# Awareness of the Digital Library among the Library Professionals in Chennai: A Case Study

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Abstract - We are currently witnessing the stone age of digital libraries. As a result, libraries are facing new challenges; new competitors, new demands, new expectations and a variety of information services from users tailored to their wants and needs. This study seeks to examine the Library professionals awareness, concept and experience on Digital Library. Questionnaire method was adopted. Sixty questionnaires were distributed among the selected library professionals working in Engineering Colleges and University in Chennai. Forty seven responses were received. They were analyzed the same were discussed in this article.

Keywords: Digital Library, Awareness, Library Professionals, Case Study & Chennai

#### I. INTRODUCTION

In new-style libraries combining services such as teaching, information technology (IT)facilities and access to academic archives with library services has brought morestudents through the library doors and most importantly has increased the number of resources borrowed (Hewitson, 2002). Digital library is to be 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.

### II, CONCEPT OF DIGITAL LIBRARY

Numerous terms are used by authors to denote the concept of digital libraries. Digital libraries contain diverse information for use by many different users. Digital libraries range in size from tiny to huge. They can use any type of computing equipment and any suitable software. The unifying theme is that information is organized on computers and available over a network, with procedures to select the material in the collections, to organize it, to make it available to users, and to archive it."

According to E.A. Fox the digital library may be defined as the "New way of carrying out the functions of libraries encompassing new types of information resources, new approaches to classification and cataloguing, intensive use of electronic systems and networks and dramatic shifts in intellectual, organizational and electronic practices".

The Associations of Research Libraries (ARL) (1955) has identified five elements common to all definitions of digital library as under.

- 1. The digital library is not a single entity;
- The digital library by requires technology to link resources of many;
- 3. These links are transparent to end-users;
- 4 .Universal access to the digital libraries and information services in the goals; and
- 5. Digital library collections are not limited to document surrogates, but they also include digital artifacts that cannot be represented or distributed in printed formats.

In broad sense digital library is a computerized system that allows users to obtain a coherent means of access to an organized, electronically stored repository of information and data. The digital library is on electronic library consisting of information in the Digital, analog and digitized form.

#### III. RELATED LITERATURE

Digital library Works such as Goncalves et al and Klas et al., 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.

#### IV. OBJECTIVES

The major objectives of the study are:

1. To know the level of awareness of the digital library among the library professionals in Chennai.

2. To identify the mode of learning of the conceptual factors on digital library among the library professionals in Chennai.

#### V. 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 and around Chennai. An informal data collection method has also been adopted to identify the reality of their knowledge on digital library.

#### Scope

The study covers the library professionals working in different environments such as Engineering Colleges and University in around Chennai only.

#### VI. CONCEPTUAL FACTORS

Twelve essential conceptual factors were identified based on literature review and the same has been grouped in to four broad categories such as "storage devices", "data format", "digital library software" and "digital library standards".

More than 50% of library professionals are "familiar and proficient" on "storage" aspect of digital information. The "Mode of Learning" of these skills is also through "books" and "Library Seminar".

With regard to "Formats" of digital data, it can be seen that more than 50% of LIS professionals are having "Familiar" and "Proficient" except in the case of "Meta data". 44.7% of LIS professionals indicated that they do not have any skill on "Meta data" and other 44.7% indicated that they are learning.

