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Journal of Knowledge Management and Information Techology

Aims and Scope

Journal of Knowledge Management & Information Technology (JKMIT) is a bi-annual peer reviewed journal that focuses on fostering original research in the areas of knowledge management and information technology. Every single issue carries empirical and qualitative research papers, impressions of the industry by the academicians and people from industry on the burning topics of the society. JKMIT aims to propagate research in the areas not restricting to only knowledge management and Information Technology and covers other functional areas of business management including economics, environment and education technology. The journal is committed to influence the thought process of management thinkers and technology strategists.

Scope of the Journal

JKMIT is published in January and June every year. Its targeted readers are research scholars, academicians engaged in research and corporate with an inclination towards research. The journal provides a platform to exchange research ideas among researchers across the globe in the realm of scholarly contributions to foster empirical and theoretical research on the most burning issues faced by the corporate world and the society as a whole. Each issue comprises of scholarly contributions come from the desks of eminent researchers.

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Contents

Activities Towards Reasons for Use /Non - Use of Social Networking Sites (SNS): A Case Study by Library Users of Janata College, Kabuganj

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ABSTRACT

Social Networking Sites offers platform to interact in real time with library staff without going to library. Social Networking Sites is one of the Web 2.0 Tools which facilitate a wide variety of services, as now a day all the youngsters are computer savvy. These tools through library staff acts as an anchor role between information sources and voracious users. During the survey, one hundred twenty seven questionnaires were circulated randomly among the library users and the response rate was seventy three percent. The result revealed that majority of the respondents used SNS for different purposes like making friendship, chatting/discussion/comment, sharing information regarding seminar/workshop/conference/jobs, interact with friends/teachers/library staff etc. Facebook was the most popular site as compared to other SNSs. Findings indicated that majority of respondents replied that the information provided in SNS were reliable given from the library.

Keywords - Social Networking Sites, Web 2.0 Tools, Janata College Kabuganj, Assam University, Silchar

INTRODUCTION

Social Networking Sites (SNSs) as one of the Web 2.0 tools deals libraries the new prospects to reach out its library users. It offers a platform for virtual social lives created by persons over the Internet. Persons define themselves in such networks so that they communicate among people sharing same or different academic related information through powerful communication prospects provided by the Internet. Through SNS people can create and share their identities and profiles that may comprise individual information, pictures, and videos etc. Patron can join groups and communicate with other people and faculty members by commenting on topics or by introducing topics that they expected would inspire conversation. With these tools users can share information, exchange files, seek comments, give advice, provide views, suggestions, ideas instantly and interactively. Users can also use these sites as a platform to connect with long lost classmates, batch mates and family members. Security and privacy are the topmost concerns of SNS. This is mainly because SNSs allow members to display their personal information such as their names, addresses, phone numbers, e-mails, and photos. Social networking

sites (SNSs) are gaining popularity in various areas. Library and information services also are attempting to utilize them for increasing the library user traffic. (Haneefa K. & E. 2011, p. 295). With this motive researcher have tried to analyse the use of SNS tools in a college where it is located at the outskirts of Silchar but exemplifying of far and wide reaching impact of Information Technology.

Janata College Kabuganj is a rural college located in the southern part of Cachar district. It was established in 1964 and most of the students enrolled are economically backward. The college has contributed immense help for the needy and marginalized sections of the people. The college was affiliated to Gauhati University till the end of 1993 later it came under the jurisdiction of Assam University Silchar since 1994. In the last five years the college has developed in various infrastructures including the facilities in the libraries too.

SCOPE AND COVERAGE OF THE STUDY

Online social networks have become a global phenomenon with websites such as Facebook, Twitter, LinkedIn reporting number of users in millions. Users in these networks contribute knowledge by sharing all kinds of information with one another including academic related information, but the extent to which knowledge gathered from such SNS is useful remains unknown (Bola. C. & Uloma D., 2011, p. 72)

According to the recent survey conducted by Mashable Social media on March 30, 2012, Online Networking tools are used by top Universities in the world like Harvard University, University of Pennsylvania, Massachusetts Institute of Technology, University of Michigan, Stanford University and University of California. For example Harvard – which has more than 1.6 million users on Face book and 107,000 users on Twitter. All these university representatives agree that social networking tool is a great resource to engage with the student community (Enagandula. & Prasad., 2013, p. 1).

The Central Library of Janata College Kabuganj is well equipped with various infrastructure facilities. The Central Library is partially automated with SOUL software providing OPAC and transaction services of books. It is registered with NLIST programmes and facilitates its users with scholarly e-journals and e-books. It also provides free internet browsing and Wi-Fi facilities along with CCTV surveillance. The Central Library is also indebted in providing free extensive services with the use of Web 2.0 tools such as SNS in Facebook (https://www.facebook.com/pages/Janata-College-Kabuganj/609345875827094) and Blog (http://centrallibraryjck.blogspot.in).

The present study comprises a prospect to explore the use and non-use of SNS and its potential as a medium for library instruction in the future and these tools will be use SNS in future or not.

Aims and objectives of the study

The main purposes of the present study are to observe the following aspects:

- To find out the usage of various SNS namely Facebook, LinkedIn, YouTube, Twitter, etc.
- To determine the reasons for not using SNS by library users;
- To identify and examine the different purpose for using SNS among library users of Janata College Kabuganj;
- To know the problems in using SNS;
- To examine the reliability of the information uploaded in SNS;
- To know users getting reliability of the information uploaded in SNS;

RESEARCH METHODOLOGY

There were several methods for data collection to meet accomplish of research work. To undertake the aforesaid objectives, researcher employs survey method for the purpose of collecting data. Keeping the objectives of the study in mind the copies of a structured questionnaire were personally circulated to gather the information from the respondents. The questionnaire enclosed varieties of questions consisting of dichotomous questions (yes/no), multiple choice questions and opinion-based questions, so that respondents can view their understandings regarding SNS.

LITERATURE REVIEW

Scholars from diverse arenas have examined the use of these SNS among many sections of the residents, particularly amongst the new generations such as school, college and university undergraduates in order to appreciate the practices, effects and significance of these sites. A number of reviews interrelated to this study are ensuing under.

Turan and Tinmaz et. al. (2013) undertook a survey on "The Reasons for Non-Use of Social Networking Websites by University Students", which explored the underlying reasons for high-tech university students' non-use of social networking websites. The primary reasons for not using social networking websites were that they were perceived to be a waste of time, or an unnecessary tool; that they might lead to an addiction; that they might violate privacy concerns or share unnecessary information; and that they might invoke family concerns. Additionally, the findings indicated that most of the students did not trust virtual friendships, and did not like sharing photographs and political views online.

Bola. C. and Uloma D. (2011) made a study on "Harnessing Collective Intelligence Through Online Social Networks: A Study Of Librarians In Private Universities In Ogun State, Nigeria", discussed that

librarians in university libraries in Ogun State, Nigeria, were mostly aware of Facebook, and few still lack knowledge of online social networks. Membership in online social networks, helped majority of the respondents to identify experts, find solutions to work problems, etc., although little assistance was received in the area of locating resources for research. Facebook was also seen as the most effective network for advancing library profession. Based on the findings, the study recommended amongst others, that librarians make online social networks more professionally oriented by using them extensively for sharing work experiences and challenges.

Haneefa K. and E. (2011) conducted a survey on "Perception and Use of Social Networking Sites by the Students of Calicut University", and showed that a majority of the students were aware of SNS. They used these sites for friendly communication. However, a good number of students used these sites for academic purpose also. It should be noted that SNS can be used as an interactive platform for academic communication and can be a source of information, knowledge and help. Orkut is the most used SNS by the students of Calicut University. There were no literatures found on the present study.

RESULTS AND DISCUSSIONS

The information from the respondents was composed using a well-defined questionnaire considered for the purpose. A study was undertaken by using questionnaire which had two parts. The first part consist of personal details like name, designation, gender, qualification, age group and provided full information of respondents. The second part involved knowledge on SNS such as use of SNS, reasons for not using SNS regularly, purpose of using SNS, activities of using SNS, frequency of visit to SNS, problems in using SNS, reasons for not using real names and photos, impact of SNS on academic performance and reliability of the information uploaded in SNS. Afterwards gathering the data, the data was analysed according to the objective. The data was analysed manually and the data presented in the form of tables, pie diagram and bar diagrams with the support of MS Excel.

Gender wise no. of respondents

Table 1: Gender Wise Number of Respondents

Gender	Responses (N = 127)	Percentage (%)
Male	62	49
Female	65	51
Total	127	100

Table 1 presented the gender wise distribution of respondents. Among the 127 respondents, 65 (51%) of were female whereas 62 (49%) of the respondents were male. Therefore the number of female respondents was more than the number of male respondents. The ratio of the female and male respondents was 51:49.

Responses regarding the use of SNS

Table 2: Response Regarding the Use of SNS

Regular Use	Responses (N = 127)	Percentage (%)
Yes	88	69
No	39	31
Total	127	100

Table 2 reveals the use of SNS regularly. It was found that 88 (69%) number of participants use SNS regularly while rest of responded are not using these sites regularly because of lack of interest, excessive time spent online, fear of addiction etc. The respondents were examined to specify the use about respectively refer to social networking site. The responses received have been summarised in Table 3.

Table 3: Use of SNS regularly

Use of SNS regularly	Responses (N = 127)	Percentage (%)
Facebook	82	64.57
You Tube	45	35.43
Twitter	24	18.9
LinkedIn	23	18.11
Google Plus	46	36.22
What app	46	36.22
Line	13	10.23
We Chat	15	11.81

It had been shown that Facebook was most favourite SNS among the respondents followed by YouTube. (Figure 1). A majority of the students i.e., 82 (64.57%) were used Facebook and 45 (35.43%) were used You Tube which was followed by Twitter with 24 (18.9%) respondents. A few respondents i.e., 23 (18.11%) were used LinkedIn and 46 (36.22%) of respondents used Google Plus as well as What app. 13 (10.23%) of respondents used Line. Only 15 (11.81%) of respondents used We Chat.

