Exposure on Digitization among Chennai Librarians: A Study

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Abstract

This paper attempts to identify the exposure and awareness of digital library among Librarians in Chennai. The samples were collected through questionnaire methods. Sixty questionnaires were distributed among the selected library professionals working in different environments such as Engineering Colleges and University. Forty seven responses were received. They were analyzed and the same were discussed in this paper.

Keywords

E-Resources, Digitization, Chennai Librarians
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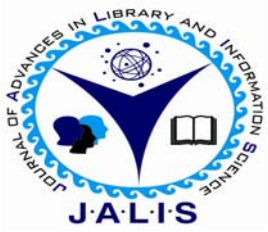

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INTRODUCTION

The digital library denotes different manifestations of offering full-text digital library contents. It continues to be a highly active area for research and development in IT intrinsic library and information discipline. In order to handle a digital library, a professional has to be dynamic and well equipped with relevant knowledge of linking of digital libraries to digital learning environment, knowledge sharing and how to develop course modules. To cope up with the problem, library professional and user needs to acquire detailed knowledge about the digital world are Knowledge of computer; Knowledge of source of electronic information; Knowledge of digitization; Translation skills; Techniques of evaluating the quality of information; Compilation and editing skills and Knowledge of copyright laws and the patent act.

CONCEPT OF DIGITAL LIBRARY

While attempting to define digital library Fox, et.al stress that "To some it simply suggests computerization of traditional libraries. To others, who have studied library science, it calls for carrying out of the functions of libraries in a new way, encompassing new types of information resources; new approaches to acquisition (especially with more sharing and subscription services); new methods of storage and preservation; new approaches to classification and cataloging; new modes of interaction for patrons; more reliance on electronic systems and networks; and dramatic shifts in intellectual organizational, and economic practices" [1].

Cleveland opined "digital libraries are the digital face of traditional libraries" with the following key features [2]:

- Include both digital collections and traditional, fixed media collections encompassing both electronic and paper materials.
- Include digital materials that exist outside the physical and administrative bounds of any one digital library.
- Include all the processes and services (revised and enhanced to accommodate the differences of new digital media) that are the backbone and nervous system of libraries
- Require both the skills of librarians as well as those of computer scientists to be viable.

REVIEW FO LITERATURE

Different approaches to evaluate the success of a Digital Libraries have been studied (e.g. Fuhr et al, [3,4]; Kyrillidou & Giersch, [5]; Saracevic, [6,7]; Saracevic & Covi[8]; Shen[9]; Tsakonas, Kapidakis & Papathendorou [10]) involving users, collection, and systems, aimed at identifying generalizable metrics or context specific methods. All the above studies are based on the system, infrastructure and user.Works such as Goncalves et al [11] and Klas et al.[12] presents standards for Digital Library formats with the goal of recording data for the evaluation of Digital Libraries. These studies give detailed information about system behaviour and access to its services, storing data that indicate critical aspects about user interaction with the Digital Libraries. It seems that the study has not been carried out based on the person who is responsible for organizing and maintaining the Digital Library systems. In this study attempt has been made to evaluate the awareness and method of acquiring of knowledge on the conceptual factors of digital library by the Library and Information Professionals who is responsible for creating and maintaining the digital library.

OBJECTIVES

The major objectives of the study are

- To identify the awareness of various factors of the digital library among the library professionals in Chennai.
- To identify the method of acquiring of knowledge and skills on various factors of the digital library functionalities including e-resources by the library professionals.
- To identify the Criteria of selection for digitizing the document.
- To identify the type of resources preferred for digitization.

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METHODOLOGY

The empirical data were collected through questionnaire methods. Sixty questionnaires were distributed among the sixty library professionals working in different environments such as Engineering Colleges and University in around Chennai. An informal data collection method has also been adopted to identify the reality of their knowledge on digital library. Forty seven responses (78.3%) were received. Among the forty seven respondents, 29 (61.7%) are male; 18 (38.3%) are female, 33 (70.2%) are Librarian; 14 (29.8%) are Assistant Librarian, 10 (21.3%) are below five years experience; 11 (23.4%) between 6-10 years experience; 20 (42.6%) between 11 to 15 years of experience and 6 (12.8%) were above 15 years of experience.

