

Capacity Building for Library Professionals: A Study

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Abstract –

The present study aims to find out need for capacity building which includes requirement of skills, support of electronic infrastructure (hardware/software related content) and relevant training programmes in the university setup. The study also concentrates on the attitudes of library professionals towards ICT applications and capacity building. The outcome of the study shows that capacity building programme is very much needed in the university libraries as the existing skills of the library professionals is deprived. The libraries have got minimum basic infrastructure, majority of the training programmes are undergone by the professionals or after the completion of the education and got the job but having positive attitude towards ICT applications.

Keywords: Capacity building, Skills, Infrastructure, Attitudes, library professionals, librarians, Karnataka, North Karnataka.

I. INTRODUCTION

The present generations are consequently after the electronic information. Every individual is preparing to understand the importance of the electronic information age and are updating themselves with proper training and their knowledge. The paradigm shift of information from print to digital environment has dragged everyone to handle the new tools, technique and technology especially for the library professionals who always serve the needs of the users especially in the university libraries. This has enabled university libraries to undergo proper capacity building (training) programmes for the library professionals.

The capacity building doesn't mean training programs for the individuals in the present electronic environment but capacity building is enhancement of individual's strength with proper infrastructure facilities which support exposure to electronic environment to the staff in the organisations for the effective implementation of electronic information environment, updating of knowledge and of course funding is required.

A. Common Types of Capacity Building

The common types of capacity building are

- i. Information seeking behaviour
- ii. Need assessment
- iii. Resource acquisition
- iv. Media management specifically
- v. Electro ICT
- vi. Licensing and legal aspects
- vii. Access management to e resources
- viii. Information literacy and Internal marketing of information resource

Facilitation of the ICT infrastructure in addition there are content specific skills like e learning, open achieve, library consortia, meta data standards, resources sharing and digital library initiatives.

II. OBJECTIVES

The objective is to study the need for capacity building which includes skills requirement, support of electronic infrastructure (hardware/software related content) and relevant training programmes in the university setup. The study also concentrates on the attitudes of library professionals towards ICT applications and capacity building.

III. METHODOLOGY

The present study has adopted well-structured questionnaire method to collect the information from the respondents. The questionnaire covers all the faces of the topic and is distributed among 40 library staff of selected university libraries of North Karnataka state. Out of which 39 duly filled in questionnaire were collected back and used as chief data for the present work.

IV. STUDY SAMPLE

There are three categories of staff identified in this study

1. Professional library staff: holds qualification of a Master Degree in Library and Information Science;
2. Para-professional staff: This category generally rose through the ranks, who hold diploma in the library science, they constitute the main body of library staff and cannot rise higher than some level in group B; and
3. Supporting Staff: The clerical, secretariat and security staff.

Only first two categories i.e. Professional librarians and Para professional are the main respondents of this study.

V. SCOPE AND LIMITATIONS

The present study is restricted to 39 library staff of the five universities of North Karnataka viz. Karnatak University, Dharwad (KUD), Gulbarga University, Kalaburgi (GUK), University of Agricultural Science, Dharwad (UASD), Kannada University, Hampi (KUH) and Visweshwaraya Technical University, Belagavi (VTU). These universities were established before 2000 and have adequate infrastructure and manpower to carry out study to know the need for capacity building, hardware/software facilities and skills requirement at the university level.

VI. LITERATURE REVIEW

Capacity building improves the knowledge, skills and empowers information professionals in providing quality services to satisfy the information needs of faculty and students in the teaching, research and learning processes (Adu, Appiah&Yamson, 2016). The impact of web based e-learning and teaching environment has influenced every facet of library and information services in academic libraries (Pawar&Kaur, 2015). Librarians required understanding full life-cycle of process in creation, validation, presentation, distribution and application of scholarly information resources in electronic environment. Effective organization of resources in the web and managing internet tools and services requires meeting the information needs of the users (Kumar, Prasad &Lokesh, 2015). There are seven identified aspects - 1) Communication skills 2) Thinking skills and problem solving skills 3) Teamwork force 4) Life-long learning, and information management 5) Innovation development 6) Ethics and professionalism 7) Leadership skills (Sitthisomjin& et. al., 2014).Positive attitude toward the use and implementation of ICT and that knowledge of ICT and training must influence positive attitudes towards ICT (Eguavoen, 2011). Librarians' knowledge in IT, experience in computer use, level of awareness of technologies and updates via ICT training are the key factors impacting their attitudes toward information technology. (Sarkarkar&Kuralkar, 2013)

