 5.31 here 44% students want to learn via presentation and 37 students wants online training, 19% students want to learn through lectures.

Table-5.32: How you feel when you use search engines for information retrieval?



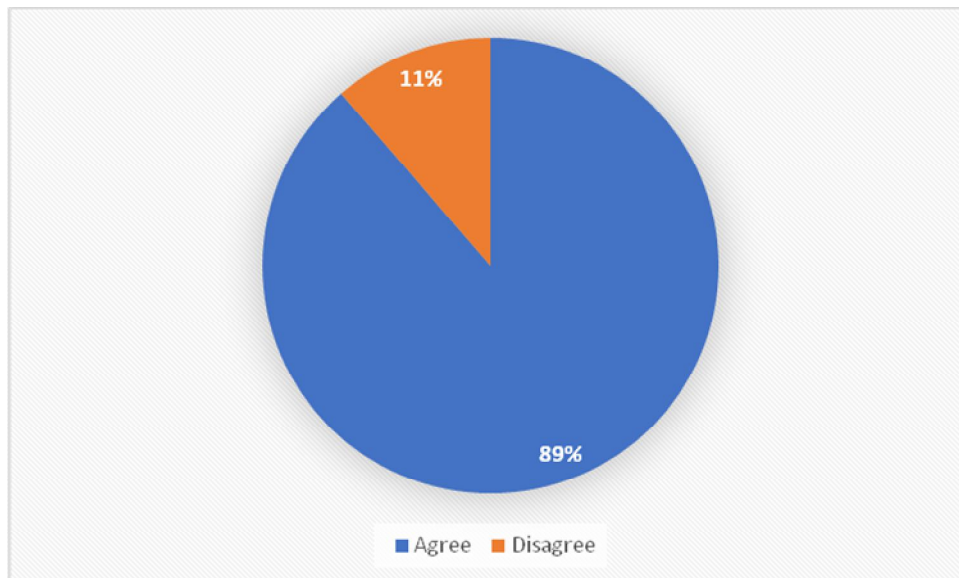
In table 5.32 how students feel when they use search engines, 27 students are satisfied with retrieving information through search engines, 13 students feel happy, 4 studentssays they are confused while retrieving information throughsearch engines.

Table-5.33: Information which is retrieved by Search Engines are either unknown or relevant but you are not aware of the same.How do you rate this information Retrieval capability?



How students rate the information retrieval capabilities of search engines is explained in table 5.33 where 21studets say it is High, 18 students are saying Moderate and 4 students are saying very high.

Table-5.34: If Search Engines are withdrawn from internet will affect your day to day required Information need.



In table 5.34 asked that if search engines are withdrawn from Internet it will affect to you day to day information needs 89% students Agree with this and 11% students think that it will not affect in their information need.

5.35 CONCLUSIONS

The study is shows that Library and Information Science students are using search engines for various purposes and Google is most used by students. It is found that Library and Information science students of University of Mumbai needs training on use of search engines so they will perform more effectively.

RECOMMENDATIONS

- Today we all are dependent on search engines for our information needs
- If proper training is given how to use search engines it will be beneficial for learning and retrieving accurate information's.
- Search engines should be more effective and more advance in coming days.

REFERENCES

- Hussain, A. (2015). Search Engines as an Effective tool for Library Professionals. *DESIDOC Bulletin of Information Technology*, 35(6), 389-397.
- Jain, V.& Saraf, S. (2006). Google Search Engine and its usefulness to Library professionals. *DESIDOC Bulletin of Information Technology*, 26(5), 23-28.
- Khalil, A. &Alrub, F. (2013). A comparison of Search Engines features and Mechanisms for advance database systems. DOI: 10.13140/2.1.3002.3360
- Kumar, R. A., Jabbar, M. A., & Reddy, Y. V. (2017). Information Retrieval Systems and web search Engines: A survey. *International journal of Advance Engineering Research and Science (IJAERS)*, (3), 123-125. Retrieved from <http://dx.doi.org/10.22161/ijaers/nctet.2017.25>
- Saini, B., Sing, v., & Kumar, S. (2014). Information Retrieval Models and Searching Methodologies: Survey. *International journal of Advance Foundation and Research in Science & Engineering*, 1(2), 57-62. Retrieved from WWW.ijafirse.org

BEST PRACTICES IN ACADEMIC LIBRARIES WITH SPECIAL REFERENCE TO LEARNING RESOURCE CENTER AT BUNTS SANGHA'S S.M. SHETTY COLLEGE OF SCIENCE, COMMERCE & MANAGEMENT STUDIES

Smitha RavindranathLibrarian, S.M. Shetty College of Science, Commerce & Management Studies, Mumbai

ABSTRACT

With the advent of Information & Communication Technology, Libraries have become a powerhouse of information. Academic libraries too are fast adopting latest technology in providing Library & Information Services. National Accreditation and Assessment Council (NAAC), established by the University Grants Commission (UGC), strives for quality and excellence in higher education and advocates for enhancing the role of Library and Information Services in improving academic environment. This paper discusses about the best practices followed in our Library to provide improved & value added services to its users.

Keywords: National Accreditation and Assessment Council (NAAC), University Grants Commission (UGC), Best Practices, Value Added Library Services

INTRODUCTION

Libraries have undergone tremendous change in the last few decades. Gone are the days of chained libraries or when the libraries were considered as storehouse of books. The advent of Information & Communication Technology has a major impact on the way libraries perform today. Each aspect of a library has undergone change; be it acquisition, circulation, user services or cataloguing. The changes have been felt in all types of libraries & Research Libraries are the most affected with this change. Academic Libraries are too not to be left behind. Today the academic curriculum is no longer restricted to textbook study. Students are required to browse additional reference books & latest articles from newspapers, magazines & journals. Electronic information media has gained importance amongst the students due to its features such as easy & anytime access, easy downloading & search facility. Academic libraries too have adjusted to the technological changes & have introduced new services with the help of Information & Communication Technology. To keep pace with the user's demand, the academic libraries house a variety of collection in print & electronic form & also provide access to various online resources.

All colleges are attached to a university & the University Grants Commission (UGC) has laid down standards for quality in education. National Accreditation and Assessment Council (NAAC) is an autonomous body established by the University Grants Commission (UGC) of India to assess & accredit institutions of higher education in the country. It strives for quality and excellence in higher education and advocates for enhancing the role of Library and Information Services in improving academic environment. It is an outcome of the recommendations of the National Policy in Education (1986) which laid special emphasis on upholding the quality of higher education in India.