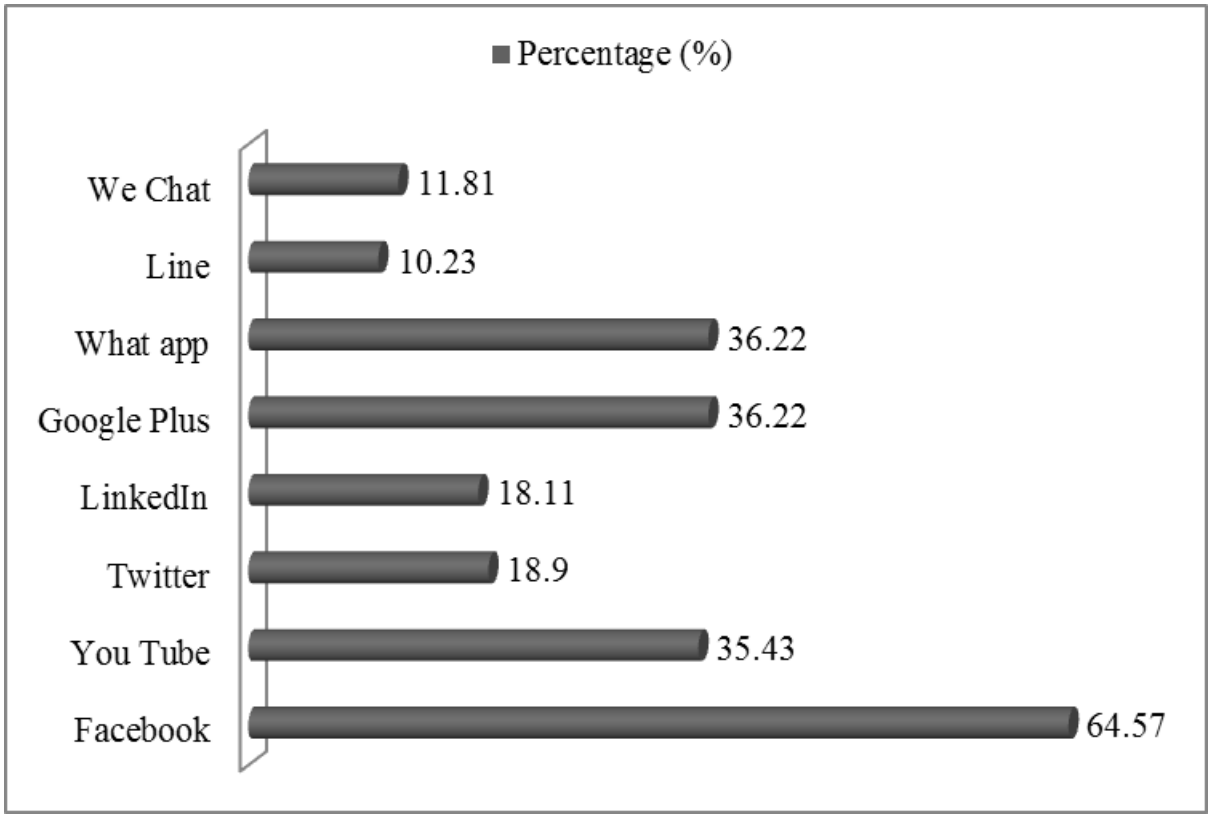

Figure 1: Use of SNS regularly

Reasons for not using SNS regularly

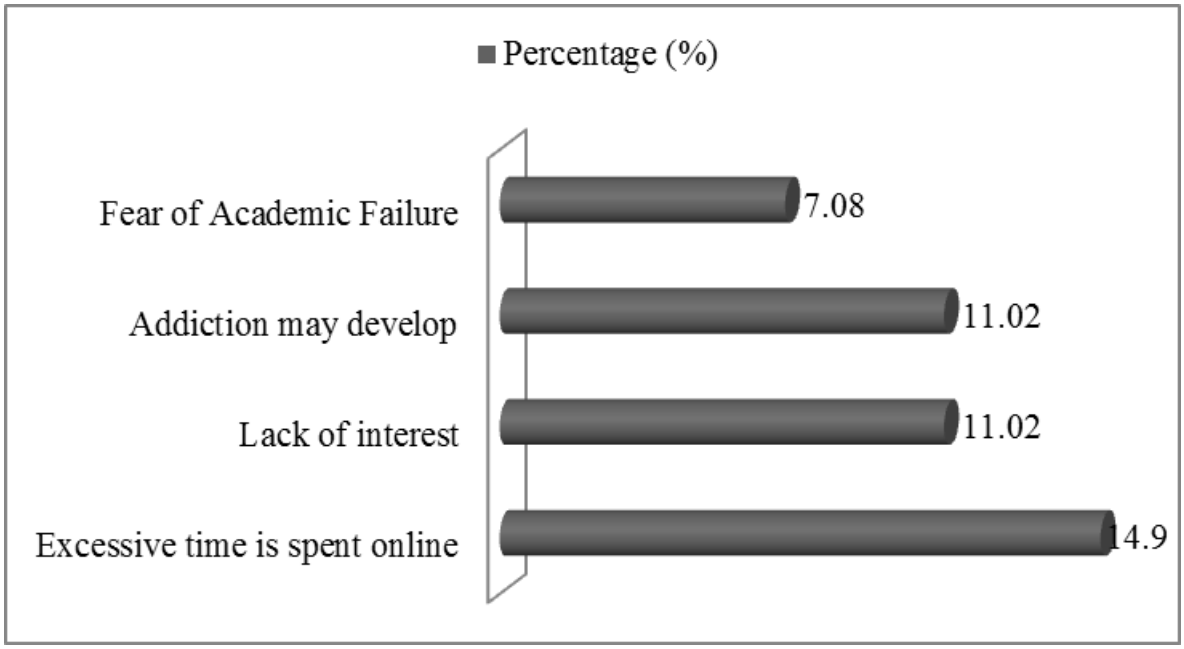

Figure 2: Reasons for not using SNS

Respondents were questioned to indication the causes why they were not using SNS. Fig. 2 disclosed various reasons for not using SNS by the respondents. The majority of the respondents i.e., 19 (14.9%) stated that they had excessive time was spent online in using SNS, 14 (11.02%) of respondents responded that lack of interest and addiction might develop was spent in using SNS. Only 9 (7.08%) of respondents were feel fear of academic failure they did not want to use SNS.

Purpose of using SNS

Table 4: Purpose of Using SNS

Purpose of Using SNS	Responses (N = 127)	Percentage (%)
Making friendship	59	46.46
Chatting/discussion/comment	44	34.65
Sharing information regarding Seminar/Workshop/Conference/Jobs	42	33.07
Interact with friends/teachers/library staff	42	33.07
Finding old friends	40	31.5
Time Pass	3	2.37
Line	13	10.23
We Chat	15	11.81

Respondents were requested to select the purposes for which they use SNS. Out of six reasons listed in questionnaire, majority of respondents i.e., 59 (46.46%) mentioned that they used making friendship and 44 (34.65%) were used for the purpose of chatting/discussion/comment. 42 (33.07%) of respondents used for the purpose of sharing information regarding seminar/workshop/conference/jobs and interact with friends/teachers/library staff whereas 40 (31.5%) of respondents used for the purpose of finding old friends. Only 3 (2.37%) respondent used for the purpose of time pass.

Activities of using SNS

Table 5: Purpose of Using SNS

Activities of using SNS	Responses (N = 127)	Percentage (%)
Participating in any particular topic	56	44.1
Sharing information regarding academic activities	52	40.94
Interact with Teachers/Library Professionals	40	31.5
Updating knowledge/Current affairs	10	7.87

Table 5 showed the activities of using SNS. The result of this study displayed that 56 (44.1%) of respondents used for participating in any particular topic and which was followed by 52 (40.94%) mentioned that they used for sharing information regarding academic activities. 40 (31.5%) of respondents opined that they used for interact with teachers/library professionals. Only 10 (7.87%) respondents used for updating knowledge/Current affairs.

Frequency of visit to SNS

Table 6: Frequency of Visit to Social Networking Sites

Time Spent on SNS	Responses (N = 127)	Percentage (%)
Every day	42	33.07
Once a Week	34	26.78
Twice in a week	8	6.3
Once a month	4	3.14

Respondents were requested how regularly they visit SNS. Table 6 represented that 42 (33.07%) of the respondents visited the SNS for every day, 34 (26.78%) for once a week, 8 (6.3%) for twice in a week, 4 (3.14%) for once a month.

Problems in using SNS

Table 7: Problems in Using SNS

Problems in Using SNS	Responses (N = 127)	Percentage (%)
Poor internet facility	37	29.13
Lack of time	36	28.35
Misusing personal information	32	25.2
Security and privacy	27	21.26

Table 7 depicts a clear picture on several problems faced by respondents in using SNS. The majority of respondents i.e., 37 (29.13%) indicated that poor internet facility were major problems mentioned by the respondents. 36 (28.35%) of respondents thought that they find lack of interest was one of the problems that they encounter. 32 (25.2%) of respondents encounter that misusing personal information was one of the problems that face in using SNS. 27 (21.26%) of respondents replied that they face problem in security and privacy.

Reasons for not using real names and photos

Table 8: Reasons for not Using Real Names and Photos

Reasons for not Using Real Names and photos	Responses (N = 127)	Percentage (%)
Security and privacy	35	27.56
Unwillingness to disclose	34	26.77
Misusing personal information	26	20.47
Males use fake identify to trap female friends	5	3.94

Respondents were requested to specify the reasons for using false names and fake photos in their profiles. Table 8 disclosed that 35 (27.56%) respondents responded that they use false names and fake photos due to fear of security and privacy. 34 (26.77%) of the respondents thought that they did it so that unwillingness to disclose their identity. 26 (20.47%) of respondents replied used false names and fake photos due to their personal information is not misused. Only 5 (3.94%) of respondents mentioned that they used fake identify to trap female friends.

Impact of SNS on academic performance

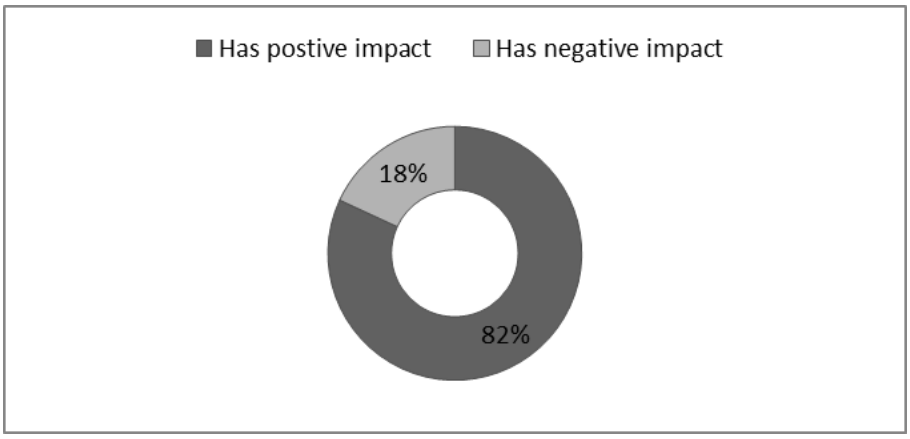

Figure 3: Impact of SNS on Academic Performance

Fig. 3 shown from the study that majority of the respondents i.e., 104 (82%) opined that SNS has positive impact on academic performance. 23 (18%) of respondents replied that it has negative impact.

Reliability of the information uploaded IN SNS

Table 9: Reliability of the Information Uploaded in SNS

Reliability of the Information Uploaded in SNS	Responses (N = 127)	Percentage (%)
Reliable	68	53.54
Partially Reliable	27	21.26
Highly Reliable	19	14.96
Not Reliable	13	10.24

Respondents were questioned to reply to the feelings on reliability of the information uploaded in SNS. Table 9 shows that out of 127 respondents, 68 (53.54%) replied that the information provided in SNS are reliable. 27 (21.26%) of respondents replied that these are partially reliable. 19 (14.96%) of respondents opined that the information are highly reliable and only 13 (10.24%) of respondents think that these are not reliable.

Getting reliability of information uploaded in SNS

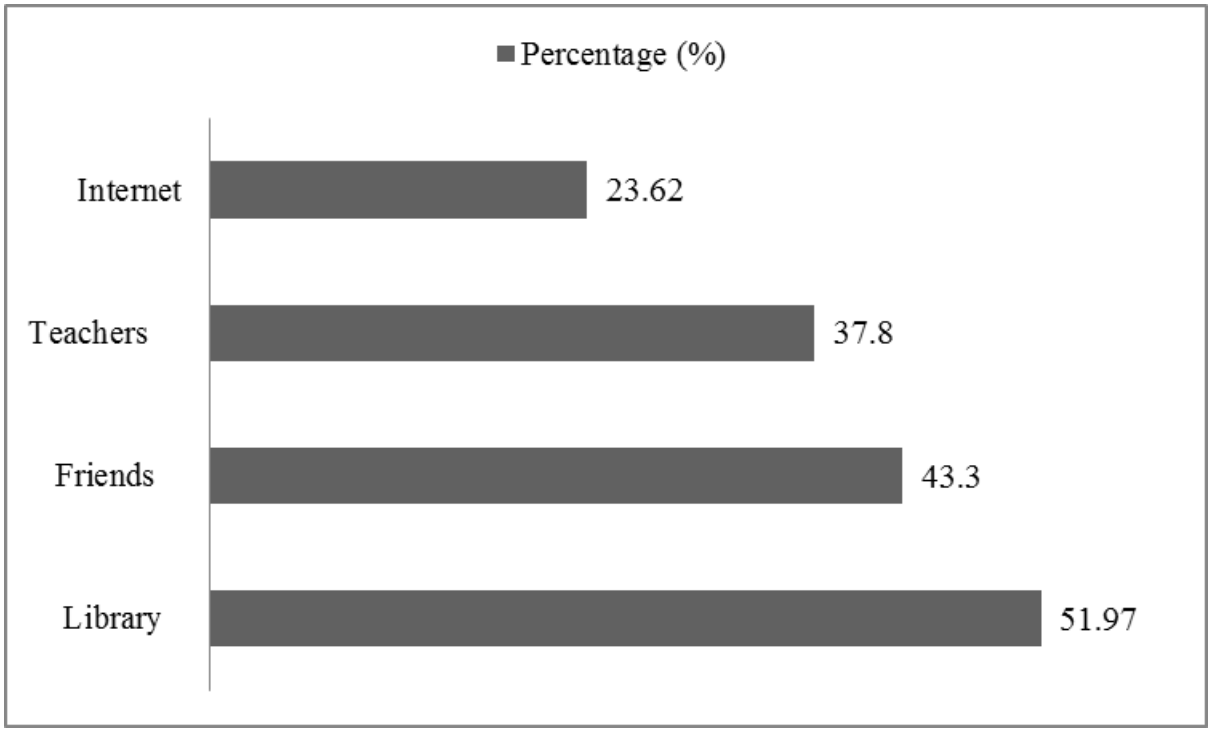

Figure 4: Getting Reliability of Information Uploaded in SNS

Participants were questioned to specify the means through which they receiving reliability of information uploaded in SNS. Fig. 4 revealed that majority of respondents i.e., 66 (51.97%) stated that they got reliability of information through library. 55 (43.3%) of respondents replied that they got reliability of information through friends which followed by 48 (37.8%) who indicated that they got information through teachers. Only 30 (23.62%) of respondents expressed that got information through internet.