VII. ANALYSIS AND INTERPRETATION OF DATA

TABLE 1 DISTRIBUTION OF QUESTIONNAIRE

Total Distributed	No. of Respondents	Percentage (%)
40	39	97.50

Out of 40 questionnaires distributed to the library professionals of selected five university libraries 39 duly filled questionnaires were received, thus the resulting into a response rate of 97.50%. After collecting the data from the library professionals, the data is checked and analyzed accordingly for the study.

TABLE 2 NEED FOR CAPACITY BUILDING

Table - 2 represents the need of capacity building in the university libraries. It shows the positive responses of the respondents towards the need for capacity building in the university libraries of North Karnataka state. In addition, the reasons of why capacity building is needed in the university libraries are sought out and the responses are sought based on the survey instrument scale from 'strongly disagree' (1) and 'strongly agree' (5).

Need for Capacity Building	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
To improve staff efficiency	--	1 (02.77)	--	11 (27.78)	27 (69.23)
It serves as motivation for library staff	--	1 (02.77)	--	22 (55.55)	16 (41.67)
It enhances staff productivity	--	1 (02.77)	--	18 (47.22)	20 (51.28)
Brings out the best in library staff for optimum performance	--	1 (02.77)	--	23 (58.33)	15 (38.89)
To be able to cope with changes in library as a result of modern technologies	--	2 (5.56)	2 (5.56)	18 (47.22)	16 (41.67)

Figures in parenthesis indicate percentage (Note: Multiple choices were permitted)

Table – 2 above indicates that as per the combined scores of 'strongly agree' and 'agree', 98.50% respondents have ranked it enhances staff productivity foremost reason for why the capacity building is needed in the university libraries, followed by 97.22% respondents have ranked brings out the best in library staff for optimum performance and it serves as motivation for library staff second, 97.01% respondents have opted to improve staff efficiency reason as third, and finally to be able to cope with changes in library as a result of modern technologies 88.89% have ranked last in the reasons.

From the above table it is clear that capacity building enhances staff productivity, brings out optimum performance, improves staff efficiency, serves as motivation for library staff, enables to cope with changes in library as a result of modern technologies, Negative or neutral response is insignificant i.e. less than 10.00%. Hence, the capacity building is needed in the university libraries.

TABLE 3 DETAILS OF THE SELECTED UNIVERSITY LIBRARIES

The analysis of the data given below in the Table 3 is concerning about the 05 state university libraries of North Karnataka state. The data is collected through the well-structured questionnaire, supplemented by interviews of Librarians to gather additional information. This survey is to compare the facilities available in the University libraries which are studied under library collection, details of hardware and software used, details of library automation, networking facilities.

Particulars	KUD	GUK	UASD	KUH	VTU
Year of Establishment of the University	1949	1980	1986	1992	1999
COLLECTIONS					
Total No. of Books	4,00,000+	2,27,831	1,61,033	45,000	--
Total No. of Print Journals (National and International)	300+	654	362	37	273
Bound Volumes	46,361	--	14,244	7,467	--
Theses/Dissertations	8,223	5,800	3,800+	--	--
CD/DVD	--	--	2785	10	--
E-Books	428	2501	46	--	--
E-Journals	10,000+	12,000	1,058	--	8,500+
Desktops	86	120	60	5	70
HARDWARE FACILITIES					
Server Machines	1	3	1	1	1
Client Workstations	--	1	--	--	--
Laptops	--	30	3	2	--
Printers (Ink Jet/Dot matrix/Laser/)	7	6	5	3	5
Barcode printer	--	1	--	1	--
Scanner (Duplex/Flatbed/Overhead)	2	2	3	1	2
UPS	5	--	1	2	5
SOFTWARE FACILITIES					
Operating System	Windows	Windows/ Linux	Windows	Windows	Windows
Database management	My SQL	My SQL	--	SQL server	MS-Access
Links with network	INFLIBNET	INFLIBNET	Krishkosh	--	VTU Consortium
Antivirus	Quick Heal	Quick Heal		Quick Heal	Quick Heal
INTERNET FACILITIES					
Connectivity	V-SAT, Leased line	Leased line	Leased line	Leased line	Leased line
Service Provider	BSNL, ERNET India	ERNET India	BSNL	BSNL, ERNET India	BSNL
Bandwidth	2 Mbps	2 Mbps	--	--	--
Internet facility	Yes	Yes	Yes	No	Yes
Library Website	Yes	Yes	Yes	No	Yes
Campus LAN	Yes	Yes	Yes	Yes	Yes
Library LAN	Yes	Yes	Yes	Yes	Yes
AUTOMATION DETAILS					
Year of starting Automation	2011	2001	--	--	2012
Library Management	Koha	Koha	SLIM21	--	NewGenLib
Digital Management	--	D-Space	-	--	--