ANALYSIS AND DISCUSSION

The data thus collected has been analyzed using SPSS package. It has been grouped in to following broader categories:

- Criteria for selection of materials for digitization
- Type of e-resources to be digitized
- Level of awareness and mode of learning on e-resources

Criteria for selection of materials for digitization

Criteria for selection of materials for digitization has been analyzed based on five point scale such as "Don't Know", " Not at All Important", "Somewhat Important", "Important", " Very Important" and the same is shown in Table.1.

Table 1: Criteria for Selection of Materials for Digitization

S.No.	Preference	Don't Know	Not at All Important	Somewhat Important	Important	Very Important	WAM	STD. DEVIATION	RANK
1	Academic Important	7(14.9)	9(19.1)	10(21.3)	11(23.4)	10(21.3)	3.17	1.34	5
2	Rare Collection	5(10.6)	9(19.1)	10(21.3)	12(25.5)	11(23.4)	3.32	1.28	3
3	Save Space	6(12.8)	5(10.6)	11(23.4)	14(29.8)	11(23.4)	3.40	1.19	1
4	Preservation	7(14.9)	5(10.6)	10(21.3)	13(27.7)	12(25.5)	3.38	1.22	2
5	Increase Access	9(19.1)	4(8.5)	9(19.1)	14(29.8)	11(23.4)	3.30	1.22	4

Based on WAM ranking were provided. From the table. 1, it can be seen that "Save Space" is the predominant factor for selection of materials for digitization. It is followed by "Preservation "and "Rare Collection".

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Type of e-resources to be digitized

The eleven different types of resources normally used for digitization has been ascertained from the "Librarian" and "Asst. Librarian" Cadre with regard to their preference. Those who have opted for preferred alone taken up and the results are shown in Table 2

Table 2: Types of Resource to be Digitized Vs Designation

S.No.	Types of Resources	Librarian N = 33	Asst. Librarian N = 14	Total N = 47
1	Project Reports	25(53.2)	11(23.4)	36(76.6)
2	Syllabus	25(53.2)	7(14.9)	32(68.1)
3	Question Papers	23(48.9)	11(23.4)	34(72.3)
4	Lab Manual	25(53.2)	7(14.9)	32(68.1)
5	Course Materials	23(48.9)	9(19.1)	32(68.0)
6	Research Articles	26(55.3)	12(25.5)	38(80.8)
7	Gray Literature	19(40.4)	5(10.6)	24(51.0)
8	Manuscript	18(38.3)	2(12.8)	20(51.1)
9	Class Lectures	25(53.2)	11(23.4)	36(76.6)
10	Theses/ Dissertations	25(53.2)	13(27.7)	38(80.9)
11	Eminent Persons Lectures	20(42.6)	12(25.5)	32(68.1)

In over all preferences it can be seen that "Theses/Dissertations" has been given first preference. It is followed by "Research Articles". It seems that "Project Report" and "Class Lectures" have been third preference. The Librarians had given first preference for "Research Articles". "Project Reports"; "Syllabus"; "Lab Manual"; "Class Lectures" and "Theses/Dissertations" are given second preferences. In the Asst. Librarian Level, "Theses/Dissertations" has been given first preference. "Research Articles" and "Eminent Persons Lectures" are given second preference by the Asst. Librarians. The Asst. Librarian has given third preference to "Project reports"; "Question Papers" and "Class Lectures".

This has been further evaluated based on years of experience and the results are shown in Table. 3. "Research Articles" are preferred by all the persons who are less than 5 years of experience. It is followed by 'Question Papers". Third preference are given to "Project Reports, "Theses and Dissertation" and "Eminent Person Lectures". In the case of 6 to 10 years experience "Class Lecturers" are given preference. "Project Reports" and "Syllabus" are given second highest preference. It is followed by 'Course Materials", "Research Articles" and "Theses / Dissertations".

Those who have 11 to 15 years experience opted "Theses / Dissertations" as the first preference. "Project Reports", "Question Papers", "Course Materials" and "Class Lecturers" were given second preference. "Research Articles" are given third preference.