Opinion about SNS

Table 10: Opinion about SNS

Opinion about SNS	Responses (N = 127)	Percentage (%)
Easy for contacting old and new friends	82	64.57
Useful for academic Communication	75	59.06
Helpful for easy communication	74	58.27
For updating knowledge	30	23.62

Respondents were requested to choose their opinion about SNS. Table 10 displayed that majority i.e., 82 (64.57%) of the respondents expressed that SNS were easy for contacting old and new friends. 75 (59.06%) opined that SNS were useful for academic communication, which was followed by 74 (58.27%) of respondents thought helpful for easy communication. Only 30 (23.62%) of respondents believed that SNS are helpful for updating knowledge

SUMMARY OF THE FINDINGS

From the study following major findings and summary have been derived:-

(a) Out of 174 questionnaires distributed, 127 questionnaires returned by the users and the percentage of response rate was 73%;

(b) The result disclosed that out of the 127 respondent 88 (69%) responded that they used SNS, while rests were not;

(c) The majority of the respondents i.e., 19 (14.9%) indicated that they had excessive time was spent online in using SNS;

(d) 56 (44.1%) of respondents used for participating in any particular topic;

(e) 42 (33.07%) of respondents visited the SNS for every day in various activities such as sharing information regarding academic activities, interact with teachers/library professionals, participating in any particular topic, updating knowledge/current affairs;

(f) It was evident that 104 (82%) replied SNS has positive impact on academic performance;

(g) The analysis showed 68 (53.54%) of respondents replied that the information provided in SNS continued reliable;

(h) Majority of respondents i.e., 66 (51.97%) indicated that they got reliability of information through library;

(i) 82 (64.57%) of the respondents expressed that SNS were easy for contacting old and new friends.

(j) The study revealed that majority i.e., 82 (64.57%) of the respondents expressed that SNS were easy for contacting old and new friends.

CONCLUSIONS

Now a day, SNS are becoming more and more popular among younger generations as they are fast and effective tools for disseminating knowledge. These tools are available freely as well as easy to communicate and facilitating up to date information to library users. Based on the analysis and the findings of the study, the researchers conclude that most of the respondents used SNS for various

like participating in any particular topic, sharing information regarding academic activities, interact with teachers/library professionals and updating knowledge/current affairs. SNS is useful for taking user feedback of existing library services and easy to help library users.

RECOMMENDATIONS

Based on the results and conclusions of the present study, the following recommendations are made.

a) Librarians should formulate strategies on the use of SNS in library. Such a policy should be considered in a way to comprise: a nominated member of staff with suitable professional qualifications, to be accountable for the planning, implementation, operation and monitoring of services of the SNS of the library;

b) Periodic assessment of the SNS should be undertaken to identify areas lacking in consideration. Assessment is needed because it assist to match goals of the SNS with performance or vision of institutions;

c) Librarian should educate/inform the user on the issue of copyright law/IPR such as sharing copyright materials like uploading videos, music, photo, comment on controversial things and other confidential documents of particular institutions. SNS should defend the misuse of copyright materials and violation;

d) Library orientations programmes should be organised to educate users about the applications, benefits and risks related with SNS such as IPR/Copyright, security and privacy etc.

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Analysing the Subject Coverage of Indian Research Repositories

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ABSTRACT

The subject coverage of the research repositories in India is not uniform. Most of the repositories have the contents produced by the researchers of that particular institution. Different subjects constitute the contents of the repositories. But most of the research repositories in India have contents of multidisciplinary subjects. This paper explores the subject coverage of the research repositories in India. There are certain subjects areas like humanities, business, economics etc are not well covered by these repositories.

INTRODUCTION

The high quality research accompanied with scholarly communications to various national and international journals and conferences has put India in the forefront in the world and leader of the developing country. Only elite institutions are able to do the quality research. Lack of access to reasonable good information hampers the scholarly communications. Shrinking budgets discourages both the access to vast scholarly publications as well as the publication process itself. Open Access literature plays a vital role in terms of access and research communications. Research repositories have provided the possibilities to have free access to exhaustive information on the web.

LITERATURE REVIEW

Review of literature reveals that adequate amount of literature available on Institutional Repositories, discussing on growth and development of Institutional repositories. copy right issues, attitudes of authors but very little are available on the subject coverage of these repositories.

Doctor (2008) argues that academic institutes in a developing country like India have constraints on infrastructure, manpower and funding. Fernandez (2006) argues that universities in India are at present lacking in infrastructure for establishing IRs. Bhat (2009) found that most of the repositories in India

were not active, with little or no community engagement. Abrizah et al. (2010) found that institutional repositories in Asian countries are not as successful as would have been expected from the considerable benefits attached to the principles of sharing. Das et al. (2005) found that the problems of existing repositories in India are mainly due to the limited availability of web servers running IRs. According to Mittal and Mahesh (2008), the collection size in most digital libraries and repositories in India is a few hundred items.

Transformative force driving information dissemination has ushered in new challenges to the traditional routines of librarianship, and institutional repositories are seen as creditable information channels in institutional settings across the world, transforming scholarship media (Lynch, 2003).

The scientific data deluge requires us to think of new science collaborations, multidisciplinary approaches and communication models, as the growth of data has been far beyond the capacity of current preservation models and strategies and will have profound effects on scientific infrastructure (Hey and Trefethen, 2003). Scientific information exchange is crucial for the establishment of open access archives, which it will emerge as a faster, cheaper, and simpler route to reach the ultimate goal of universal open access in the future (Kirsop et al., 2007).

As a critical factor for the thriving knowledge economies, creation and dissemination that lower access costs bring knowledge to people who can use that knowledge as the basis of invention and innovation (Mokyr, 2002).

With the information landscape undergoing turbulent developments aimed at up scaling information architecture and system development, this underpins the teaching, research and learning activities, laying the foundations for a new disaggregated model of scholarly publishing (Crow, 2002).

Generally online self-archiving has only flourished in disciplines that had an existing paper-based preprint culture. The subjects covered by most repositories were mainly physical sciences, mathematics, computer science and economics, with a small number of other subjects, including linguistics, philosophy and some social sciences. None of the repositories studied in the survey had content from the medical or clinical sciences, and only archive mentioned chemistry (Mark Ware, 2014).

Open access to electronic versions of Indian print journals in the areas of science, technology and medicine is a recent phenomenon. The growth in visibility and impact has been reported for the online

version of the Journal of Postgraduate Medicine (Bavdekar and Sahu , 2005). Another article by Kumari (2005) discusses global access to Indian research through Indian STM journals online.

PROBLEM

Although a number of studies regarding Indian institutional repositories are available that discuss growth and development and technical and establishment issues, no effort has been made hitherto to explore the various subjects of documents available in these repositories.

Wilson and Jantz (2011) found that institutional repository deposits among the American Research Libraries (ARL) shows great variation across disciplines, and is lagging behind in Humanities scholarship, particularly History, English, and Linguistics.

The subject analysis of the IRs indicates that the institutes in the field of sciences and technology are more interested to create IRs than social sciences, arts and humanities. (Nazim, Mohammad and Mukherjee, Bhaskar, 2011)

SCOPE

The scope of the study is limited to 57 institutional repositories in India.

OBJECTIVE AND METHODS

To investigate the subject coverage of the research repositories developed in India, the fifty seven research repositories are identified, which are registered with Registry of Open Access Repositories (ROAR, 2014). The information about the subject of the contents of the repositories is collected. The subject categories devised by ROAR registry is being used to classify the data.

FINDINGS

Tables A and B shows the subjects of the contents of the research repositories. It shows that majority of the repositories; about 16.19% have multidisciplinary subjects in their contents. Dspace@Inflibnet, Kautilya Digital Repository, NCCR IIT Madras, Eprint@DU, DSpace@IGGSIP University, NOPR NISCAIR, Dyuth@CUSAT, IIT Bombay, IIM Ahmedabad, IIT Roorki, DSpace@MS University, DSpace@University of Hyderabad etc are the repositories which have contents of multidisciplinary subject.

Health & Medicine is the next subject category which constitutes their availability in about 10.47% of the total repositories. Few of the repositories which have Health & Medicine in their contents are, OPENMed@NIC, Entrpo-Entrepo, DKR CDRI, EPrint@CMFRI, EPrint@CFTRI, EPrint@IICB, Kolkata, EPrint @NITR Library, EPrint@MDRF, NII, Indian Academy of Sciences Publications of Fellows.

Further it is found that General Technology subject constitute with 9.52% of total repositories. DSpace@DTU, OpenMED@NIC, Eprint@NML, NIO, GOA, NAL-IR, DSpace@sdmcet, Dharwar, Sardar Ballabhbhai Patel NIT, etc. are few of the examples of repositories which have general technology subject in their contents.

The subjects Mechnical Engineering&Materials, Biology&Biochemistry, Chemistry&Chemical Tecnology, are at the third place in their presence in the indian repositories each constituted 7.61% of total repositories. The repositories like, DSpace@DTU, NIT, Raurkela, Ad.Meth.&Process Inst., Bhopal, IR@NPL, Indian Institute of Petroleum IR, DSpace@sdmcet, Dharwar have Mechnical Engin.&Materials subject in their contents.

Likewise, repositories DKR, CDRI, Eprint@IARI, Eprint@CMFRI, IIT, Bombay , Eprint@IICB, Kolkata, Eprint@SBT, MKU, Madurai, Indian Institute of Petroleum IR , National Inst. Of Immunology etc. have Biology&Biochemistry subject in their contents. The repositories, DSpace@DTU, NIT, Raurkela, Indian Inst. Of Science, Eprint@NML, DSpace@IUCAA, Indian Institute of Petroleum IR, DSpace@sdmcet, Dharwar, National Inst. Of Immunology have Chemistry&Chemical Technology subject in their contents.

It is also found that Physics&Astronomy subject constitute 6.66% of all repositories appears in the contents of repositories, DSpace@IIA, NIT, Raurkela, Indian Inst. Of Science, Raman Res.Inst.Dig. Repository, IR@NPL etc. The subjects Agriculture, Food, Vertinary and Math&Statistics constitutes 5.71% each to the total of repositories. The repositories, OAAgricultural Res.Repository, Indian rice Res. Inst., OAR@ICRISAT, Ind.Inst. Spices Research, etc have Agriculture, Food, Vetnary subjects in their contents. Likewise repositories, Indian Inst. Of Science, Eprint@CFTRI, NAL-IR, DSpace@Inst. Of Material Science, etc. have Math&Statistics subject in their contents.

The other subjects, General Science, Library&Information Sc., and Computer Sc. &IT appear in contents of 4.76%, 3.8%, and 3.8% repositories of total repositories respectively.

The subjects like electrical & electronics, geosciences, and civil engn., appears in the contents of 2.85%, 1.9% and 1.9% repositories respectively.

The subjects business & economics, gen. arts & huminities, and environment & development appear in the contents of 1.9%, 0.95% and 0.95% repositories respectively.

Selected Indian Research Repositories

Repositories	Serial No.	Repositories	Serial No.	Repositories	Serial No.
OAAgricultural Res.Repository	1	Eprint@CMFRI	21	DSpace@IUCAA	41
Indian rice Res. Inst.	2	Eprint@NML	22	DSpace@Inst. Of Material Science	42
Entrepo-Entrepo	3	Dyuth@CUSAT	23	Gokhle Inst. Of Politics and Econom.	43
Min. of Earth, GOI	4	NOPR, NISCAIR	24	Indian Institute of Petroleum IR	44
Librarian's Dig Lib.(LDL)	5	Eprint@CFTRI	25	Ind.Acad. Of Sc. Publ. Of fellows	45
DSpace@INFLIBNET	6	NIO, GOA	26	DSpace@sdmcet, Dharwar	46
DSpace@DTU	7	Raman Res.Inst.Dig. Repository	27	VidyaPrasarakMandal, Thane	47
OpenMED@NIC	8	OAR@ICRISAT	28	Indian Inst. Of Horticulture	48
Knoor, Shrinagar	9	IIT, Bombay	29	DSpace@PDPU	49
DSpace@IIA	10	Eprint@IICB, Kolkata	30	Ind.Inst. Spices Research	50
NIT, Raurkela	11	Eprint@SBT, MKU, Madurai	31	DSpace@NCRA, IIT Bombay	51
NCCR, IIT Madras	12	NAL-IR	32	National Inst. Of Immunology	52
NCAR, Goa	13	Eprint@IMMT	33	DSpace@University of Hyderabad	53
IIM, Khozhikod	14	Ad.Meth.&Process Inst., Bhopal	34	Sardar Ballabhbhai Patel NIT	54
DKR, CDRI	15	Eprint@ATREE	35	ISI Library, Bangalore	55
Eprint@IARI	16	IR@VSL, IIM, Ahmedabad	36	NIIIT, Allahabad	56
Kautilya Dig. Repository	17	Eprint@NIRT Library	37	Eprint@MDRF	57
Indian Inst. Of Science	18	IR@NPL	38		
Delhi University	19	DSpace@MS University	39		
DSpace@GGSIP Univ.	20	IIT Roorki Repository	40		