TABLE I LEVEL OF AWARENESS AND MODE OF LEARNING ON CONCEPTUAL FACTORS OF DIGITAL LIBRARY

| Group     | S.No | Description                  | Leve   | reness (N= | Mode of Learning (N=47) |        |        |        |        |        |
|-----------|------|------------------------------|--------|------------|-------------------------|--------|--------|--------|--------|--------|
|           |      |                              | NS     | L          | F                       | P      | ST     | В      | LS     | FC     |
| Storage   | 1    | Awareness on Storage         | 3      | 8          | 34                      | 2      | 0      | 29     | 11     | 7      |
|           |      | Devices                      | (4.6)  | (17.0)     | (72.3)                  | (4.3)  | (0.0)  | (61.7) | (23.4) | (14.9) |
|           | 2    | Awareness in Digital Storage | 2      | 8          | 15                      | 22     | 16     | 16     | 10     | 5      |
|           |      |                              | (4.3)  | (17.0)     | (31.9)                  | (46.8) | (34.0) | (34.0) | (21.3) | (10.6) |
|           | 3    | Awareness in Digital Storage | 2      | 14         | 13                      | 18     | 9      | 22     | 13     | 3      |
|           |      | Security                     | (4.3)  | (29.8)     | (27.7)                  | (38.3) | (19.1) | (46.8) | (27.7) | (6.4)  |
| 1         | 4    | Awareness in Graphic         | 5      | 15         | 11                      | 16     | 14     | 16     | 17     | 0      |
|           |      | /Audio Formats               | (10.6) | (31.9)     | (23.4)                  | (34.0) | (29.8) | (34.0) | (36.2) | (0.0)  |
| ma        | 5    | Awareness in Moving Image    | 5      | 9          | 23                      | 10     | 5      | 16     | 9      | 17     |
| Format    |      | formats                      | (10.6) | (19.1)     | (48.9)                  | (21.3) | (10.6) | (34.0) | (19.1) | (36.2) |
|           | 6    | Awareness in Metadata        | 21     | 21         | 5                       | 0      | 13     | 12     | 20     | 2      |
|           |      |                              | (44.7) | (44.7)     | (10.6)                  | (0.0)  | (27.7) | (25.5) | (42.6) | (4.3)  |
|           | 7    | Awareness in Server          | 16     | 9          | 13                      | 9      | 15     | 8      | 13     | 11     |
| ည         |      | Programs                     | (34.0) | (19.1)     | (27.7)                  | (19.1) | (31.9) | (17.0) | (27.7) | (23.4) |
| Software  | 8    | Awareness in Digital Library | 4      | 17         | 9                       | 17     | 10     | 18     | 17     | 2      |
|           |      | Softwares                    | (8.5)  | (36.2)     | (19.1)                  | (36.2) | (21.3) | (38.3) | (36.2) | (4.3)  |
|           | 9    | Awareness in Metadata        | 11     | 10         | 19                      | 7      | 0      | 14     | 23     | 10     |
|           |      | Description                  | (23.4) | (21.3)     | (40.4)                  | (14.9) | (0.0)  | (29.8) | (48.9) | (21.3) |
| Standards | 10   | Awareness in RDF             | 11     | 22         | 11                      | 3      | 4      | 21     | 11     | 11     |
|           |      | Standards                    | (23.4) | (46.8)     | (23.4)                  | (6.4)  | (8.5)  | (44.7) | (23.4) | (23.4) |
|           | 11   | Awareness in Digital Library | 11     | 15         | 16                      | 5      | 11     | 27     | 4      | 5      |
|           |      | Standards                    | (23.4) | (31.9)     | (34.0)                  | (10.6) | (23.4) | (57.4) | (8.5)  | (10.6) |
|           | 12   | Awareness about Standards    | 9      | 8          | 27                      | 3      | 11     | 11     | 19     | 6      |
|           |      | Organization                 | (19.1) | (17.0)     | (57.4)                  | (6.4)  | (23.4) | (23.4) | (40.4) | (12.8) |

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

In relation to "Software", two aspects namely "Awareness on Server Programs" and "Awareness on Digital Library Soft wares" were taken up for the study. 34% of LIS professionals indicated that they do not posses any skill on "Server Program" and 19.1% indicated that they are "Learning". In the case of "Digital Library software", 55.3% indicated that they are "familiar" and "Proficient". "Books" and "Library Seminars" are important resources for "Mode of Learning".

Fair amount of awareness can be seen in the case of "Standards Organization" (63.8%) whereas in the case of "Digital library standards"(55.3%) and "RDF Standards" (70.2%) indicated either "No skill" or "Learning". More than 60% of LIS Professionals depends on the resources such as "Books" and "Library Seminars" for gaining awareness on standards. The levels of awareness of the conceptual factors on digital library have been further compared with the designation and the years of experience. The comparison based on the designation is shown in table 2.