NAAC has made quality the defining element of higher education in India through a combination of self & external quality evaluation, promotion & sustenance initiatives. To make this possible NAAC arranges for periodic assessment & accreditation of institutions of higher education & the various units attached to it. Today a Library has become a very important unit of an academic institution due to its demand for more information & knowledge. To fulfil the demand & to serve the users in a better way, an Academic Library need to adopt advanced methodology. This will ultimately pave way for better quality in Library & Information Services in Academic Libraries.

ABOUT LEARNING RESOURCE CENTER (LRC)

LRC at Bunts Sangha's S.M. Shetty College of Science, Commerce & Management Studies, is a fully Air conditioned Library and is Wi-Fi enabled. The reading room is open for 12 hours from 7:00 am to 7:00 pm. The Library houses collection of both Junior & Degree College. The library collection comprises of books, journals, magazines, newspapers, CD-ROMs, geographical sources & previous years' question papers. The Library in-house operations are automated through SOUL Library Software. The Library has subscription to NLIST (by UGC - INFLIBNET), through which students & teachers can access many electronic resources like full-text of more than 6000+ e-journals and 1,35,000+ e-books. The Library has institutional membership to Tata Institute of Social Sciences Library. Students are provided computers with internet facility for their project & study work. The Library collection can be searched through SOUL Web OPAC. Access to many subject related free online journals is provided through Directory of Open Access Journals (DOAJ). The Library houses a separate

Teacher's Corner for Teachers where computer terminals are provided along with printer & scanner. The library is secured by CCTV cameras & fire extinguishers. To encourage & develop reading habits amongst students, the library provides 3 library cards each for textbook, reference book & general reading book. PG students are given extended loan period of 14 days. Orientation programmes & library awareness programmes are arranged to spread awareness about the library & its services. The library also organizes events for students like the annual book exhibition, essay writing, poster making competition etc. The library has its own website wherein information about the library is provided in detail. Library has also created an institutional repository where users have access to old question papers, syllabus copies, e-resources etc.

The best practices followed by us in each section are described below:

ACQUISITION

Aim: Every Reader his / her book

Practice1: The Library invites requisitions from the teaching staff & also the students library purchase. Requisitions are allowed for any type of reading material; textbook, reference book or general reading book.

Practice2: List of new publications are gathered from online bookstores & mailed to the teachers for their consent to purchase.

Practice3: Book Exhibition is organised once in a year & invitation is sent to all readers. A good number of books is procured through recommendation from students & teachers through this method.

PROCESSING

Aim: Books in Need is a Book Indeed

Practice: The Library follows the standard procedure for processing of the library resources i.e. bill wise accessioning & data entry. But if there is an emergency for any title then the library staff ensures that the books in demand are processed first & given to the readers in the minimum possible time.

REFERENCE SERVICE

Aim: Something Better than Nothing

Practice: In the unavailability of textbooks during examination time, students are directed to browse the reference books & e-resources for the topics related to their field of study. Thus our library staff ensures that no student is left disappointed while leaving the library.

CIRCULATION

Aim: Save the Time of the Reader & Staff

Practice: We have a demand slip facility for book issue to students. Students are required to fill up this slip half an hour prior to issue. Library staff helps the students in making correct entries in the slip with respect to course, semester, paper, title, author & publisher. This procedure enables the staff to easily remove the desired books from the shelf & that too in few trips thus saving the staff's time. Students too are at gain as they don't waste their time in searching for the book. This procedure also ensures that there is no theft of books during rush hours. However staff can directly issue the books without filling up the slip.

DIGITAL LIBRARY

Aim: Library as a Learning Resource Center

Practice1: The Library has subscribed to INFLIBNET N-LIST which has a good collection of e-books & e-journals. The Librarian frequently browses the N-LIST database for resources related to the topics mentioned in the syllabus of each course. The teachers & students are informed about it & they can access the same through their respective login.

Practice2: Directory of Open Access Journals or DOAJ provides free open access to many journals in a variety of subjects. The library has identified few journals in each course & the same have been bookmarked in the library computers.

Practice3: Online access to newspapers is available to the readers through the library computers.

Practice4 : Readers are given full time internet access through the library computers. We have a separate teacher's corner so that the teachers can do their work without getting disturbed.

Practice5: Library Web OPAC is installed in all the library computers. The library staff trains the readers in searching the catalogue.

Practice6: Information is also communicated through LED display installed in the Library.

LIBRARY SERVICES**Aim: Information is for Use**

Practice : The Library subscribes to 13 newspapers, journals & academic magazines. Contents of these periodicals are analysed at the time of their inward. There are three notice boards in the library.

'*Information Corner*' in which information related to current affairs, general & additional knowledge is displayed,

'*Career Corner*' in which information about various career options, short term courses, part time jobs, conferences, workshops, seminars etc. are put up.

'*Know Your Library*', which provides information about the library.

Aim: Every Book its Reader

Practice : Every library will have reference books in addition to the textbooks prescribed in the curriculum. These reference books are hardly used by students as their focus is only on textbook learning. Same is the case with fiction books. As a result, these books lie in the library without being used. Every week, a list of 5 such books with a short summary is prepared & is displayed on the library notice board as "Books of the Week". The library also displays its reference & general reading books collection twice in a year to create awareness about the existence & information content of these books available

Aim: Knowledge is Power

Practice1 : Library notice boards & also the LED display is dedicated to provide information about the library & informative articles from various journals, magazines & websites.

Practice2 : List of latest arrivals is mailed to the teaching staff. Hardcopy of the same is also maintained in a file in the library at the circulation counter.

Practice3 : Contents page of subject magazine & journals is scanned & mailed to the teachers.

Practice4: The college library provides an excellent opportunity to enhance one's knowledge through institutional memberships with British Council & Tata Institute of Social Sciences Library

Aim: Know Your Library

Practice1 : User Education Programmes is provided in three ways:

Common Orientation : In the first week of the new academic year, one orientation is given to all first year students in common. This orientation is part of the fresher's orientation programme organised by the college.

Library Visit : Class teachers of the respective classes bring their students to the library for orientation.

Library Awareness Programmes: An awareness programme is conducted for students of all programmes in their respective classrooms. One lecture is devoted for the library aware awareness programme.

Aim: Customer is King

Practice1: Readers are the library's customer & satisfying their requirement is the Library's top priority. Students form the major part of the Library readers. Student representatives are included in the Library Committee as members & they are allowed to give their opinion about the library.

Practice2: Library feedback is taken from both students & teachers & they are discussed in the library committee meetings for the committee's suggestions & action.

Aim: Library is a Growing Organism

Plan1 : Our Library constantly tries to improve its collection & services every year. Very soon we plan to introduce SDI service to the teachers wherein the library will collect information about lecture schedules of various teachers. The library will then make note of the upcoming lectures. Articles from various resources such as library magazines & journals, newspapers, e-journals, e-books etc will be compiled & provided to the teachers a couple of days ahead of their lecture.