Those who are having above 15 years of experience preferred "Research Articles" and "Lab Manual" as important resources for digitization. "Question Papers" and "Gray literatures" as their second preference. Remaining 7 resources are given as third preference

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Table 3: Types of Resource To Be Digitized Vs Experience

S.No	Type of Resources	Below 5 Years	6 to 10 Years	11 to 15 Years	Above 15 Years	Total
		N = 10	N = 11	N = 20	N = 6	N = 47
1	Project Reports	8(17.0)	9(19.1)	15(31.9)	4(8.5)	36(76.6)
2	Syllabus	7(14.9)	9(19.1)	12(25.5)	4(8.5)	32(68.1)
3	Question Papers	9(19.1)	5(10.6)	15(31.9)	5(10.6)	34(72.3)
4	Lab Manual	7(14.9)	7(14.9)	12(25.5)	6(12.8)	32(68.1)
5	Course Materials	5(10.6)	8(17.0)	15(31.9)	4(8.5)	32(68.1)
6	Research Articles	10(21.3)	8(17.0)	14(29.8)	6(12.8)	38(80.8)
7	Gray Literature	7(14.9)	3(6.4)	9(19.1)	5(10.6)	24(51.0)
8	Manuscript	4(8.5)	6(12.8)	9(19.1)	5(10.6)	20(51.1)
9	Class Lectures	7(14.9)	10(10.6)	15(31.9)	4(8.5)	36(76.6)
10	Theses/ Dissertations	8(17.0)	8(17.0)	18(38.3)	4(8.5)	38(80.9)
11	Eminent Persons Lectures	8(17.0)	7(14.9)	13(27.7)	4(8.5)	32(68.1)

In general, it can be seen that "Theses/Dissertations" and "Research Articles" are given predominance for digitization. It is followed by "Project Reports" and "Class Lectures", for digitization.

Level of awareness and mode of learning on e-resources

The level of awareness and mode of learning of five different e-resources such as "e-books", "e-journals", "e-database", "e-Theses" and " on-line data base" are taken up for the study and the analysis is shown in table- 4.

These factors were further evaluated based on *"Level of Awareness"* and *"Mode of acquiring skills"*.

- The level of awareness were identified based on four point scales such as *"NS – No Skill"; "L – Learning"; "F – Familiar"; "P – Proficient"*.
- The mode of learning based on four point scales such as *"ST – Self Thought; B – Book; LS – Library Seminar; FC – Formal Course"*.

Table 4: Level of Awareness and Mode of Learning On E-Resources

S.No	Description	Level of Awareness (N=47)				Mode of Learning (N=47)			
		NS	L	F	P	ST	B	LS	FC
1	Awareness on E-Books	12 (25.5)	14 (29.8)	11 (23.4)	10 (21.3)	8 (17.0)	10 (21.3)	19 (40.4)	10 (21.3)
2	Awareness on E-Journals	6 (12.8)	15 (31.9)	15 (31.9)	11 (23.4)	9 (19.1)	16 (34.0)	14 (29.8)	8 (17.0)
3	Awareness on E-Databases	9 (19.1)	18 (38.3)	9 (19.1)	11 (23.4)	10 (21.3)	17 (36.2)	11 (23.4)	9 (19.1)
4	Awareness on E- Theses	6 (12.8)	17 (36.2)	14 (29.8)	10 (21.3)	10 (21.3)	10 (21.3)	14 (29.8)	13 (27.7)
5	Awareness on Online Databases	4 (8.5)	17 (36.2)	16 (34.0)	10 (21.3)	12 (25.5)	13 (27.7)	13 (27.7)	9 (19.1)

NS = No Skill, L = Learning, F = Familiar, P = Proficient, ST = Self Thought, B = Book, LS = Library Seminar, FC = Formal Course

More than 50% of the professionals are "Familiar" and "Proficient" on "e-journals", "e-theses" and "Online Databases". "e-database" and "e-books" are preferred less than 50%. Similarly "Library Seminars" and "Formal Courses" are the two methods preferred as "Mode of learning. Less than 45% prefer "Self Thought" and "Books" as mode of learning except on "on-line database".