Table: A

A=AVAILABLE SUBJECT

SUBJECTS	SERIAL NUMBER OF REPOSITORIES																											
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
multidisciplinary						A						A					A		A	A			A	A					A
biology&biochemistry															A	A					A				A				
agriculture,food,vert.	A	A							A												A							A	
health&medicine			A					A	A						A						A				A				
geoscience				A									A																
lib&inf.sc.					A																				A				
chemistry&chemical tech.							A				A							A				A							
math&statistics							A											A							A				
physics&astronomy							A			A	A							A							A		A		
gen technology							A		A													A			A	A			
gen.science									A																A	A			
gen.arts&huminities																										A			
civil engn.							A																						
computer sc.&IT							A																						
electrical&electronics							A																						
mechanical engn.&materials							A				A																		
business&economics														A											A				
environment&development																													

Table: B

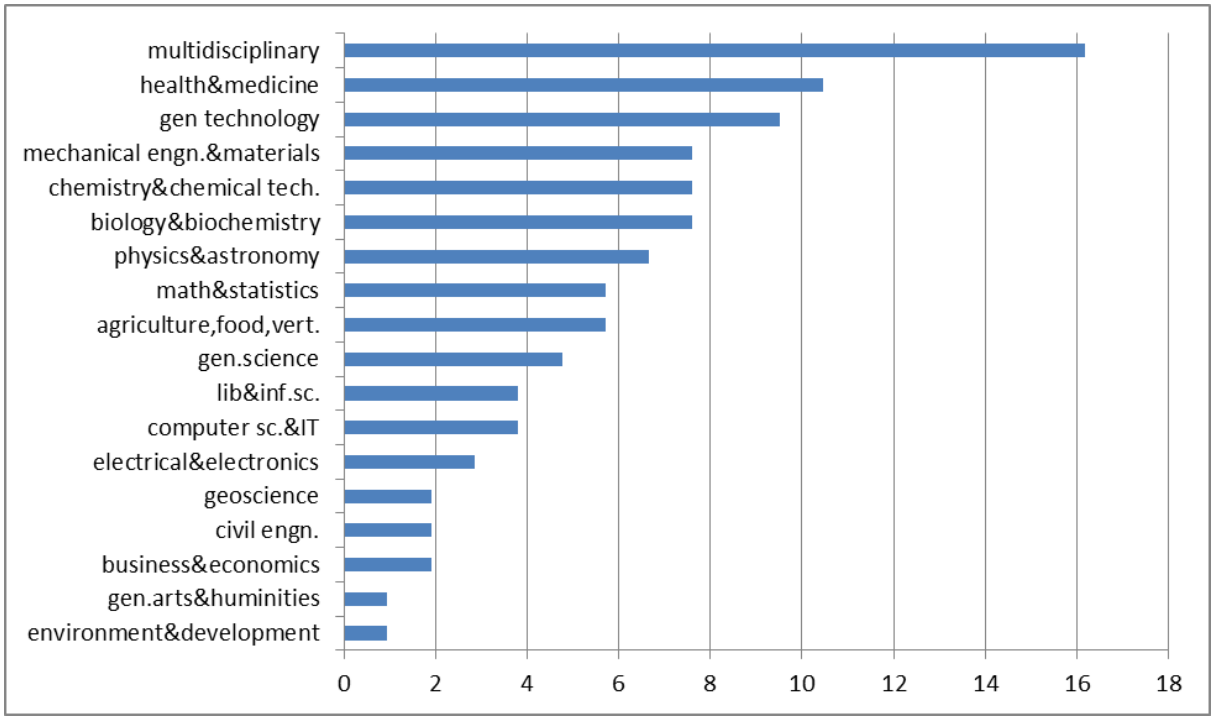
A=AVAILABLE

SUBJECTS	SERIAL NUMBER OF REPOSITORIES																										
	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57
multidisciplinary							A			A	A			A				A	A	A		A		A				
biology&biochemistry	A	A													A								A					
agriculture,food,vet.																					A							
health&medicine	A							A								A							A					A
geoscience																												
lib&inf.sc.															A		A											
chemistry&chemical tech.												A			A		A						A					
math&statistics			A										A													A		
physics&astronomy									A																			
gen technology			A												A	A	A								A			
gen.science															A	A												
gen.arts&huminities																	A											
civil engn.															A		A											
computer sc.&IT															A		A										A	
electrical&electronics															A		A											
mechanical																												
engn.&materials			A	A	A				A						A		A											
business&economics																												
environment&development						A																						

Table: percentage of repositories by subjects

Repositories	Percentages
Environment &development	0.95
Gen.arts & humanities	0.95
Business &economics	1.9
Civil Engineering	1.9
Geosciences	1.9
Electrical &electronics	2.85
Computer sc.&it	3.8
Lib. & Info. Sc.	3.8
Gen. science	4.76
Agriculture, food,vert.	5.71
Math & statistics	5.71
Physics &astronomy	6.66
Biology &biochemistry	7.61
Chemistry &chemical tech.	7.61
Mechanical engn.& materials	7.61
Gen technology	9.52
Health &medicine	10.47
Multidisciplinary	16.19

Indian research repositories by subjects



CONCLUSIONS

From the above findings it is evident that the research repositories in India are developing as such that their subject coverage is largely multidisciplinary in nature. Health & Medicine is the subject area which appears in large number of Indian research repositories. The other subjects which have been considered for worth mentioning are General technology, Mechanical Engin. & Materials, Chemistry & Chemical Technology, Biology & Biochemistry, Physics and Astronomy, Computer Sc, IT, Mat & Physics Agriculture, Food, Veterinary Sc Electrical & electronics etc.

The subjects like General Arts & Humanities, Environment and Development, Business and Economics, Civil Engn. etc. is not well covered by the research repositories in India. The coverage of these subjects are very nominal or nil in the contents of the repositories.

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A Perspective On Socio-Technical Issues In Integrated Management Of Urban Storm Water

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ABSTRACT

Since the time of Harappa-Mohanjadero, that is prior to the Fifth Century BC, the available records point out that urban settlements have been designed with elaborate drainage network. However, in recent times, particularly in metropolises in developing countries, the frequency of heavy losses due to storms have significantly gone up, projecting the topic of urban storm water management to highlight. An attempt is made in this paper to identify and analyze the likely causes and thereupon to make some suggestions to improve storm water management. The importance of the societal processes in storm water management is brought out and thereby the need to consider the topic as a socio-technical one is emphasized.

INTRODUCTION

For several decades rather centuries, stormwater, or runoff, has been considered largely a problem that impact communities in various forms. Prevailing engineering practices were to move stormwater away from cities as rapidly as possible to avoid potential damages from flooding.

The problem of stormwater mainly occurs due to the rainwater that once infiltrated into the ground now flows in excessive amounts over hard surfaces such as rooftops, paved parking areas, roads and streets. This runoff flows into storm drains and ultimately into various natural water bodies e.g. lakes and streams. Over the course of its travel it carries various pollutants that are harmful to aquatic life and public health.

One of the most well documented and well published discoveries in archaeology is that of the sophisticated design of cities of Harappa and Mohanjadero, dating to the fifth century B.C. Perhaps, the most admirable part of the urban design is its municipal drainage system (Burian and Findlay, 2006; and Shapiro, 2006). In the same country, now when one looks in to the 21st century, what is in the view? Urban storm water floods – be it in Delhi, Calcutta, Mumbai, Hyderabad, Chennai or

Thiruvananthapuram – that is the north, west, east and south of India (NEWS). Yes, great news on misery in day to day life – loss of lives, economic losses in billions of dollars, disruption of all services, waterbased diseases, all caused because of may be by an hour of rainfall or two days of rainfall. The places cited have differing hydrologies and catchment characteristics. Rainfall patterns are widely differing, topography has a range from plains to hilly, soil texture ranges from alluvial to laterite and soil layers range from pervious alluvium to impervious Deccan trap.

Drainage networks in these are well laid out and have proved effective for centuries in some cases and for decades in other cases. Yet, what is it that makes the impacts similar in intensity and nature? An attempt is made herein to identify and analyze the factors for such similarity in behaviour to widely differing inputs.

Starting with the work area of the agencies responsible – that is that of the technical wing of local self government agency – the issues that require looking into seem to be are: Is there adequate technical knowledge? Does the agency having access to knowledge, have financial capability and means of implementation? When one looks into the performance of the storm drainage networks, prior to the last three decades, there seems to be no need to delve deeper in this area.

Technology serves society and society grows on technology – that is, a mutually interlinked connection exists. So, in what way has society contributed to recurring storm water floods? Have societal processes impaired technical performance?

If so, in which way and what are the steps that may be taken to lead the societal processes and technical aspects to a successful marriage between the two? With this objective in mind, a brief analysis is presented below.

TECHNICALASPECTS

The Rational Formula, the most widely used formula to estimate run off links the peak runoff rate Q to the intensity I of rainfall, catchment area A and the hydrologic and hydraulic characteristics of the catchment reflected in a coefficient C through the equation given below:

$$Q = C\ I\ A$$

The inconsistency in the units of I and A may also be accommodated by modifying the value of C

accordingly. When expressed through consistent SI or FPS units C has a range of 0.1 to 0.9

The units used for I is generally inch/ hour or cm/hr

The intensity I is seen to be inversely related to the duration and frequency of rainfall. That is, the more frequent the rainfall, the less intense it is and the shorter the rainfall duration, the more intense it is. Quantified corrrelational expressions, in this context, are site specific

Other relevant parameters which influence technical design of drainage net work are the length of travel and the slope of the overland, as the time concentration is related to these. The larger the slope, the lower is the time of concentration and the longer is the path the larger is the time of concentration.

Engineering design of drainage network is based on the peak run off rate Q, and the time of concentration . The designed quantities are the hydraulic quantities of cross section, the wetted perimeter, the slope; while the choice of roughness coefficient is linked to the material used for constructing the drainage network. To a large extent, the choice of material is decided on site specific aspects, expected life etc. Number and location of junctions, inclusion of backwater effects at junctions and outlet locations also are site specific. The number and design of inlets to the drainage are generally based on codal provisions. The point is that, in general, technical designs are user independent and have been tested over time.

However, there are some points, as given below, worth observing in this context:
The choice of I is crucial and the probability is of underestimation. A major reason is that the estimates are based on the record of point rainfall observations In a large hydrometeorologic region, the location of the heaviest rainfall for each rainfall is likely to be different and in all probability its value is not captured on record.. Secondly, most of the records available are not of instantaneous values. From average daily values, the hourly or shorter interval value is required to be computed through a multiplying constant.

From the brief review given above, it is clear that the dynamic nature of catchment behaviour is not and cannot be reflected in technical design.

Suggestions related to technical aspects

In this context, it is advisable to consider an intensity based on a smaller time interval in the range of five

to 15 minutes, from available recording raingauge values.

Further, some measures that may turn out to be useful are in the design of inlets: more in numbers, larger areas, provision for vertical and horizontal grates, provision for permeable skirting near horizontal grating etc.

The beneficial effects of the recently adopted practice of providing permeable sidewalks may further be enhanced by marginally sloping these towards service lanes and by providing closely spaced inlets to drainage conduits from the service lanes as well.

On the maintenance and service aspects, the intentional use of drainage network as dumping ground by all, including the lowest level service personnel, may need to be looked into.

SOCIETAL PROCESSES

The influence of societal processes may be categorized into various groups – permanent, temporary, storm induced, multiplicative, predictable, unpredictable etc., the groups being not necessarily mutually exclusive.

Whatever be the process, it must influence the technical inputs of '**C'**, 'I', and 'A' so as to affect the runoff rate **'Q'.** The inputs from society and the influence of these on the hydrologic-hydraulic parameters are discussed below.

Influence on the Intensity Parameter 'I'

As mentioned earlier, the parameter 'I' refers to the intensity of rainfall – that is an input before rainwater falls on the surface. In general, only atmospheric processes may influence intensity of rainfall at a locality. The definition of 'locality; in hydrologic and hydrometeorologic terms may differ significantly. That is, point rainfalls recorded over long period also may not have the highest rainfall values in the hydrometeorological 'locality'. Focusing on inputs from societal processes related to urbanization, especially with heavy vertical growth, these vertical units may serve as heat sources and heat and humidity flow modifiers – so also could be the presence of large waterbodies, forests, parks;but, as heat sinks, and thus as heat flow modifiers At present technical knowledge on these aspects is scarce and thus the impacts remain unquantifiable.