Plan2: Additional reading room will be provided to the students.

Plan3: Out of syllabus books will be removed from the active collection & will be stacked outside the library at a different place in order to make space for new collection.

CONCLUSION

The NAAC Accreditation process is a learning experience & it helps the libraries in improving its functions & services. Each area of the library is scrutinized for its process & documentation. Hence academic libraries need to adopt new & improved services to serve the user community. A SWOT analysis of the library if done will help the libraries to know about its strengths & weaknesses & to perfect the library process with supporting documentation. The NAAC team stresses on adopting best practices in each library in order to provide value added services to the users. These best practices if adopted & followed by libraries on a regular basis will enhance the quality of library & information services & will enable to serve the users in a better way

REFERENCES

1. Best Practices in Library & Information Services : a case presentation. Retrieved From the NAAC website <http://www.naac.gov.in>
2. Vyas, S. D. (2009, October 5th to 8th). *Best Practices in Academic Libraries in India: a study*. Paper Presented at International Conference on Academic Libraries (ICAL-2009), University of Delhi, New Delhi, ICAL
3. Raut, Ashish S. (2013, March 21st to 23rd). *Study of Best Practices in the Accredited Academic Libraries of Sant Gadge Baba Amravati University region*. Paper presented at CALIBER 2013, INFLIBNET Center, Gujarat, CALIBER
4. Mahajan, Preeti (Fall 2005). *Academic Libraries in India : a present day scenario*. Library Philosophy & Practice, 8(1), 1-4.
5. Ranganathan S.R. (2017). *The Five Laws of Library Science* New Delhi, Ess Ess Publications.

BUILDING UP AN INSTITUTIONAL REPOSITORY IN DIGITAL ENVIRONMENT

Yamini P. GalapureLibrarian, Gokhale Education Society's, SMRK-BK-AK MahilaMahavidyalaya, Nashik

ABSTRACT

Institutional Repository is an intellectual output of any organisation. The present paper aims to study how the repository of an Institution can be build up in digital environment. The paper has covered various aspects of IRs such as definition, significance, contents and essential factors to build up an IR.

Keywords: Institutional Repository, Open Source Software, Digital Library.

INTRODUCTION

The impact of technology has changed the complete structure of library. Libraries now became libraries without walls. The information stored in the library is now accessible worldwide through the concept of open access. Moreover the libraries are working as knowledge resource centers for scholarly community. In this present scenario libraries are now became digital libraries where the collection is available in digital form. Libraries preserve the institutions collection such as publications of an organization, grey literature such as brochures, prospectus etc. To maintain an institution's intellectual output the concept of Institutional Repository came into existence.

IR is the solution of information retrieval of a particular institution which is accessible at Remote place. It is a place for storing research output of a given institution. Institutional Repositories are maintained and developed by various open source softwares. Digital libraries are the platform to form Institutional Repositories and the softwares used are the tool to build up an Institutional Repositories. There are various softwares available for institutional Repositories such as DSpace, Fedora, E-print, Greenstone etc.

DEFINITIONS**• Institutional Repository**

According to wikipedia: An institutional repository is an archive for collecting, preserving, and disseminating digital copies of the intellectual output of an institution, particularly a research institution.¹

• Digital Library

The working definition of digital library used by the CDLM is as follows: A digital library is a collection of collections of electronic knowledge resources developed and maintained in order to meet the totality of information needs for a given user population.²

• Open Source Software

Open-source software (OSS) is a type of computer software in which source code is released under a license in which the copyright holder grants users the rights to study, change, and distribute the software to anyone and for any purpose.¹¹ Open-source software may be developed in a collaborative public manner. According to scientists who have studied it, open-source software is a prominent example of open collaboration.¹²¹ The term is often written without a hyphen as "open source software".¹

From the above definitions, all these terminologies are correlated and interdependent on each other. It is cleared that the institutional repositories can build up by using software which are accessible by Open Source Software and establish digital libraries through IRs.

• Significance of an Institutional Repository

The significance of institutional repository is to make digital collections to be available without restraint globally or locally. It accelerated researcher enthusiasm in advance research.

An institutional repository of any institutes increases its visibility and prestige. The Institutional repositories provide access to its own digital documents of institutions. Institutional repository stimulates scholarly communication movement, boost visibility across worldwide and knowledge gain. The researcher will get worldwide attention through academic and research institutions institute repository system.

ESSENTIAL FACTORS FOR BUILDING UP IR**• Hardware & Software**

Computers, printer, scanner, hard disc, operating system LAN, internet connection are the basic hardware requisite.

Software is the essential factor to build up IR. Open source software are popularly use and popular softwares are e-print, DSpace, Greenstone or inhouse software can also be created.

- Access issue: IR can be accessible through IP. IP based system or username and password can be created for the access to its users.
- Copyright issue: Copyright is the essential factor for the published materials of institute or faculty. The accessibility
- Trained and knowledgeable staff: the library staff should be enthusiastic and technosavy.
- Contents of IR:Following are the contents which are included in the IR such as

1. Grey Literature: the unpublished material is called grey literature i.e.

- thesis and dissertations,
- administrative documents,
- Projects & Dissertations
- Annual reports
- manuscripts
- Institute publications such as
- Prospectus
- College/institute Annual Magazines
- Conference proceedings/seminar reports
- Broachers'
- Syllabus
- Question papers

3. Faculty publications

- Books publication
- Chapter publication
- Journal research papers
- Newspaper articles

4. Photographs

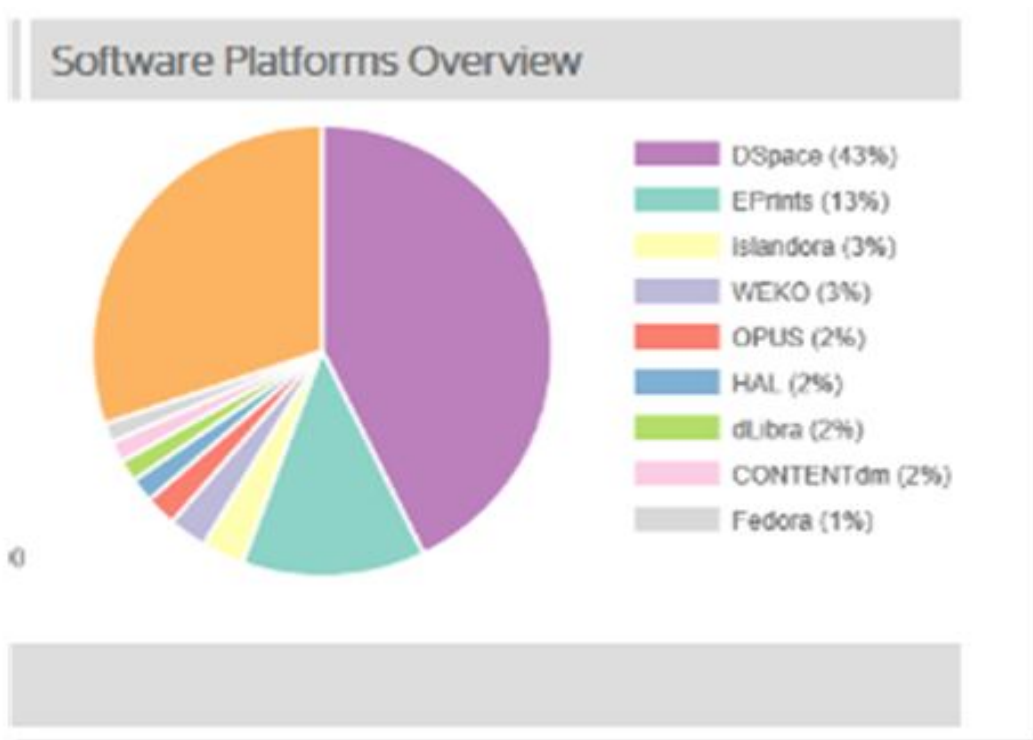
5. Faculty notes & study material for students