TABLE II LEVEL OF AWARENESS ON CONCEPTUAL FACTORS OF DIGITAL LIBRARY VS. DESIGNATION

| Group     | S.No  | Description                                   |            | Libraria     | n (N=33)     |              | Asst. Librarian (N=14) |             |              |              |  |
|-----------|---|---|------------|--------------|--------------|--------------|------------------------|-------------|--------------|--------------|--|
|           |   |   | NS         | L            | F            | P            | NS                     | L           | F            | P            |  |
| Storage   | 1   | Awareness on<br>Storage Devices               | 3<br>(6.4) | 6<br>(12.8)  | 22<br>(46.8) | 2<br>(4.3)   | 0 (0.0)                | 2<br>(4.3)  | 12<br>(25.5) | 0            |  |
|           |   |   | 0.4)       | 8            | (40.8)       | 20           |                        | 0           |              | (0.0)        |  |
|           | 2   | Awareness in Digital                          | Ü          | -            | _            |              | 2                      | Ü           | 10           |              |  |
| Stc       |   | Storage                                       | (0.0)      | (17.0)       | (10.6)       | (42.6)       | (4.3)                  | (0.0)       | (21.3)       | (4.3)        |  |
|           | 3   | Awareness in Digital                          | 2          | 9            | 11           | 11           | 0                      | 5           | 0            | 5            |  |
|           |   | Storage Security                              | (4.3)      | (19.1)       | (23.4)       | (23.4)       | (0.0)                  | (10.6)      | (0.0)        | (10.6)       |  |
| Format    | 4   | Awareness in<br>Graphic/ Audio<br>Formats     | 3<br>(6.4) | 8<br>(17.0)  | 11<br>(23.4) | 11<br>(23.4) | 2<br>(4.3)             | 7<br>(14.9) | 0 (0.0)      | 5<br>(10.6)  |  |
|           | 5   | Awareness in<br>Moving Image<br>formats       | 0 (0.0)    | 9<br>(19.1)  | 16<br>(34.0) | 8<br>(17.0)  | 5<br>(10.6)            | 9<br>(19.1) | 23<br>(48.9) | 10<br>(21.3) |  |
|           | 6   | Awareness in                                  | 16         | 14           | 3            | 0            | 5                      | 7           | 2            | 0            |  |
|           |   | Metadata                                      | (34.0)     | (29.8)       | (6.4)        | (0.0)        | (10.6)                 | (14.9)      | (4.3)        | (0.0)        |  |
|           | 7   | Awareness in Server                           | 11         | 9            | 11           | 2            | 5                      | 0           | 2            | 7            |  |
| Software  |   | Programs                                      | (23.4)     | (19.1)       | (23.4)       | (4.3)        | (10.6)                 | (0.0)       | (4.3)        | (14.9)       |  |
|           | 8   | Awareness in Digital<br>Library<br>Soft wares | 0 (0.0)    | 12<br>(25.5) | 9 (19.1)     | 12<br>(25.5) | 4<br>(8.5)             | 5 (10.6)    | 0 (0.0)      | 5 (10.6)     |  |
|           | 9   | Awareness in                                  | 10         | 8            | 9            | 6            | 1                      | 2           | 10           | 1            |  |
|           |   | Metadata Standards                            | (21.3)     | (17.0)       | (19.1)       | (12.8)       | (2.1)                  | (4.3)       | (21.3)       | (2.1)        |  |
| Standards | 10  | Awareness in RDF                              | 6          | 15           | 11           | 1            | 5                      | 7           | 0            | 2            |  |
|           |   | Standards                                     | (12.8)     | (31.9)       | (23.4)       | (2.1)        | (10.6)                 | (14.9)      | (0.0)        | (4.3)        |  |
|           | 11  | Awareness in Digital                          | 11         | 15           | 2            | 5            | 0                      | 0           | 14           | 0            |  |
|           |   | Library Standards                             | (23.4)     | (31.9)       | (4.3)        | (10.6)       | (0.0)                  | (0.0)       | (29.8)       | (0.0)        |  |
|           | 12  | Awareness about                               | 2 (4.3)    | 3 (6.4)      | 26<br>(55.3) | 2 (4.3)      | 7<br>(14.9)            | 5 (10.6)    | 1 (2.1)      | 1 (2.1)      |  |
|           | NS - No Skill: I - Learning: F - Familiar: P - Proficient |   |            |              |              |              |                        |             |              | afiaiant     |  |

NS - No Skill; L - Learning; F - Familiar; P - Proficient

#### VII. CONCLUSION

Digital Library is the electronic library, which the information is stored in the digital form. With the advancement and new technology in the field of librarians and information professional must acquire the new skills as networking and web based technologies. DL 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 In Multi-Disciplinary Knowledge and Skills are required if information professionals have to survive. 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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