Influence on Parameter 'C'

The parameter 'C' is representative of a number of flow related factors of the surface; resistance offered to over land flow, perviousness of the land surface, the slope effect and thus of travel time and numerical constants to accommodate the system of units used. In short, any change in flow surface characteristics gets reflected in 'C'

Societal processes may significantly and adversely influence 'C'. To give an example, a shopping complex built on an erstwhile open ground leads to a larger runoff rate on account of less resistance to flow, more even surface, increased slope, less infiltration etc. However, a full or partial blockage of the inlet to a drain - in all probability a well designed and well maintained drain – may adversely affect the storm water disposal of the shopping complex.

Influence on 'A'

It has already been shown that 'A' is the catchment area that contributes to runoff. A barrier, temporary or permanent, flexible or rigid, permeable or impermeable, that fragments or increases 'A' affects the flow rate – Societal processes contribute significantly to modification of 'A' – modification from 'A' that was considered at the time of design of the drainage network. Well designed master plans may show locations of prospective major roads, flyovers, embankments etc. However, speed breakers, dumped construction wastes, piled up garbage etc may also cause change in 'A', making it difficult to accommodate for these technically.

The major unaccountable, but predictable input from society is litter as a modifying agent of 'C' and 'A'.

Litter, particularly plastic and polythene based litter has received considerable attention as non biodegradable polluting materials and information on its role in storm water management has come out as mostly as an unsought byproduct. However, many other types of litter exist. Some of the major bulk contributors to litter are

- Fast-food outlets: through plastic/polythene/paper/ leaf plates, water bottles, cans, and food material wastes.
- Tailoring units: through scraps and waste material
- Barber shops: (wayside and regular) through cut hair
- House holds: through all kinds of waste materials, in general, mixed type
- Construction sites: through building materials, building equipments and waste materials

- Dug up sites: sites dug up often on roads for public utility services
- Office complexes: (private and public) all kinds of litter including food related, office stationery related (e.g. post offices, banks, educations institutions)
- Workshops / small manufacturing units: through grease, scraps of materials used, stored raw material – leather, rubber, tyre, wood etc.

The above given list is indicative, rather than comprehensive

Littering behavior

An interesting observation (Marais et al, 2004, and Geers, 2006) in littering behavior is that most of the individuals are seen to be followers, rather than starters. That is, a nucleus of one or two litter pieces tend to give the impression that dumping waste at that site is perhaps acceptable.

Access to public services also influences littering behavior, the more exclusive the access, the less is littering potential. Understandably, unorganized and often unauthorized residential areas of low income group show high population density and higher littering potential.

MANAGEMENT MEASURES AND PRACTICES

To call these as Best Management Practices requires comparative evaluation of performance of various measures and practices. Management measures and practices may be broadly categorized as structural or non-structural (EPA, 1999). In doing so, the drainage network leading to the nearest natural water course is not considered, as it serves as the backbone and is not eliminatable.

The structural measures and practices comprise many categories:

Infiltration units, which may be in the form of receiving basins or porous pavements. Infiltration is the main hydrologic process utilized.

Detention ponds, wetlands etc. are units designed (or naturally occurring) to which storm water may be directed. These may serve as recreation units, biological purifiers, fisheries etc.

The hydrological processes used are infiltration, biological usage, evapotranspiration, and the mechanical component of adequate storage. Some examples of runoff ponds are those in Rajasthan, in

Tamil Nadu, in Andhra Pradesh and in Karnataka constructed in ancient times. In recent times, one can site the case of Chandigarh.

Some other examples are rainwater harvesting through seepage pits, pipes/wells, roofwater harvesting.

Non-structural measures are generally practices – separation of waste at source, legislative measures, educating the society on the feasible aspects of management practices etc.

ROLE OF INDIVIDUALS/INSTITUTIONS/ORGANIZATIONS

The points raised in the previous sections reveal that the technical agencies assigned to deal with storm water management do a fairly reasonable job of designing and constructing the drainage network. May be there is scope for improvement in maintenance. However, even in the best maintained system, it is not practically feasible to maintain an efficient system at every instant of time. That is, rainfall occurrences and cleaning services cannot be synchronized. The point is, the influence of societal processes especially of temporary and recurring nature must be dealt with members of the society, themselves.

Secondly, ownership of large tracts of land rest with governmental, private and corporate agencies. Some examples that may be cited are: the Armed Forces, Central Public Works Department, various kinds of educational institutes, factories, offices of corporate bodies etc. These units have the capability and resources to implement structural and non-structural measures. An example that can be cited for this kind of civic responsibility is that of the campus of IIT Delhi. Various water harvesting measures, segregation of waste at source and general education of members in this context and other similar steps have been implemented there.

Legislative measures, as of now, have targeted mainly on individuals. Byelaws must be enacted or more preferably laws must be enacted to bring in institutions to practise structural and non-structural measures. Also strict and rigorous enforcement of laws must be done.

Above all, it is the individual that matters. The sense of neighborhood and civic sense which exist must be nurtured. The requirement of a nucleus to litter and the example of automatic queuing habit well spread all over Maharashtra are indicators of the feasibility of developing and maintaining civic sense.

Media and educational institutions have the highest potential to take up this role. The media – printed and electronic – which raise questions on behalf of the public must also raise questions on the individuals' contribution in blocking the drainage network.

An institution, whatever be the areal extent and annual budget, has the potential to utilize half to one percent of its budget towards management measures and practices in its physical domain. Activities at this level for five to ten years may make the institutional area not to contribute to storm water. On the other hand, it may contribute significantly to enhancement of groundwater resources.

GETTING STARTED

It is desirable to get started with a lot of valuable information in hand. However, as in emergency situations, getting started with assessment of available information can go hand in hand with gathering more detailed information. In one of the simplest forms, photographic shots, for example, may be used to locate the most problematic areas and also to identify best locations for management measures.

CONCLUSIONS

The major problem associated with storm water management is that the knowledgebase of technical aspects for the design of a drainage network has no components for including real life situational contexts of the dynamic impact of societal processes. In practicality, neither is it feasible to have such support.

Every segment of society – individuals, institutions, private, governmental, legislative, law enforcement agencies- can significantly contribute without much starting time and with moderate financial input.

There are a number of rays of hope; to mention a few:

- feasibility of 'add on module' approach permits time and budget constraints to be accommodated;
- the attitude of the citizen, not wanting to be first one to do an offensive civic act is ray of hope.
- the ownership of large tracts by institutions permit ,' catch the rain where it falls or in the nearest available neighborhood' to prevent runoff to streets.

Another major ray of hope is that the basic engineering infrastructure is seen to be mostly adequate. It is

most important to realize that however much the civic agency is efficient in design and maintenance, undesirable impact of societal processes can totally undermine the storm water management.

The importance of properly designed and well maintained urban storm water management is being reiterated by all segments of society – individuals, media, technical, economic – every year for the last three decades and more frequently in the last few years. Impact of post mortem evaluations generally die with the withdrawal of the rainy season. An outsider to the urban settlement may categorize such activities also as a part of set of seasonal, ritual activities related to the rainy season.

A down to earth approach to prevent 'drowning the earth' malady that breaks out during premonsoon-monsoon in urban settlements is urgently called for.

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DISCLAIMER

The author do not claim any concerted effort to document the quantitative impact of societal processes. All inferences are based on random observations near markets/offices/institutional locations and at times as marooned victims. Performance evaluations have been mostly qualitative, on the strength of 'before' and 'after' photographs.

Transforming Academic Libraries to Learning Organizations: A Study of Oslo University Library, Norway

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ABSTRACT

The paper highlights the importance of innovative strategies, such as the knowledge management tools that have been implemented and used in the process of transforming the academic libraries into learning organizations. A case study of the Oslo University is undertaken to understand how it is managing its tacit and explicit knowledge. The balance of the ICT infrastructure, the flow of the knowledge transfer, and the communication between the librarians has been identified during this qualitative research. The interview of director of Oslo University Library was conducted and questionnaires were personally distributed among the heads of its four departmental libraries. Through data collection overall knowledge management system is analyzed, and its challenges and possibilities were identified. The aim of paper is to show importance of use of knowledge management tools in managing tacit knowledge by libraries to become an effective learning organization per se.

Keywords -knowledge management system, learning organization, university library

LEARNING ORGANIZATION

Have you ever thought to make your library a learning organization? Wondering what a learning organization is? Well library director of Oslo University, Norway says it is making collaborative efforts to provide best services to users, and making use of technology and professional knowledge of staff to create and offer library amenities. For example, a library is functioning as learning organisation, when its staff shares and collaborate among each other to perform any task related to library by using latest technology. The live examples of such organizations are Oslo university library, the American library and in corporate sector IBM, Google, and Apple.

Why to make a learning organisation

There are various reasons why we need learning organisation as mentioned below:

- To preserve the tacit knowledge of staff
- To update knowledge and expertise of library staff
- To deliver quality services
- To make library a happening place
- For powerful understanding among staff
- For better communication and sharing within organisation
- To setup pleasant environment for exchanging ideas

CREATING LEARNING ORGANISATION

The learning organisation is created by keeping the organisation culture, policies and type of organizational mind. Every library should grow as learning organisation. The following steps come underway in creation of a learning library. Communicate Learning: The awareness of learning & openness in library is necessary to initiate this process. Technology usage generates awareness among people that speeds up this process. Cut Bureaucracy: Building confidence in teams & staff is main core of an organisation to flourish. Let them make their mental model by building their beliefs & values, that how they want to take library towards a learning organisation. Flat Structure: It is important that every employee get chance to put forward their ideas. Collective leadership can always be effective instead of having hierarchical structure. Share Learning: The main hurdle for libraries to become a learning organisation, is lack of sharing of knowledge among their staff.

BUILDING A LEARNING ORGANISATION

Once the base of library is set as learning organisation then efforts should be made to build it upwards. Building learning organizations is difficult and continuous process. To develop it as learning organisation, the leaders need to keep various factors in mind that affects the functions of an organisation. Some of those factors are as follows:

- Learning is informal so a formal training is not enough but informal environment is necessary for the best learning. i.e., formalized informal training like coaching, on-demand training, and performance support tools works instead of whole staff's formal training (Forbes, 2012).
- Promote and award expertise - provide flexibility to do further study and improve their skills. if the staff feel happy will do more work for organisation. The people who prevent staff from improving their skills should be straight away removed from organisation.

- Unease the power of experts - having a experts directory with in organisation is better idea. Allow these experts to share their talents with all other staff. Because everybody feels happy when they are given chance to share their ideas. Make a online platform where any staff can upload their own lectures, talks, and pictures. Where they can talk about library processes, and their experiences effectively.
- Allow people to make mistake - A person who works can only make mistakes. always try to find out what went wrong, Is any training required to stop this in future? Practice, practice and only practice can improve an employees work keep them motivated.

CASE STUDY

To understand the importance and impact of knowledge management in the learning organization, a study of Oslo University Library is conducted. Furthermore an overview oflatest knowledge management tools and strategy is presented for the learning organizations. The details of the study are as follows:

The study aims to manage tacit knowledge effectively to make better learning organizations. Furthermore it has following objectives:

- To explore learning organizations and importance of knowledge management in their improvement;
- To know best practices in managing knowledge by Oslo University Library;
- To get an overview and analyze the present problems and solutions for knowledge management; and
- To plan how to implement new knowledge management model for better learning organizations.

RESEARCH METHODOLOGY

In the current study qualitative approach is used to apply survey and interview methods. As these methods extracts the present situation of knowledge management needs in learning organization. A qualitative analysis of websites, online & offline literature associated with knowledge management is carried out. Unstructured interview method containing open ended questions is used, to interview library director, and to study the nature of learning organizations. The interview was recorded and then its transcript was prepared, to understand every idea on this topic. Based on the literature review,

interview of library director and questionnaires filled by librarians of departmental libraries of Oslo University, several features of knowledge management strategies and initiatives for learning organization is drafted.

OSLO UNIVERSITY LIBRARY

The Oslo University has network of its central library and four other departmental libraries. The library is headed by the library director and departmental libraries are headed by subject librarians. As far as the organizational culture of library is concerned it has two staff cultures. First one is old and experienced staff and secondly, young librarians. Both of them are important. The young one learns from experienced librarians. Sometimes librarian may say don't want to do this;' I have my own way of doing'. It takes time to share everything by young librarians among experienced librarians. It is very hard to realize their responsibilities to them. The coordination between young and old staff is a challenge for knowledge sharing and to library to function as learning organisation. Library has emerged as learning organisation during last five years. Let's find out its journey, to become a learning organisation through managing knowledge.

KNOWLEDGE MANAGEMENT INITIATIVE

Before 2009, the library wasn't organized as staff interaction and communication technology tools were not used. At that time staff use to work for themselves. But then library started using knowledge management tools very effectively. It has helped library to get users satisfaction and library staff started working as a team. Knowledge management is useful to reach library mission goals, but the real challenge to achieve these goals is to make library staff to understand that we are working on same goals and are part of same organisation.