- **Digital library Softwares for building up IR**

Open source, Digital libraries (DLs)/institutional repositories (IRs)/digital archives are been discussed heavily since 2000.

Under open source license terms and conditions range of free institutional repository software are available especially Aigaion, BRICKS (software), D-Space, E-Prints, Greenstone (software), Invenio, Islandora, Museolog, Omeka, Refbase, RefDB, SobekCM etc.

The softwares such as D-Space, E-Prints, Greenstone, Fedora are the most popularly used. According to DOAR (Directory of Open Access Repository) and the statistical information shown below in the Pie-chart, DSpace is the most popular software to build up an IR. The usability about each of software used are shown in the screenshot as below:



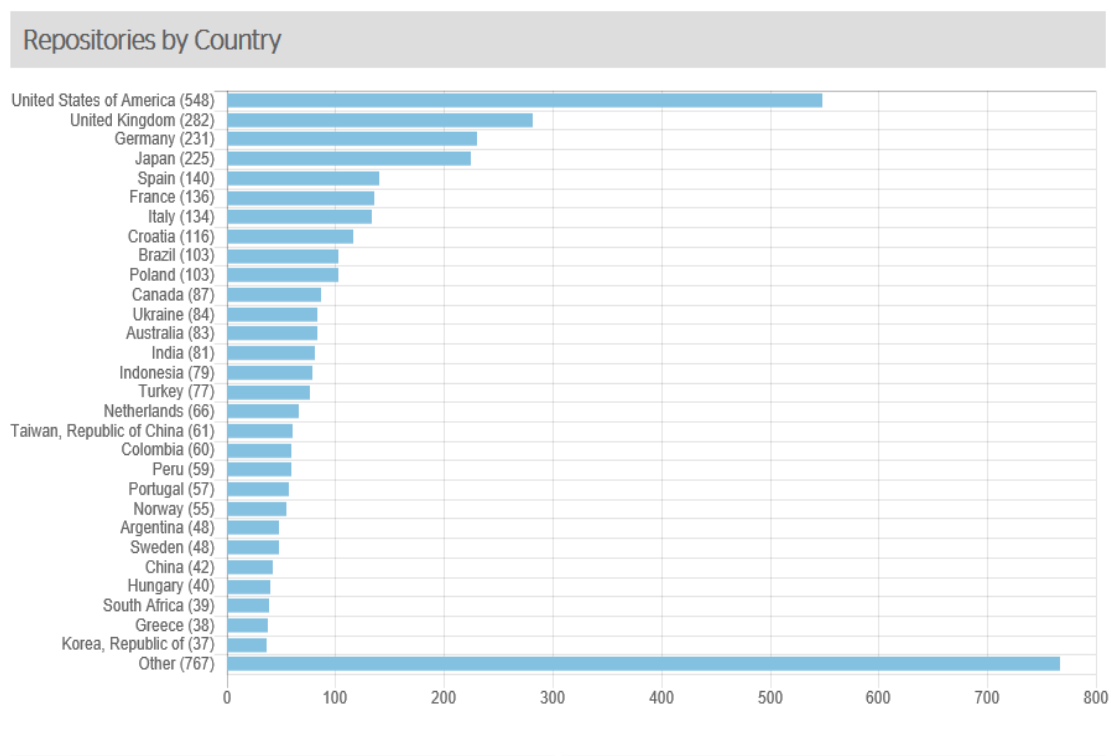
Accessed on 23 February 2019 http://v2.sherpa.ac.uk/view/repository_visualisations/1.html

• **The Present Scenario of IR**

According to DOAR, United States of America is on the top most ranking position (i.e 548) worldwide. India is at 14th position in the ranking i.e. (81) worldwide.

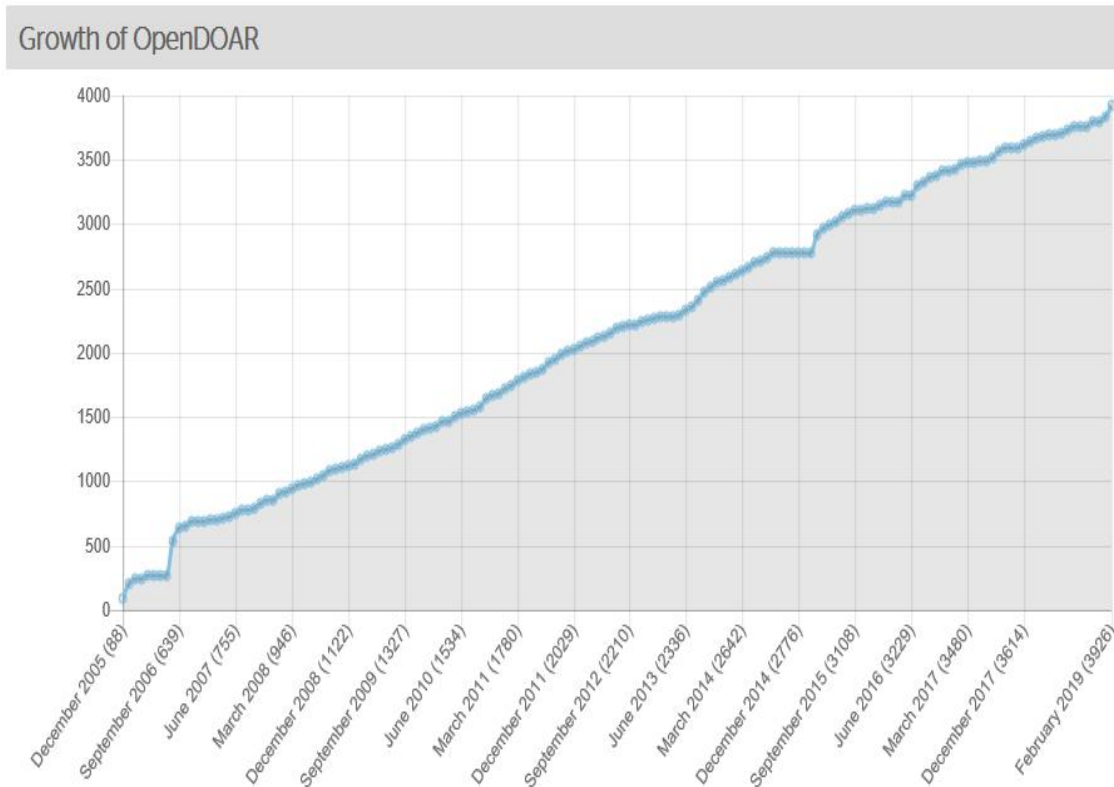
Below is the screenshot of DOAR which shows an overview of repositories by country