These factors are further evaluated based on their designation and the results are shown in Table-5 and Table - 6

Table 5: Level of Awareness on E-Resources Vs Designation

S.No	Description	Librarian (N=33)				Asst. Librarian (N=14)			
		NS	L	F	P	NS	L	F	P
1	Awareness on E-Books	7(14.9)	11(23.4)	8(17.0)	7(14.9)	5(10.6)	3(6.4)	3(6.4)	3(6.4)
2	Awareness on E-Journals	6(12.8)	11(23.4)	9(19.1)	7(14.9)	0(0.0)	4(8.5)	612.8)	4(8.5)
3	Awareness on E-Databases	6(12.8)	14(29.8)	6(12.8)	7(14.9)	3(6.4)	4(8.5)	3(6.4)	4(8.5)
4	Awareness on E- Theses	3(6.4)	12(25.5)	8(17.0)	10(21.3)	3(6.4)	5(10.6)	6(12.8)	0(0.0)
5	Awareness on Online Databases	3(6.4)	9(19.1)	14(29.8)	7(14.9)	1(2.1)	8(17.0)	2(4.3)	36.4)

NS = No Skill, L = Learning, F = Familiar, P = Proficient

Table 6: Mode of Learning on E-Resources Vs Designation

S.No	Description	Librarian (N=33)				Asst. Librarian (N=14)			
		ST	B	LS	FC	ST	B	LS	FC
1	Awareness on E-Books	7(14.9)	8(17.0)	14(29.8)	4(8.5)	1(2.1)	2(4.3)	5(10.6)	6(12.8)
2	Awareness on E-Journals	7(14.9)	10(21.3)	11(23.4)	5(10.6)	2(4.3)	6(12.8)	3(6.4)	3(6.4)
3	Awareness on E-Databases	9(19.1)	12(25.5)	7(14.9)	5(10.6)	1(2.1)	5(10.6)	4(8.5)	4(8.5)
4	Awareness on E- Theses	5(10.6)	9(19.1)	10(21.3)	9(19.1)	5(10.6)	1(2.1)	4(8.5)	4(8.5)
5	Awareness on Online Databases	9(19.1)	10(21.3)	9(19.1)	5(10.6)	3(6.4)	3(6.4)	4(8.5)	4(8.5)

ST = Self Thought, B = Book, LS = Library Seminar, FC = Formal Course

It is observed that the professionals are "Familiar" and "Proficient" on "e-journals", "e-theses" and "Online Databases". "e-database" and "e-books" are given secondary preference. "Library Seminars" and "Formal Courses" are the two methods preferred as mode of learning by both "Librarians" and "Asst. Librarians". It is followed by "Self Thought" and "Books" as mode of learning except on "on-line database".

Further the level of awareness and mode of learning on E-Resources has been further evaluated based on number of years of experience. The analysis of data presented in Table 7 and Table 8

Table 7: Level of Awareness on E-Resources Vs Years of Experience

S.No	Description	Below 5 Years (N=10)				6 to 10 Years (N=11)				11-15 Years (N=20)				Above 15 Years (N=6)			
		NS	L	F	P	NS	L	F	P	NS	L	F	P	NS	L	F	P
1	Awareness on E-Books	2 (4.3)	4 (8.5)	3 (6.4)	1 (2.1)	2 (4.3)	2 (4.3)	2 (4.3)	5 (10.6)	6 (12.8)	6 (12.8)	5 (10.6)	3 (6.4)	2 (4.3)	2 (4.3)	1 (2.1)	1 (2.1)
2	Awareness on E-Journals	1 (2.1)	2 (4.3)	6 (12.8)	1 (2.1)	2 (4.3)	5 (10.6)	2 (4.3)	2 (4.3)	3 (6.4)	8 (17.0)	4 (8.5)	5 (10.6)	0 (0.0)	0 (0.0)	3 (6.4)	3 (6.4)
3	Awareness on E-Databases	2 (4.3)	3 (6.4)	1 (2.1)	4 (8.5)	1 (2.1)	4 (8.5)	3 (6.4)	3 (6.4)	4 (8.5)	8 (17.0)	5 (10.6)	3 (6.4)	2 (4.3)	3 (6.4)	0 (0.0)	1 (2.1)
4	Awareness on E- Theses	3 (6.4)	4 (8.5)	3 (6.4)	0 (0.0)	3 (6.4)	5 (10.6)	2 (4.3)	1 (2.1)	0 (0.0)	8 (17.0)	7 (14.9)	5 (10.6)	0 (0.0)	0 (0.0)	2 (4.3)	4 (8.5)
5	Awareness on Online Databases	1 (2.1)	3 (6.4)	4 (8.5)	2 (4.3)	2 (4.3)	2 (4.3)	5 (10.6)	2 (4.3)	0 (0.0)	11 (23.4)	5 (10.6)	4 (8.5)	1 (2.1)	1 (2.1)	2 (4.3)	2 (4.3)

NS = No Skill, L = Learning, F = Familiar, P = Proficient

It can be seen from Table-7 that "Familiar" and "Proficient" on e-resources are directly proportional to number of years of experience. Further it is noted that few of the professionals are having "No Skills" although they have long years of experience.