INITIALS REQUIREMENTS

The library needs latest technology and innovative staff with lots of knowledge to manage its staff's tacit knowledge. Knowledge and skills are required for successful library business. Leadership skills are required to make staff feel comfortable to share, to provide them freedom and make them feel responsible and enjoy their work. One requirement is to make them to work as a team. Technology oriented skill are preferably required to keep up the pace with latest trends. A better knowledge of selection process for collection, knowledge of organisation, research areas in place, knowledge of process, teaching methodology and requirements of students is necessary to make a library learning organisation. To keep pace with latest trends a librarian has to be part of digital revolution.

KNOWLEDGE MANAGEMENT SYSTEM DATABASES FOR LIBRARIANS

Talking about knowledge management system databases for librarians, the library does not have it. The staff is more interactive and share things physically through meetings, that's how they share the knowledge and minutes of these meetings are the records which are being uploaded on our inter employees website. They do use blogs and e-mail and phone for contacting among themselves.

Use of Technology

The use of technology provides opportunity to an organisation to become better learning organisation. Use of different software for communication and preservation of knowledge is necessary. Some of the softwares are mentioned below:

1. **Concept Map :** It is a knowledge modelling tool developed by Novak (Novak 1998; Novak and Cañas 2008; Novak and Gowin 1984),that aim to represent knowledge through concepts enclosed in circles or boxes of some types, which are related via connecting lines or propositions. Library staff can draw their problems, solutions of certain issues, different processes through concept map. Please see Annexure 1.
2. **CmapTools :** It is freely downloadable offline software to draw concept maps of various kinds. It is very effective for library staff to manage complex knowledge. Please see Annexure 2.
3. **Best Practices Databases :** A common database containing different best practice should be maintained in library. It could be accessible to all library staff so that they can upload their own practices on regular basis.
4. **Lessons Learned Systems :** Every day staff learn new things and make several mistakes but in this system one can keep record of all lessons experienced by all employees.
5. **Story Telling Circles :**This is one more interesting way to represent the tacit knowledge, by converting the problem in form of story. A circle of staff dealing with similar work can share stories on this database. For example a forum within the organisation could be effective. The stories could be explained by drawing sketches.
6. **Innovative Ideas File:** A file where an employee can keep his/her ideas record. It could be made colourful. It could be maintained online or in print.

IMPLEMENTATION

Implementation of knowledge management system in library with users

Library is together with users. Staff learns from users and users learn from staff. Library gets suggestions from the student on our services. For e.g. some students are working with library to create new application which can be used in library. You can go to book shop and the code of this application will tell you whether this book is available in the library, then you can decide if you need to buy this book or not.

COMMUNICATION

Communication is key factor for an organisation to be best learning organisation. Staff of undertaken library can communicate freely. Firstly the departmental heads take decisions based on their mutual discussions and then they share it and report it to Library Director for her approval. Library of Science Dept. has a common blogand have one website for library staff. Staff have schedule of meetings, news, and agenda of meetings through a software called Lotus. Furthermore some of useful knowledge management tools initiatives are explored below:

Internal Staff Blog

- Share problems facing while working
- Share good achievements

Personal Blog

- Personal experiences on dealing library problems
- Personal notes on searching techniques, DDC, query handling at reception, what is kept where?

But staff doesn't want to share this personal blog or notes with other colleagues.

E-Mail

Collection of e-mails which contain solution or explaining procedure to solve particular problem which particular librarian faced. These e-mails can be kept in a folder.

Library Skills Guide

Log book

A register kept at reception and all employees write their problems, regarding library functioning, roles etc. anything which they want to share with other staff.

Internal websites

Website for employees of library where following is usually mentioned:

- Schedules of meetings
- Roles and duties position wise
- To upload minutes of meetings - Agendas of meetings - budget, services, documentation, courses and administration related topics changes according to situation and need.
- To upload visit reports - seminar, conference, short training courses

Breakfast Meetings maintained on "Frokostmote Om Cristin"- Professional meet - in a week/In couple of weeks' time.To share what we have doing in that week, what sort of problems we faced and what would be solutions.

Lotus notes 8.5 software is used for maintaining the calendar for meetings around the year, in this all employees can see the each other's calendar and can schedule meetings, trainings etc. accordingly.

Guide to Routine works

- What to do after opening library
- What to do before closing library

Training - by experts among library staff

- Library management software
- Training on databases subscribed by library with searching techniques

IT Related Training

- Printers/Scanners/E-Mails/RFID

Reception Tasks

- Query handling/Issue Return of books/Book ordering

OUTPUT

Librarian's efficiency improvement by knowledge management

The library is much more visible now. The staffs of library now work together. As a whole library we are part of faculty line not administrative anymore in the university, which has made a big difference. Now staff can suggest our point of views in front of all faculty members at all levels. Now librarians got more power, responsibility and respect.

Improvement by usage of knowledge management

Library has started organising seminars on interesting topics of our users. Science library has organises seminar on global citizen where experts from world are invited to present a talk for our users. Programs to motivate students to take science to study and research are also organised by our library. Because of our library has collaboration with radio station to telecast lecture services for our users.

Making It Better

Librarians' participation to make collective knowledge
Staffs meet different librarians at conferences and seminars; and keep contact with them. Whenever we feel difficulty in performing any task we write mail or approach them by any other means and ask what they dealt to a particular situation and share their experiences, then staff will not do same mistake and will perform that task more effectively.

Collaboration with other libraries

All departmental libraries hold meetings and share most of the things among each other. They work together to buy books, cataloguing, classification and publicity of libraries etc. This makes this university library a learning organisation as a whole. The library has collaborations with most of the university libraries of Norway, as it has inter library loan facility with them. It also organise collective workshops and training programs for staff with these libraries.

CONCLUSION

Library staff shares their experiences through meetings and lectures among themselves. Staff can present their future plans in way of power point presentation including the strategies and upload in that database. All other libraries can prepare such presentations on future strategies and plans and can share them. The use of many softwares require employees to keep regular eye, check messages every couple of hours, In this busy world it's not possible. The senior staff doesn't have much time to write their experiences in database. As staff make use of personnel & official e-mail, mobile message, phone calls, facebook, library blog, personnel blog, internal staff website etc. in office so sometimes they feel it is not easy to be regular and update on all these systems especially for senior and old librarians who are not much tech savvy. But managing tacit knowledge using various strategies and ways such as lessons learned systems, storytelling circles, Innovative ideas file, best practices database, and knowledge

capturing tools like CMap would be very effective and should be used by all libraries to be great learning organisations,

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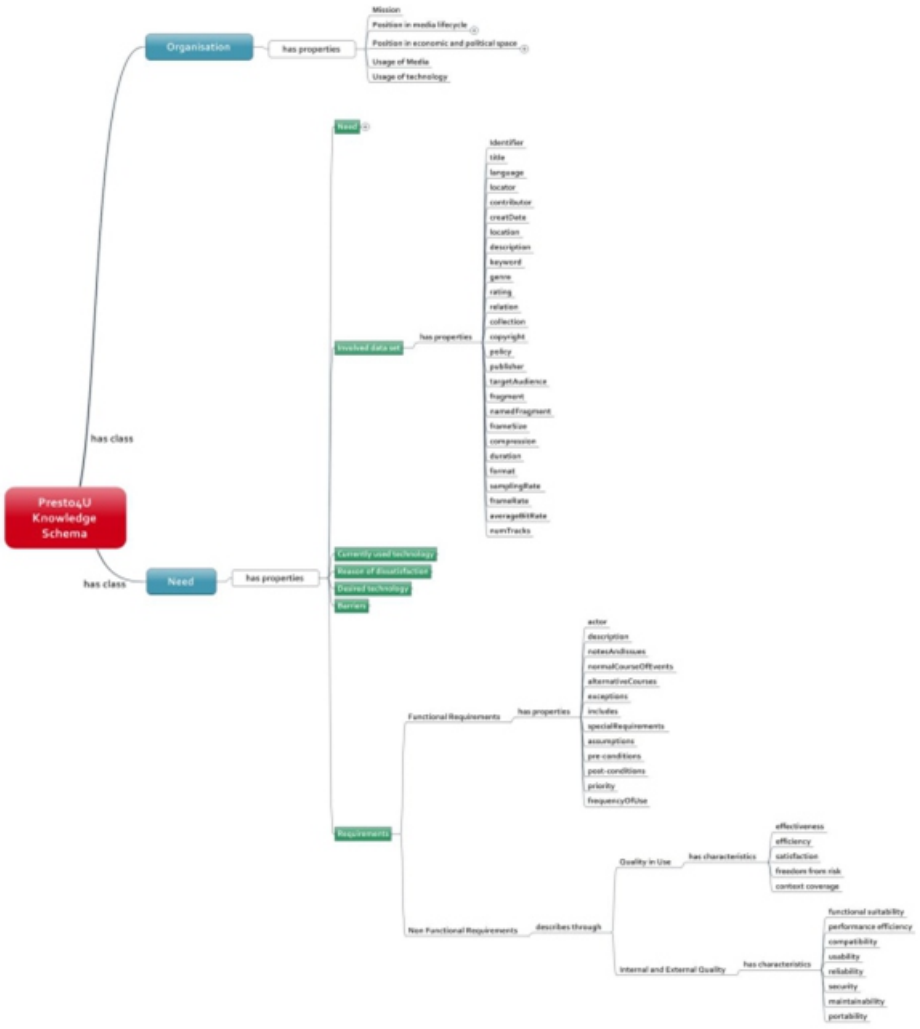
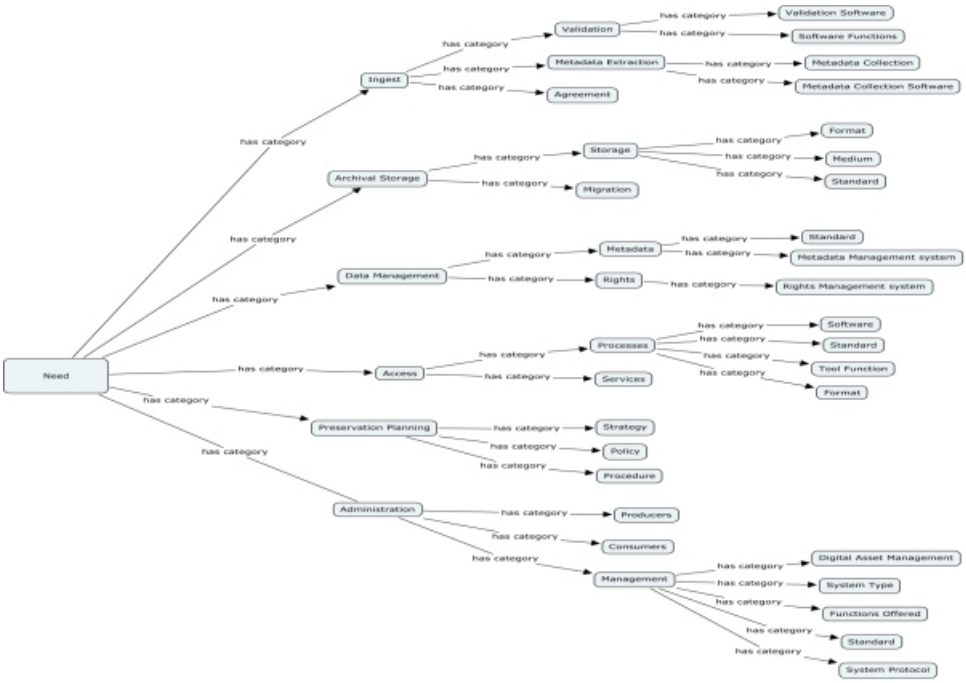
Annexure A: A concept Map prepared using Mindjet



Annexure B: A concept map prepared using Cmap



E-Resource Management in Select University Libraries of Delhi

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ABSTRACT

The present study is an attempt to study the different e-resources present and the current practices related to their acquisition, selection, procurement, collection development policy, preservation and de-selection in the university libraries of Delhi. The study shows that the e-resources acquired by these libraries primarily include e-journals and databases; some libraries also possess videos and CD-DVD's as e-resources and the acquisition of the e-resources is mainly through direct subscription and then providing the link to those resources from library's home page. The basic criteria for selection of e-resources includes the recommendations by subject experts and students that further emphasizes on the language, subject and quality of information provided which forms an important parameter in the Collection Development policy of these libraries. Lack of skilled and trained staff is a major problem that creates hindrance in preservation and management of e-resources. De-selection being a very important aspect and libraries are not aware of what actually it is.

Keywords - E-Resources, E-Journals, E-Databases, University Libraries, Delhi

INTRODUCTION

Advances in technology has influenced the information needs and the seeking behaviour of the users. It has affected the way the users now seek, locate, access and use information. The technological changes have an impact on the manner the information used to be accessed, stored and disseminated both from the users and librarians' point of view.