An overview of the data held in OpenDOAR



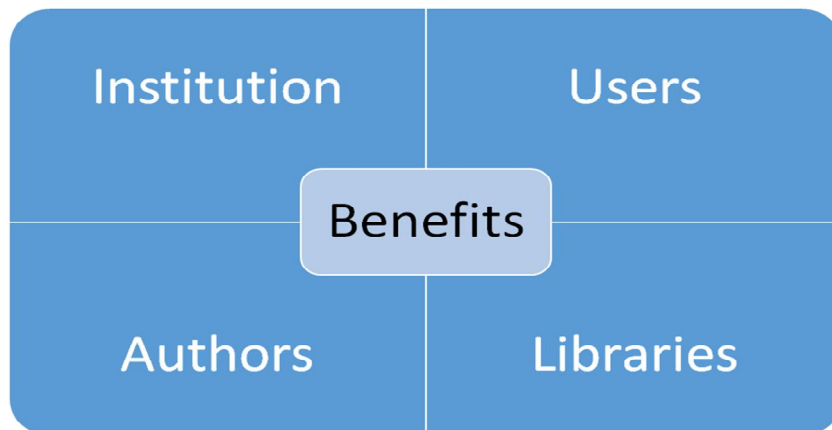
Accessed by http://v2.sherpa.ac.uk/view/repository_visualisations/1.html

The growth chart of IR is shown yearwise from December 2005 to February 2019 as below:



• **Advantages of Institutional Repositories (IR)**

Institutional repositories are beneficial to all. Below chart shows the benefits of IR.



Benefits to the Institution

- ✚ Accessibility of an institutional intellectual output is available globally
- ✚ Create a value added feature for the institution
- ✚ When administrative records are submitted in the IR, organizational history is well preserved.
- ✚ A knowledge bank of the institute can be created by accumulating all the works of the intellectual capability.

Benefits to Users

- ✚ User can browse, search the documents submitted to an IR freely.
- ✚ In some cases users can access the full text, in some can access partially.
- ✚ User can avail the external membership facility of that particular institution and access those documents or contents.
- ✚ The research work, published and unpublished materials of a particular institution can also get an access to the users.

Benefits to Authors

- ✚ Get a forum and exposure to the author for their work.
- ✚ Preservation and retrieval of published and unpublished documents at one place.
- ✚ Systematic and convenient way of dissemination of intellectual output.
- ✚ Increase the usability of research work which reflects on the citation of an article.

Benefits to Library and Information Centers

- ✚ Linkages with other libraries.
- ✚ Resource Sharing, Library co-operation & Networking, ILL can be formed
- ✚ Can serve the clientele in better way by using IRs.
- ✚ Satisfy the 4th law of library as “Save the time of the User.”

CONCLUSION

The development of IRs all over the world is increasing. Directory of open access repository is being consistently updating the world wide record of IRs. The directory has shown the statistical information and growth rate subject wise, geographical area wise and year wise on its website.

The development of IRs in India is also fast. Many institutes are taking up an initiatives to set up them. IRs in India have a great exposure and a bright future. The repositories being available in digital form get an access to the research work and intellectual contents globally. Libraries can hope now to serve their clientele in better fashion.

REFERENCES

1. https://en.wikipedia.org/wiki/Institutional_repository
2. <http://home.wlu.edu/~whaley/classes/DigiLib/Whaley/Definition.html>
3. TripathiManorama, Jeevan V.K.J. (2011) “An Evaluation of Digital Libraries and Institutional Repositories in India”, The Journal of Academic Librarianship, Vol 37 (6) pp.543-545 cited from <https://www.researchgate.net/publication/270266565>
4. Gohain, R. R. (2011). Current trend and development of institutional repositories in india. International Journal of Information Rese arch, 1(1), 1-19.
5. Kankana, B. (2016). Management of indian institutional repositories an evaluative study.
6. Jeelani, Sofi GhMohinuddin (2016). “Institutional repositories in India an evaluative study”, International Journal of Library and Information Science (IJLIS), Vol 5 (3) pp. 166-184
7. Sawant, S. (2009). Institutional Repository Initiatives in India a status report.
8. Kumar Roy, Bijan; Mukhopadhyay, Parthasarathi; and Chandra Biswas, Subal, "An Analytical Study of Institutional Digital Repositories in India" (2012). “Library Philosophy and Practice (e-journal). 692 <http://digitalcommons.unl.edu/libphilprac/692>
9. Thorat, S. V. (2015). Design and development of institutional repository a conceptual model for university Libraries.

FREEDOM OFFERED BY WIKIMEDIA: A GIVE AND TAKE POLICY

Dattatray Papat Sankpal¹ and Dr. Vilas Govind Jadhav²¹Librarian, Waghire College of Arts, Commerce & Science, Pune²Deputy Librarian, SNDT Women's University, Mumbai

ABSTRACT

The paper insights the features of the Wikimedia, as a free online information resource. Freedom provided on this platform to the contributors as well as users is studied in the present paper. This paper attempts to promote the features of the Crowdsourcing tool, i.e. Wikipedia. The policies of the Wikipedia for using the information, and that for contributing are also discussed in this paper. The study found that, the Wikimedia has common policies, code of conduct for all it's sister projects. Though there are few restrictions about using and sharing the contents, freedom in many contexts is given by the Wikimedia Foundation is remarkable.