Table 8: Mode of Learning on E-Resources Vs Years Of Experience

S.No	Description	Below 5 Years (N=10)				6 to 10 Years (N=11)				11-15 Years (N=20)				Above 15 Years (N=6)			
		ST	B	LS	FC	ST	B	LS	FC	ST	B	LS	FC	ST	B	LS	FC
1	Awareness on E-Books	1 (2.1)	1 (2.1)	4 (8.5)	4 (8.5)	2 (4.3)	2 (4.3)	5 (10.6)	2 (4.3)	4 (8.5)	4 (8.5)	8 (17.0)	4 (8.5)	1 (2.1)	3 (6.4)	2 (4.3)	0 (0.0)
2	Awareness on E-Journals	2 (4.3)	5 (10.6)	2 (4.3)	1 (2.1)	2 (4.3)	3 (6.4)	3 (6.4)	3 (6.4)	5 (10.6)	7 (14.9)	5 (10.6)	3 (6.4)	0 (0.0)	1 (2.1)	4 (8.5)	1 (2.1)
3	Awareness on E-Databases	2 (4.3)	3 (6.4)	3 (6.4)	2 (4.3)	4 (8.5)	3 (6.4)	2 (4.3)	2 (4.3)	3 (6.4)	7 (14.9)	6 (12.8)	4 (8.5)	1 (2.1)	4 (8.5)	0 (0.0)	1 (2.1)
4	Awareness on E-Theses	1 (2.1)	2 (4.3)	4 (8.5)	3 (6.4)	2 (4.3)	1 (2.1)	4 (8.5)	4 (8.5)	7 (14.9)	4 (8.5)	4 (8.5)	5 (10.6)	0 (0.0)	3 (6.4)	2 (4.3)	1 (2.1)
5	Awareness on Online Databases	2 (4.3)	4 (8.5)	1 (2.1)	3 (6.4)	5 (10.6)	2 (4.3)	3 (6.4)	1 (2.1)	4 (8.5)	6 (12.8)	6 (12.8)	4 (8.5)	1 (2.1)	1 (2.1)	3 (6.4)	1 (2.1)

ST = Self Thought, B = Book, LS = Library Seminar, FC = Formal Course

"Library Seminars" and "Books" are the major means in mode of learning on e-resources. It can be seen from the table that some of the professionals prefer "Formal Course" for enriching their knowledge on e-resources irrespective of number of years of experience (Table 8).

SUGGESTIONS

- The digital library system, an electronic access service technology, must have the facilities to collect multi-media information such as image, text, voice, audio, portrait, video, TV, software and scientific data. These high value information are to be organised using normal process. Further these information are to be preserved and managed well, to improve knowledge and to provide high speed strides interlink over database on Intranet. At the same time, the system must be a solution to series of problems, such as intellectual property rights, access authority, and data safety. Thus the characteristics of digital library are collecting digitalization, handling with computer, delivery in network, information stores freely; resource share and structure linking up-rization are to be maintained.
- Digital Library must have facility to transfer variety of multi-media information to huge members on the basis of unified standard and normalization, on the bottom of various digital information and on the hold up of the resource warehouse group of distributed huge capacity data, with the intelligence retrieval technology.
- Taking all these perspectives into account it is right time that the Library Information Professional should be dynamic and have relevant knowledge on digital library. Further they must have a fair knowledge on linking digital learning environment, knowledge sharing and to develop course modules.
- It is better to organize extensive training program on digitization aspect. The course should provide working knowledge on format and standards on digital library.
- Special attention may be given on digital library software installation, customization on server and client side

CONCLUSION

Digital Library has came long-way from early digital library development efforts where predominant model was often stand-alone system. Digital Library requires careful planning and development if they are to be achievable in terms of real-time information requirement. There are numerous approaches to make the digital library more accurate and real-time including application of various natures. Digital Library system includes applying various techniques and methods to improve visual presentation, availability, behaviour and location of items/products and services can be effective only if the Library and Information professionals has considerable knowledge and inquisitive for learning the developments that are taking place every day in the domain.

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