E-Resources is an umbrella term for all digital resources. Digital information exists in a format that a computer can store data and information, organize, transmit and display it without any intervening conversion process. Electronic resources encompass many genre, formats, and storage and delivery mediums. It is a combination of those resources that are 'born digital' and 'made digital'. So, libraries in India are also moving with the technology and have started acquiring these e-resources that includes indexing and abstracting services, electronic books and serials, electronic databases offered by information aggregators, document delivery services and web sites. Many of these resources may be locally mounted on a library's server or they may be accessed remotely by modem or through direct

Internet connections maintained by the library. The library operations have been greatly influenced by this new category of resources, the method of acquisition to selection and procurement of these resources and then the access to these resources , keeping an eye on their duplication and copyright and licensing as well as preservation and de-selection, all these practices has come into being which was earlier for print.

So, this paper is an attempt to know, what e-resources are comprised by the university libraries in Delhi and how they are storing and managing the access, licensing and copyright of these resources and what steps are being taken for the preservation of this new category of resources.

REVIEW OF LITERATURE

Much of the literature available in this area is dedicated to use and impact of e-resources and the e-resource managements systems developed by different libraries. Very less literature is available related to the current practices in managing e-resources.

Miller said that over the past 20 years, academic collection development specialists have dealt with changes, brought about by decreasing purchasing power and the growing importance of electronic resources. Throughout, collection managers have rethought their efforts and revised criteria for selection of materials in new formats while maintaining traditional collections. This period may provide perspective for dealing with the next stages of change. (Miller, 2000)

Tamar in his paper has described e-resource management as a process as a cycle that comprises of following continuous steps : Discovery, Trial, Selection, Acquisition, Access, Decision to renew or cancel. Discovery is the awareness towards the existence of some resource, the librarian then locating the resource. Trail is trying out an e-resource before deciding whether to purchase it or not. Selection means once the trial is over, the librarian decides whether to acquire the e-resource. Acquisition is the same as in print resources however, an additional level of detail is required, such as license information and information about the availability of the resource to various populations of users. Access is a major issue when you are dealing with e-resources, unlike print holdings. Decision to renew or cancel means that the subscription to a e-resource is typically valid for a defined time period. When the period ends, the librarian needs to decide whether to renew the subscription or cancel it. Furthermore, even after a subscription has been cancelled, the library might have perpetual access or archiving rights to the data, another area that librarians must deal with on an ongoing basis. (Tamar, 2005).

Kennedy has discussed that the library collections are, increasingly, hybrids of print and digital materials. This paper considers whether library collection development policies, whose `golden age' in Australia was in the 1980s and 1990s, are still required for today's hybrid collections. (Kennedy, 2005)
Janet, Matthews and Brady have tried to discuss in his paper the problem many libraries have had with managing collections of electronic resources, i.e. managing disparate pieces of relevant information. Licenses contracts, payment information, and access rights are often recorded in different format media and stored in multiple library departments. Administering this collection of management data is cumbersome and lime consuming. Washington State University Libraries decided to implement an Electronic Resource Management (ERM) system to better manage this information and to better administer their electronic resources. (Janet, Matthews and Brady, 2007)

Arora in his paper discussed various challenges in preservation and different strategies to be followed while preserving digital resources. (Arora, 2009)

Gaur and Tripathi focused on the preservation of the Digital content (of the e- resources) as it is fragile and not durable. Its accessibility and use by future generations depends on technology which very rapidly evolves and changes. Hence, ensuring access of e-resources for future generation of users is a big challenge for libraries. The present paper highlights various problems of digital content and elaborates how digital preservation is more demanding and challenging than preserving print copies of journals. It also gives a bird's eye view of various projects initiated for archiving digital content of scholarly journals.(Gaur & Tripathi, 2012)

Kataria and Ram said that Even after two decades of digital presence in libraries and proliferation of electronic resources (e-resources) in terms of production, acquisition and usage the management of e-resources remains a cumbersome process. The process involved in the management of e-resources has often overwhelmed the library personnel. The life cycle of e-resources, especially in the academic institutions begin with the discovery and identification of the resource and moves on to the trial access, selecting the specific resource from the gamut of other resources followed by acquisition of the specific resource into the library realm and then felicitating access to the users and then the follow-up of studying the usage of the resource for further continuation of those resources. In between these processes there is the cumbersome chore of going through the licensing agreements and keeping the records correct. All these processes are time consuming and involve a lot of work. These relentless arrays of work have made librarians to look for systems which can save their time and energy and provide efficient management of e-resources. This paper looks at the origin of the ERMS (E-resource Management Systems) and the available ERMS in the library digital landscape. (Kataria & Ram, 2013).

Groenewald and Breytenbach investigated the awareness about digital preservation and what must be done towards preserving valuable original digital material. The paper also aims to discuss the use of metadata principles and the implementation of tools for the preservation of documents stored on personal computers.. the author recommended that the digital objects should be archived with metadata about the object and the creation thereof. Metadata need not necessarily be structured and controlled when used by individuals or small groups for preservation of self owned data. The metadata content, however, should describe the object, the method of creation and technologies used in the creation. All changes to the document should be captured in the preservation metadata. Future access to digital content does not only depend on one preservation method but on a sequence of strategies and methods applied to the digital content.(Groenewald and Breytenbach , 2013).

Objectives of the study

The objectives of the study can be summed up as follows-

- To know the various types of e-resources available in select libraries;
- To know the different modes of procurement and acquisition of e-resources.
- To know the various different criteria's for selection of e-resources;
- To assess the existing policy regarding procurement and acquiring the e-resources, collection development, licensing and preservation of e-resources if any; and if not to find the reasons behind it.
- To understand the various aspects of e-resource licensing/terms of use.
- To know how to preserve the e-resources which are expanding exponentially each-day

Scope of the study

The scope of the study is confined to 3 University Libraries of Delhi, namely,

1. Central Library, University of Delhi, Delhi;
2. Central Library, Jawaharlal Nehru University, Delhi;
3. Zakir Hussain Library, Jamia Milia Islamia, Delhi.

The selection of sample was done on the basis of availability of e-resources in these libraries for their users.

METHODOLOGY

The structured questionnaire was designed and selected libraries with respect to their e-resources, infrastructure, finances and library professionals engaged in different activities in different sections of

the library were surveyed. However, a few open-ended questions were also included in order to gather qualitative data related to the subject. The qualitative approach to research was followed as the author has personally visited each library and had individual sessions with the library staff and if need raised taken group discussions based on the questions structured earlier. Some more questions that could come up during the discussions were also included later in the questionnaire.

ANALYSIS AND INTERPRETATION OF DATA

The survey was conducted through a structured questionnaire which was circulated personally among the university libraries. All filled-in questionnaires were collected personally to make the response rate 100 per cent. On the basis of the responses received on various aspects of e-resources collection development and current practices, data of most importance is presented as follows:

PARTICIPATING LIBRARIES.

The Central Library, Jawaharlal Nehru University and Zakir Hussain Library, Jamia Milia Islamia and Central Library, Delhi University were the participating libraries.
These three libraries were selected because of the availability of e-resources in the libraries for the users of the library.

Among these three libraries Zakir Hussain Library of the Jamia Milia Islamia is the oldest established in 1920, there after stands the Central Library, Delhi University established in 1922 and the youngest amongst the three is the Central library, Jawahar Lal Nehru University, being established in 1969.

Among these three libraries, Zakir Hussain Library, Jamia Milia Islamia is the first library with the introduction of e-resources in it for the users in 2002 followed by Central Library, JNU in 2005 and Central Library , DU in 2006.

No Annual Budget.
The following list shows the annual budget allocation for the year 2013-14 of the three libraries :

Central Library, DU	Rs 50,00,000 /-
Central Library, JNU	Rs70,90,000 /-
Dr. Zakir Hussain Library, JMI	Rs 72,80,000 /-

The study shows that apart from the annual budget, there are certain other grants that the libraries receive from UGC or from the government but no special grant is given for the acquisition and management of e-resources. The grants are for the library as a whole, it is the wisdom of the librarian along with the library staff, how they make use of it.

INFRASTRUCTURE OF THE LIBRARY

Infrastructure of library deals with the various resources of the library, like a separate computer lab for accessing e-resources for the users and the library staff for managing the e-resources.

SEPARATE LAB FOR E-RESOURCES

The collected data shows that the 2 libraries among the 3 libraries has separate lab for accessing e-resources. The Central library DU and the Central library, JNU has separate computer labs but Zakir Husain library doesn't.

AVAILABILITY OF LAN FACILITY-

As per the collected data, all the three libraries has LAN facility in their Labs and library.

Server for organizing e-resources.

Another important component in collection management of e-resources is the availability of server for managing the resources.

Table 1 shows that Central Library, DU and Central Library, JNU maintains the server for organization of their e-resources but Zakir Husain Library, JMI does not have a server for the organization of their e-resources.

All these libraries have provided the links to their e-resources on their respective library websites.

The links can be listed as follows :

i.

ii.

iii.

Table 1 : *Server for organizing e-resources*

S.No.	Library	Server for organization of e-resources
1.	Central Library, DU	√
2.	Central Library, DU	√
3.	Zakir Husain Library, JMI	

COLLECTION MANAGEMENT OF E-RESOURCES

Collection Management of E-Resources covers many aspects taking from selection, acquisition, organization, to access, retrieval, preservation, maintenance and weeding.

COLLECTION. E-RESOURCE (OPEN SOURCE)

The data in the Table 2 shows that the availability of different types of e-resources (open source) in the respective libraries.

The Central Library DU has e-journals, e-books, e-databases, e-thesis-dissertation and reference sources online in open sources Whereas Central Library JNU has only e-journals and e-thesis/dissertations in open source and Zakir Husain has e-journals, e-databases and e-thesis/dissertations open source.

Table 2 : E-Resource (Open Source)

Library	E-books	E-Journals	E-databases	E- Thesis/ Dissertation	Reference sources online	others
Central Library, DU	√	√	√	√	√	
Central Library, JNU		√		√		
Zakir Husain Library,JMI		√	√	√		

E-Resources (Subscribed)

Table 3 shows that the Central library, DU subscribes to e-journals, e-magazines, e-databases, e-thesis/Dissertations, Reference sources, Central Library JNU subscribes to e-books, e-journals, e-magazines, e-audio/video, e-databases, e- thesis/dissertations and Zakir Husain Library subscribes only e-journals, e-magazines, e-databases.

Table 3 : E-Resources (Subscribed)

S.No.	Resource Type	Central Library, DU	Central Library, JNu	Zakir Husain Library, JMI
1	E-books		√	
2	E-Journals	√	√	√
3	E-magazines	√	√	√
4	E- audio/ video		√	

5	E- databases	√	√	√
6	E- thesis/ Dissertations	√	√	
7	References sources	√	√	
8	CD-ROMs		√	
9	IR's	√	√	
10	Others (specify)		√	

Other E-Resources.

Table 4 shows that the Central Library DU and Central Library JNU has 3 other types of e-resources also like OPAC, Database Inhouse, IR (Self) and Zakir Husain Library has OPAC and Database Inhouse only.

Table 4 : Other E-Resources.

S.No.	Resources type	Central Library, DU	Central Library, JNU	Zakir Husain Library, JMI
1	OPAC	√	√	√
2	Database Inhouse	√	√	√
3	IR (Self)	√	√	

Collection Development Policy

All the three libraries have their CDP and it is regularly updated.

Coverage of CDP

Table 5 shows that the CDP policy of Central Library DU, and Central Library JNU covers all the necessary 3 aspects i.e. e-resources, their licensing, preservation but the Zakir Husain Library, JMI CDP covers e-resources only and that too in not that much detail.

Need for a CDP policy covering all the three aspects in detail.

Table 5 : Coverage of CDP

S. No.	Library	E-Resources	Licensing of e-resources	Preservation of e-resources
1	Central Library, DU	√	√	√
2	Central Library, JNU	√	√	√
3	Zakir Husain Library, JMI	√		

Separate Staff specially for managing E-Resources

Table 7 shows that the Central Library DU, and Central Library JNU has separate skilled staff for

managing e-resources but Zakir Husain Library does not have specially skilled staff for managing e-resources.

All the 3 libraries conduct training programmes for the staff for enhancing their skills.

Central Library DU organizes "Training the Trainers" Workshop.

Central Library JNU organizes conferences, seminars, workshop on continuos intervals to train their staff eg. On anti- plagiarism etc.

Zakir Husain Library, JMI organizes Workshop on IT, and demos by different e-resource publishers.

Table 7 : Separate staff specially for managing E-Resources

S.No.	Library	Skilled staff for managing e-resources	Conduct training programmes
1	Central Library, DU	√	√
2	Central Library, JNU	√	√
3	Zakir Husain Library, JMI		√

Selection of E-Resources

Tools for Selection of E-Resources

Table 8.1shows that Central Library DU uses the maximum number of tools for selection of e-resources making it 8, then comes Central Library, JNU and Zakir Husain Library, JMI with using 4 tools each for the selection of e-resources.