Keywords: Wikimedia, Crowdsourcing, Open Source Information Resource, Social Media

INTRODUCTION

Wikipedia was found in 2001 with the motto "making the knowledge open to all" by Jimmy Wales and Larry Sanger [1]. Many other sister projects are launched thereafter. Currently Wikipedia and the sister projects are monitored by Wikimedia Foundation, which was found in 2003 by Jimmy Wales as a way to fund Wikipedia and its sibling projects through non-profit means[2]. The Wikimedia Foundation, as a monitoring agency, has its Board of Trustee, Members and recruited staff also. Besides these office bearers, Wikimedia Project is assisted by number of volunteers throughout the globe. The volunteers answer to the queries of the users. They resolve the disputes arose by the members. Wikipedia the free Encyclopedia is available in 303 different languages [3]. Wikimedia, being a social media, is a crowdsourcing tool. The resource of information is collectively managed by the people from across the globe. It's features, it's freedom, the measures taken to ensure it's reliability make it the most useful information resource of information for Educationists, Librarians, researchers, scholars, teachers and students.

WIKIPEDIA: A CROWDSOURCING TOOL

Wikimedia is an emerging crowdsourcing activity which involve peoples in performing information seeking and computation tasks where users can broadcast tasks on the internet to a large group of other users [4]. The Wikimedia is more than just creating a website where people just work. This site has a structure which guides the crowd in the desired directions, assists in describing the challenges they want solved, and aids them in executing tasks.

Wikimedia is nothing but just like as a crowdsourcing i.e. a participative online activity in which an individual, an institution, a non-profit organization, or company proposes to a group of individuals of varying knowledge, heterogeneity, and number, via a flexible open call, the voluntary undertaking of a task. The undertaking of the task, of variable complexity and modularity, and in which the crowd should participate bringing their work, money, knowledge and/or experience, always entails mutual benefit. The user will receive the satisfaction of a given type of need, be it economic, social recognition, self-esteem, or the development of individual skills [5].

The main objective of Wikipedia is to solve a problem or carry out a task and usually involves a monetary value in exchange for such service. It has the "Web 2.0"-style attribute of increased interactive participation by large numbers of online users. But unlike user-generated content, social networks, and other popular trends, participants in a Wikimedia ecosystem have little or no contact with each other. In particular, one editor cannot see the results of another's work [6].

OBJECTIVES

The primary objectives of the study were:

1. To know the policies of Wikimedia
2. To find out the measures taken by Wikimedia to validate the information
3. To analyse the features of Wikimedia projects, specially for its users
4. To list out the various contexts of freedom provided by Wikimedia

SCOPE

The scope of this paper is limited to various features and policies of Wikimedia Projects in the context of users. The features that gives freedom to use and contribute Wikimedia projects. This paper excludes the Policies and

Code of Conduct for Board and Staff Members of Wikimedia. The paper does not cover powers of Wikimedia Foundation, Boards of Trustees. The study is limited to policies of its English version only.

METHODOLOGY

The analysis of Policies and features of Wikimedia Foundation [7] has been carried out for the present study. The features are tested by the the researchers to verify its mechanism.

POLICIES OF WIKIPEDIA

Following policies apply to all Wikimedia wikis [7]

1. Data Retention policy for Non-Public Data

Table - 1: Data Retention policy for Non-Public Data:

Examples	Maximum Retention Period
Date Type: Nonpublic Personal information	
IP addresses of site visitors (operational data) IP addresses of A/B test subjects (analytical data) Identifying user-agent information of site visitors	After at most 90 days, it will be deleted, aggregated, or de-identified
Email address	Until user deletes/changes the account setting.
Date Type: Non-personal information	
Data collected by MediaWiki about a user account's activity (e.g., first time a user goes to an edit page, date and time that a user verifies their email address)	Indefinitely
Data collected by Event Logging and associated with their user ID (e.g., whether an account was created on mobile, A/B test data for Getting Started)	After at most 90 days, it will be deleted, aggregated, or de-identified
Logs of terms entered into the site's search box, or terms within prefilled links to the search engine that have been followed by user navigation	After at most 90 days, it will be deleted, aggregated, or de-identified
Language	Until user deletes/changes the account setting.
Date Type: Non-personal information not associated with a user account	
Counts of how many times certain events have occurred (e.g. successful HTTPS requests)	Indefinitely
Date Type: Articles browsed by readers	
A list of articles visited by readers	After at most 90 days, if retained at all, then only in aggregate form

According to Table 1 [8], the Non-Public data (the personal data of the contributors) will retain not more than 90 days on the website. This include the IP address, email address of the individuals.

2. Licensing policy (passed March 2007)

Under this Policy, the fundamental thing is: Freedom to user, on the one hand, while on the other hand, binding to the contributor not to restrict any content under any legal clause.

The functioning of this ecosystem ensures, works of authorship should be **free**, and by *freedom* we mean [9]:

2.1 the **freedom to use** the work and enjoy the benefits of using it:

2.2 the **freedom to study** the work and to apply knowledge acquired from it

2.3 the **freedom to make and redistribute copies**, in whole or in part, of the information or expression

2.4 the **freedom to make changes and improvements**, and to distribute derivative works

3. Non discrimination policy (passed January 2006) [10]

“The Wikimedia Foundation prohibits discrimination against staff or contractors on the basis of race, color, religion, sex (including pregnancy, childbirth, or related medical conditions), gender, gender identity, gender expression, sexual orientation, national origin, citizenship, ancestry, age, physical disability, mental disability, medical condition, genetic information, family care status, marital status, domestic partner status, military or veteran status, or any other basis prohibited under federal, state, or local law.

The Wikimedia Foundation commits to the principle of equal opportunity, especially in all aspects of employee relations, including employment, salary administration, employee development, promotion, and transfer. If you feel you are being discriminated against, please contact your manager or the Wikimedia Foundation HR team.”

4. PRIVACY POLICY [11]

4.1 The Wikimedia Foundation believes that, one shouldn't have to provide personal information to participate in the free knowledge movement.

4.1.1 One Can Read, edit, or use any Wikimedia Site without registering an account.

4.1.2 One Can Register for an account without providing an email address or real name.

4.2 Wikimedia collects some information when a user/contributor:

4.2.1 Make public contributions.

4.2.2 Register an account or update your user page.

4.2.3 Use the Wikimedia Sites.

4.2.4 Send us emails or participate in a survey or give feedback.

By collecting this information the Wikimedia movement attempts to know, how Wikimedia Sites are used so as to make them better for the users.

4.3 Wikimedia is committed to:

4.3.1 Describe how an individual's information may be used or shared in this Privacy Policy.

4.3.2 Use reasonable measures to keep one's information secure.

4.3.3 Never to sell one's information or sharing it with third parties for marketing purposes.

4.3.4 share only an individual's information in limited circumstances, such as to improve the Wikimedia Sites, to comply with the law, or to protect the users and others.

4.3.5 Retain an individual's data for the shortest possible time that is consistent with maintaining, understanding, and improving the Wikimedia Sites, and Wikimedia obligations under law.