The most common tools for selection of e-resources in academic library are-

Opinion from experts/Faculty, Trail offered by vendors, Trail offered by publishers, Consortium

Table 8.1 : Tools for Selection of E-Resources

S. No.	Tools	Central Library, DU	Central Library, JNu	Zakir Husain Library, JMI
1	Review in e-journals	√		
2	Observation of other library's resources	√		
3	Publisher's demo in seminars/conferences	√		
4	Opinion from experts/Faculty	√	√	√
5	Enquiry with existing vendors	√		
6	Trail offered by vendors	√	√	√
7	Trail offered by publishers	√	√	√
8	Consortium	√	√	√

Criteria for selection of e-resources

Table 8.2 shows that the Central Library, DU again considers the maximum number of criterion for

selection of e-resources i.e. 11 criterion, then follows Central Library, JNU with following 7 criterion and the last is Zakir Husain Library, JMI with considering 5 criterion for selection of e-resources.

The most common criterion for selection of e-resources can be listed as-

User needs, Publisher Reputation, Full-text availability, Back volumes full text and Peer reviewed articles.

Table 8.2 : Criteria for selection of e-resources

S.No.	Criterion for selection of e-resources	Central Library, DU	Central Library, JNU	Zakir Husain Library, JMI
1	User needs	√	√	√
2	Vendor credibility	√		
3	Publisher Reputation	√		√
4	Technical background of publisher	√		
5	Full text availability	√	√	√
6	Back volumes full text	√	√	√
7	Search capability	√	√	
8	Duplication of existing ones	√	√	
9	Peer reviewed articles	√	√	√
10	Structure of e-resources	√		
11	availability format	√	√	

Procurement of e-resources
Mode of acquiring e-resources

Table 9.1 depicts that the Central Library, DU and Zakir Husain Library, JMI acquires the e-resources from maximum number of modes, as per the data, from 4 different modes, then follows Central Library JNU with using 3 modes.

The most common modes of acquiring e-resources in the library are: Publisher, Vendor and Consortia.

Table 9.1 : Mode of acquiring e-resources

S.NO.	Modes	Central Library, DU	Central Library, JNU	Zakir Husain Library, JMI
1	Publisher	√	√	√
2	Vendor	√	√	√
3	Aggregator	√		√
4	Consortia	√	√	√

Member of Library Consortia.

Table 9.2 shows that all the three libraries are members of Consortia.

JNU ranked 1st with the member of 2 consortia, and then Central Library DU and Zakir Husain Library, JMI with member of 1 consortium i.e. UGC INFONET consortium

Table 9.2 : Member of Library Consortia.

S.No.	Consortia	Central Library, DU	Central Library, JNU	Zakir Husain Library, JMI
1	UGC INFONET	√	√	√
2	INDEST		√	

Acquisition of e-resources

Factors considered while acquiring e-resources

Table 10.1 shows that the Central library again covers all the aspects while acquiring e-resources, ie all 10 aspects. Central library , JNU considers also considers all 10 aspects and Zakir Husain Library, JMI considers 5 aspects.

The important aspects to be covered while acquisition of e-resources are-

Content provided in the resource, Coverage of the subjects, Cost, Reputation, Impact factor, Technical support, Licensing terms and conditions.

Table 10.1: Factors considered while acquiring E-Resources

S.No.	Aspects	Central Library, DU	Central Library, JNu	Zakir Husain Library, JMI
1	Content provided in the resource	√	√	√
2	Coverage of the subjects	√	√	√
3	Frequency of updates	√	√	
4	Cost	√	√	√
5	Search retrieval strategies	√	√	
6	Reputation	√	√	√
7	Impact factor	√	√	
8	Ease of access	√	√	
9	Technical support	√	√	√
10	Licensing terms and conditions	√	√	√

Pricing options

Table 10.2 shows that all the three libraries uses both the types of pricing options, some of their resources are on annual subscription and some on one time purchase policy.

Table 10.2 : Pricing Options

S.No.	Type of product	Central Library, DU	Central Library, JNu	Zakir Husain Library, JMI
1	Annual Subscription	√	√	√
2	One time purchase	√	√	√

Pricing model.

Table 10.3 shows that Central Library, DU and Central Library, JNU both uses Best Pricing for acquiring e-resources but on the other hand Zakir Husain Library, JMI not aware of which pricing option they use.

Table 10.3 : Pricing Model

S.No.	Model	Central Library, DU	Central Library, JNU	Zakir Husain Library, JMI
1	All-you-can-eat			
2	Big Deal			
3	Best Pricing	√	√	_____

Licensing Aspects.

Table 11.1 shows that the Central Library, DU and Central Library, JNU looks after 9 aspects each, while licensing the e-resources. Zakir Husain Library, JMI looks after only 2 aspects while licensing e-resources.

The important aspects to be kept in mind while licensing e-resources are :

Scholarly sharing, Providing e-links, Access to databases, Electronic reserves, Indemnification, Modification in license terms, Archival/back up copy, Cancellation terms.

None of the libraries have Caching as an important point in their licensing aspects.

Table 11.1: Licensing Aspects.

S.No.	Licensing Aspects	Central Library, DU	Central Library, JNU	Zakir Husain Library, JMI
1	Scholarly sharing	√	√	√
2	Caching			
3	Providing e-links	√	√	
4	Access to databases	√	√	√
5	Archival/back up copy	√	√	
6	Making digital copies			
7	Electronic reserves	√	√	√
8	Indemnification	√	√	
9	Modification in license terms	√	√	
10	Archival rights	√		
11	Cancellation terms	√	√	
12	Reimbursement		√	

Nature of Licensing aggrement

Table 11.2 shows that all the three libraries have "Notice Issued Renewal", but yes, Zakir Husain Library, JMI also has Automatic Renewal for some e-resources.

Most preferred way of licensing agreement is Notice Issued Renewal.

Table 11.2 : Nature of Licensing aggrement.

S.No.	Nature	Central Library, DU	Central Library, JNU	Zakir Husain Library, JMI
1	Automatic Renewal			√
2	Notice Issued Renewal	√	√	√
3	Early termination			

Obstacles while dealing with the licensor

Table 11.3 shows that all the three libraries face certain obstacles while dealing with the licensor.

Central Library, DU faces Disparity in bargaining power,
Central Library, JNU feels that the license agreements should be as per the needs of library, and yes disparity in bargaining power.
Zakir Husain Library, JMI feels the same as CL,JNU that the license agreements should be as per the needs of library.

So the common obstacles can be interpreted through data are: Disparity in bargaining power and license agreements to library needs.

Table 11.3 : Obstacles while dealing with the licensor

S. No.	Obstacles	Central Library, DU	Central Library, JNU	Zakir Husain Library, JMI
1	Disparity in bargaining power	√	√	
2	Inflexibility on the part of vendor			
3	license agreements to library needs		√	√
4	Not knowing what to look for			

User Identification.

Table 11.4 shows that all the three libraries use IP address for the identification of their users.
Preferred mode of User Identification : IP address.

Table 11.4: User Identification.

S. No.	Type	Central Library, DU	Central Library, JNU	Zakir Husain Library, JMI
1	IP address	√	√	√
2	Login password			
3	Protocols			

Measures for digital rights management of e-resources.

Table 11.5 shows that the Central Library, DU uses special security measures for keeping track of copyright violation and uses the mechanism provided by database providers to check systematic downloading.

Central Library , JNU and Dr. Zakir Husain Library , JMI uses the anti-plagiarism software i-thenticate.

Table 11.5: Measures for digital rights management of e-resources

S.No.	Measures	Central Library, DU	Central Library, JNU	Dr. Zakir Husain Library, JMI
1	Special security measures	√		
2	Anti-plagiarism software		√	√

Use statistics provided by the vendor

As per the table 11.6, Use statistics is provided by the vendor in all the three libraries. Use statistics is regularly updated too.

In, Central Library, DU, it is delivered online, and in Dr. Zakir Husain Library , JMI in MS-Excel files.

Table 11.6: Use statistics provided by the vendor

Library	Use statistics provided	Updated Regularly	Delivery format
Central Library, DU	√	√	ONLINE
Central Library, JNU	√	√	ONLINE
Zakir Husain Library, JMI	√	√	ONLINE

Management of e-resources

Integration of e-resources

As per the table 12.1, Only Central Library, JNU has linked their e-resources to OPAC and has a digital library collection also, for which they use digital library software also. It uses DSpace Digital Library Software.

Table 12.1 :Integration of e-resources

S.No.	Aspects	Central Library, DU	Central Library, JNU	Zakir Husain Library, JMI
1	Linked e-resources to OPAC		√	
2	Digital library software		√	

Access

As per the table 12.2, All the three libraries has Multi user access and through IP address identification based.

Most preferred means of access is the Multi user access that too IP based.

Table 12.2 : Access

S. No.	Library	Single user	Multi user	IP based	Login password
1	Central Library, DU		√	√	
2	Central Library, JNU		√	√	
3	Zakir Husain Library, JMI			√	

Some other Important aspects for effective collection management of e-resources.

As per the Table 12.3, Central Library, DU covers in total 6 aspects out of 8, Central Library, JNU covers in total 7 aspects out of 8 and Zakir Husain Library, JMI covers in total 3 aspects out of 8.

Aspects common and imptortant for consideration can be listed as : Updates by vendor, Periodical review of e-resources, Feedback from users and Monitor speed of information download.

Table 12.3 : Important aspects for effective collection management of e-resources.

S.No.	Aspects	Central Library, DU	Central Library, JNU	Zakir Husain Library, JMI
1	Updates by vendor	√	√	√
2	Update in OPAC about e-resources		√	
3	Create metadata			
4	Periodical review of e-resources	√	√	√
5	Feedback from users	√	√	√
6	Monitor speed of information download	√	√	
7	Security of e-resources	√	√	

Preservation of e-resources

As per the Table 12.4, All the three libraries uses one or the other technique for preservation of their e-resources. Central Library, DU uses Replication, Digital Archaeology and Analog backups; Central Library, JNU uses Analog backups and Technological preservation and Dr. Zakir Husain Library, JMI uses Replication and Technological preservation.

Table 12.4 : Preservation of e-resources

S.No.	Method	Central Library, DU	Central Library, JNU	Zakir Husain Library, JMI
1	Replication	√		√
2	Migration			
3	Analog backups	√	√	
4	Emulation			
5	Digital Archaeology	√		
6	Technological Preservation		√	√

De-Selection of e-resources

As per the Tabel 12.5, Only Central Library, DU weeds out the e-resources.

Central Library, DU considers following aspects while weeding out of e-resources: Not in circulation since years, Not compatible to existing hardware/ software, Outdated/ inaccurate materials, Duplication of materials, Materials damaged beyond repair.

Table 12.5 : De-Selection of e-resources

S.No.	Criteria	Central Library, DU	Central Library, JNU	Zakir Husain Library, JMI
1	Not in circulation since years	√		
2	Not compatible to existing hardware/ software	√		
3	Outdated/ inaccurate materials	√		
4	Duplication of materials	√		
5	Materials damaged beyond repair	√		

Findings

The results of the present research can be listed as-

1. University libraries possess a hybrid collection of print and electronic resources through direct purchase and through consortia initiatives.
2. The e-resources mainly includes CD's , DVD's, e-books, e-journals and e-databases.
3. Only JNU central library has access to e-books, other has access to traditional e-resources.
4. Indian Universities are on back seat till now in acquiring e-books in their libraries.
5. The reason behind it can be –
   i. Lack of adequate funds
   ii. Lack of Knowledge of the procedures involved.
6. The library's focus on information literacy to their users for more effective and efficient use of e-resources.

7. Library's face certain constraints while dealing with the consortia license providers.
8. Library staff is not aware of the concept of preservation , conservation and de-selection of e-resources. Proper training of the librart staff at regular intervals of the time is the need of the hour.
9. Libraries provide access to e-resources to their users but they don't acquire plagiarism checker software.
10. Libraries provide e-resources but are not stepping towards to have a digital library , they only provide links on the library's website to the different e-resources.

SUGGESTIONS

The following suggestions are applicable to any university library in India, in general, that will increase the utility of e-resources by faculty and research scholars.

1. The University libraries have to redefine their collection management policy giving focus to electronic resources and create a separate electronic resource management section considering the complex licensing agreement process.
2. Staff of University libraries need continuous training in the use of digital library software, organization of E- collections and utilization of software to manage e-resources.
3. Information literacy programmes at basic and advanced level are the need of the hour. The users should be made aware of the do's and dont's of e-resources and the network techniques.

Libraries need to make use of the Web 2.0 and 3.0 tools like Blogs, Portals, Wikis, Podcasting , RSS feeds to market their information resources and services.

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