4.4 Wikimedia aware Its Users as follows:

4.4.1 Any content one adds or any change that one makes to a Wikimedia Site will be publicly and permanently available.

4.4.2 If one adds content or makes a change/s to a Wikimedia Site without logging in, that content or change will be publicly and permanently attributed to the IP address used at the time rather than a username.

4.4.3 Wikimedia community of volunteer editors and contributors is a self-policing body. Certain administrators of the Wikimedia Sites, who are chosen by the community, use tools that grant them limited access to nonpublic information about recent contributions so they may get privileges to protect the Wikimedia Sites and enforce policies.

4.4.4 This Privacy Policy does not apply to all sites and services run by the Wikimedia Foundation, such as sites or services that have their own privacy policy (like the Wikimedia Shop) or sites or services run by third parties (like third-party developer projects on Wikimedia Cloud Services).

4.4.5 Wikimedia is committed to education and research around the world and occasionally release public information and aggregated or non-personal information to the general public through data dumps and data sets.

4.4.6 For the protection of the Wikimedia Foundation and other users, if an individual is not agree with this Privacy Policy, it is advised not to use the Wikimedia Sites.

5. Trademark policy (last revised February 2014):

1. For Using the Information on Wikipedia: The content on Wikimedia can be viewed free of charge, without any authentication.
2. For Contributing the Information on Wikipedia: For editing or creating an article with new section, one has to authenticate with your login details. Wikimedia is open to register to everybody, irrespective of caste, creed, gender, location and age. Anybody can create an article on the Wikimedia projects.

6. Dispute Resolution Policies: One can be disagree with the content posted by other contributors. There is a mechanism to post his/her disagreement using the Dispute Resolution Notice Board, using his/her Wikimedia account. [12]

FEATURES OF WIKIMEDIA

1. All contributors expected to post only content which is under a Free Content License, or which is otherwise free as recognized by the 'Definition of Free Cultural Works'. Contributors can add citations using the Edit page.
2. Under this licence appropriate credit has to be given to the original work,
3. One should provide a link to the license, and indicate if changes were made.
4. **The content** remixed, transformed, or built upon the material, by a contributor has to be distributed under the ShareAlike licence. No additional restrictions — You may not apply legal terms or technological measures that legally restrict others from doing anything the license permits.
5. **Talk Page:** Using the talk page, one can raise his disagreement, ask questions in support of a particular information.

FREEDOM TO WHAT?

View: The content on Wikipedia is free to view. It is free to refer and to cite.

Copy: There is no restriction to copy and use the content of the Wikipedia. The users can copy the content for their use.

Reproduce, even commercially: Non-text media on the Projects are available under a variety of different licenses that support the general goal of allowing unrestricted re-use and re-distribution. [7] The users of wikipedia can reproduce the non text content and distribute it even commercially.

Edit and Share: The text, which an individual contributes, adds, edits on wikipedia is free to use under the Creative Commons Attribution by ShareAlike: [13]

No geographical limit: people located in different parts of the world can work on the same document.

HIGHLIGHTING FEATURES OF WIKIMEDIA

1. **Export the Content :** The content can be exported in the form of book, download as a pdf, and one can get a printable version of the same.
2. **References in Support of the Article:** For validation of the content, users can go through the references given in support of the content.
3. **Cite this page:** A researcher can cite a Wikipedia page to attribute the content in his/her research.
4. **Wikipedia Bots:** (short for "**robots**") which generally make automated changes or actions on Wikimedia. It does not mean all changes on Wikimedia will be operated by Bots, but human assisted changes and actions also continue on the Wikimedia Projects.

CREDIT TO NONE: While citing an article, it is noticeable that, there is no credit to any contributor or group of contributors. All the articles are open for peer-editing, which makes no authorship of an article goes to any individual but it goes commonly to Wikimedia Contributors.

CONCLUSION

Wikimedia can be powerful tools to facilitate collaborative work and the development of online communities. The policies and features of Wikimedia offers freedom to the users for using the content. According to its policy, the contributors can post content without any legal restrictions, like copyright, etc. The ability and

freedom given to the distributed individuals to contribute to the same document or project with just a web browser and a network connection has resulted in some amazing achievements of peer-produced content over recent years. The most notable example is Wikipedia but we are still in the early days of this technology and great things may come from a wide adoption of wiki technology from communities and groups interested in creating open resources. Hoping that, Wikimedia continues to grow as a place to facilitate and support the development of Open Educational Resources (OERs) and a place for communities of interested practitioners.

REFERENCES

1. Neate, Rupert (2008). Wikipedia founder Jimmy Wales goes bananas. *The Daily Telegraph*. Retrieved February, 17, 2019 from <https://www.telegraphindia.com>
2. Jimmy Wales (2003). Announcing Wikimedia Foundation. mail:wikipedia-l. Retrieved January 26, 2019.
3. List of Wikipedias. (2019). *Meta, discussion about Wikimedia projects*. Retrieved 07:38, February 17, 2019 from: https://meta.wikimedia.org/w/index.php?title=List_of_Wikipedias&oldid=18847000.
4. Bozzon, A., Brambilla, M., Ceri, S., & Mauri, A. (2013). Reactive crowdsourcing. In *Proceedings of the 22nd International Conference on World Wide Web*, 153-164.
5. Estellés-Arolas, E., & González-Ladrón-de-Guevara, F. (2012). Towards an integrated crowdsourcing definition. *Journal of Information science*,38(2), 189-200.
6. Alonso, O., Rose, D. E., & Stewart, B. (2008). Crowdsourcing for relevance evaluation. In *ACM SigIR Forum*, 42 (2), 9-15.
7. Terms of Use/en. (2018). *Wikimedia Foundation Governance Wiki*, . Retrieved 04:13, February 17, 2019 from https://foundation.wikimedia.org/w/index.php?title=Terms_of_Use/en&oldid=116456.
8. Data retention guidelines. (2019). *Meta, discussion about Wikimedia projects*. Retrieved, February 17, 2019 from https://meta.wikimedia.org/w/index.php?title=Data_retention_guidelines&oldid=18752493.
9. Definition of Free Cultural Works. (2015) *Freedom Defined*. Retrieved, February 17, 2019 from <http://freedomdefined.org/Definition>
10. Non-discrimination policy. (2018). *Wikimedia Foundation Governance Wiki*, Retrieved February 17, 2019 from https://foundation.wikimedia.org/w/index.php?title=Non-discrimination_policy&oldid=118290.
11. Privacy policy. (2018). *Wikimedia Foundation Governance Wiki*, Retrieved 16:09, February 17, 2019 from https://foundation.wikimedia.org/w/index.php?title=Privacy_policy&oldid=118373.
12. Dispute Resolution. (2019). *Wikimedia Foundation Governance Wiki*, Retrieved February 17, 2019 from https://en.wikipedia.org/wiki/Wikipedia:Dispute_resolution_noticeboard
13. Creative Commons ShareAlike Licence. Retrieved 16:09, February 17, 2019 from <https://creativecommons.org/licenses/by-sa/3.0/>

MANUSCRIPT SUBMISSION

GUIDELINES FOR CONTRIBUTORS

1. Manuscripts should be submitted preferably through email and the research article / paper should preferably not exceed 8 – 10 pages in all.
2. Book review must contain the name of the author and the book reviewed, the place of publication and publisher, date of publication, number of pages and price.
3. Manuscripts should be typed in 12 font-size, Times New Roman, single spaced with 1” margin on a standard A4 size paper. Manuscripts should be organized in the following order: title, name(s) of author(s) and his/her (their) complete affiliation(s) including zip code(s), Abstract (not exceeding 350 words), Introduction, Main body of paper, Conclusion and References.
4. The title of the paper should be in capital letters, bold, size 16” and centered at the top of the first page. The author(s) and affiliations(s) should be centered, bold, size 14” and single-spaced, beginning from the second line below the title.

First Author Name₁, Second Author Name₂, Third Author Name₃

1 Author Designation, Department, Organization, City, email id

2 Author Designation, Department, Organization, City, email id

3 Author Designation, Department, Organization, City, email id

5. The abstract should summarize the context, content and conclusions of the paper in less than 350 words in 12 points italic Times New Roman. The abstract should have about five key words in alphabetical order separated by comma of 12 points italic Times New Roman.
6. Figures and tables should be centered, separately numbered, self explained. Please note that table titles must be above the table and sources of data should be mentioned below the table. The authors should ensure that tables and figures are referred to from the main text.

EXAMPLES OF REFERENCES

All references must be arranged first alphabetically and then it may be further sorted chronologically also.

• **Single author journal article:**

Fox, S. (1984). Empowerment as a catalyst for change: an example for the food industry. *Supply Chain Management*, 2(3), 29–33.

Bateson, C. D.,(2006), ‘Doing Business after the Fall: The Virtue of Moral Hypocrisy’, *Journal of Business Ethics*, 66: 321 – 335

• **Multiple author journal article:**

Khan, M. R., Islam, A. F. M. M., & Das, D. (1886). A Factor Analytic Study on the Validity of a Union Commitment Scale. *Journal of Applied Psychology*, 12(1), 129-136.

Liu, W.B, Wongcha A, & Peng, K.C. (2012), “Adopting Super-Efficiency And Tobit Model On Analyzing the Efficiency of Teacher’s Colleges In Thailand”, *International Journal on New Trends In Education and Their Implications*, Vol.3.3, 108 – 114.

- **Text Book:**

Simchi-Levi, D., Kaminsky, P., & Simchi-Levi, E. (2007). *Designing and Managing the Supply Chain: Concepts, Strategies and Case Studies* (3rd ed.). New York: McGraw-Hill.

S. Neelamegham," Marketing in India, Cases and Reading, Vikas Publishing House Pvt. Ltd, III Edition, 2000.

- **Edited book having one editor:**

Raine, A. (Ed.). (2006). *Crime and schizophrenia: Causes and cures*. New York: Nova Science.

- **Edited book having more than one editor:**

Greenspan, E. L., & Rosenberg, M. (Eds.). (2009). *Martin's annual criminal code: Student edition 2010*. Aurora, ON: Canada Law Book.

- **Chapter in edited book having one editor:**

Bessley, M., & Wilson, P. (1984). Public policy and small firms in Britain. In Levicki, C. (Ed.), *Small Business Theory and Policy* (pp. 111–126). London: Croom Helm.

- **Chapter in edited book having more than one editor:**

Young, M. E., & Wasserman, E. A. (2005). Theories of learning. In K. Lamberts, & R. L. Goldstone (Eds.), *Handbook of cognition* (pp. 161-182). Thousand Oaks, CA: Sage.

- **Electronic sources should include the URL of the website at which they may be found, as shown:**

Sillick, T. J., & Schutte, N. S. (2006). Emotional intelligence and self-esteem mediate between perceived early parental love and adult happiness. *E-Journal of Applied Psychology*, 2(2), 38-48. Retrieved from <http://ojs.lib.swin.edu.au/index.php/ejap>

- **Unpublished dissertation/ paper:**

Uddin, K. (2000). A Study of Corporate Governance in a Developing Country: A Case of Bangladesh (Unpublished Dissertation). Lingnan University, Hong Kong.

- **Article in newspaper:**

Yunus, M. (2005, March 23). Micro Credit and Poverty Alleviation in Bangladesh. *The Bangladesh Observer*, p. 9.

- **Article in magazine:**

Holloway, M. (2005, August 6). When extinct isn't. *Scientific American*, 293, 22-23.

- **Website of any institution:**

Central Bank of India (2005). *Income Recognition Norms Definition of NPA*. Retrieved August 10, 2005, from <http://www.centralbankofindia.co.in/home/index1.htm>, viewed on

7. The submission implies that the work has not been published earlier elsewhere and is not under consideration to be published anywhere else if selected for publication in the journal of Indian Academicians and Researchers Association.

8. Decision of the Editorial Board regarding selection/rejection of the articles will be final.



INDIAN ACADEMICIANS & RESEARCHERS ASSOCIATION

Major Objectives

- To encourage scholarly work in research
- To provide a forum for discussion of problems related to educational research
- To conduct workshops, seminars, conferences etc. on educational research
- To provide financial assistance to the research scholars
- To encourage Researcher to become involved in systematic research activities
- To foster the exchange of ideas and knowledge across the globe

Services Offered

- Free Membership with certificate
- Publication of Conference Proceeding
- Organize Joint Conference / FDP
- Outsource Survey for Research Project
- Outsource Journal Publication for Institute
- Information on job vacancies

Indian Academicians and Researchers Association

Shanti Path ,Opp. Darwin Campus II, Zoo Road Tiniali, Guwahati, Assam

Mobile : +919999817591, email : info@iaraedu.com www.iaraedu.com



EMPYREAL PUBLISHING HOUSE

- Assistant in Synopsis & Thesis writing
- Assistant in Research paper writing
- Publish Thesis into Book with ISBN
- Publish Edited Book with ISBN
- Outsource Journal Publication with ISSN for Institute and private universities.
- Publish Conference Proceeding with ISBN
- Booking of ISBN
- Outsource Survey for Research Project

Publish Your Thesis into Book with ISBN “Become An Author”

EMPYREAL PUBLISHING HOUSE

Zoo Road Tiniali, Guwahati, Assam

Mobile : +919999817591, email : info@editedbook.in, www.editedbook.in