From the above Table 3 it is clear that the collections (such as books, journals, thesis, dissertations, e-resources etc.) in the university libraries depend upon the age of the university. The majority of the university libraries are using Microsoft Windows Operating System whereas Gulbarga University library is also using Linux operating system. The common database management software used are MY SQL and SQL server. However, for the data security the antivirus

used is Quick Heal in all the selected university libraries. All the university libraries have one or the other library management software and are using for the following functions viz. Database creation, Circulation, Acquisition, Cataloguing, Serials Control, OPAC, Barcode Generation and Digitization of document. All the universities are having BSNL and ERNET as internet service provider which are leased line connectivity. The university libraries are having LAN facilities providing internet and e-journal services to its users through LAN and terminals. Web OPAC is the common service to all University libraries. Almost all the institutions are fairly good in hardware facilities like enough number of desktops, server machines, client workstations, inkjet/dot matrix/laser printers, scanners, and sufficient number of UPS. However, some of the hardware facilities are not used well, these infrastructures are not maintained well. Majority of the university libraries are having separate library website except Kannada University, Hampi.

It is clear from table 3 that majority of the university libraries have the basic infrastructure facilities like campus network (LAN), computers, connectivity to internet for libraries and library automation softwares where as to manage electronic resources there are no technology for Electronic Resource Management System (ERMS). Also there are many technologies (e.g. discovery tools) which traditional libraries cannot afford to procure.

TABLE 4 PREFERENCE GIVEN FOR THE TRAINING PROGRAMMES PROVIDED BY THE UNIVERSITY LIBRARY FOR THE LIBRARY STAFF

The participant's (n=05) preference in order of the ranks given by them between rank 1 (most preferred) and rank 3 (least preferred) to each of the training programmes specified in the list provided in the survey instrument as illustrated in the table below.

Training Programmes	Preferences of Librarians		
	1st	2nd	3rd
Library standards and practices	2 (40.00)	3 (60.00)	--
Information Technology	2 (40.00)	2 (40.00)	1 (20.00)
Management techniques/tools	1 (20.00)	3 (60.00)	--
Teaching and Learning	3 (60.00)	2 (40.00)	--
Library Consortium	3 (60.00)	2 (40.00)	--
Digital Library	2 (40.00)	3 (60.00)	--
Institutional Repositories	2 (40.00)	3 (60.00)	--

Figures in parenthesis indicate percentage

Table - 4 shows the top ranked training programmes for the library professionals from the combined scores of 'Rank 1' and 'Rank 2' preferences given by the librarians. All the respondents i.e. 100.00% of the librarians have preferred library standards and practices, teaching and learning, Library consortium 'digital library' and institutional repositories to be ranked foremost training programmes, followed by 80.00% participants prefer 'information technology' and management techniques/tools programmes.

The training programmes provided by the university library for the library professionals are library standards and practices, digital library, management techniques/tools, teaching and learning, library consortium Institutional repositories and Information Technology.

TABLE 5 ORGANISATION OF CAPACITY-BUILDING PROGRAM/S IN A YEAR

The periodicity in organising the capacity building programmes by the university libraries is shown in the Table

- 5.

Periodicity	No of librarians	% of librarians
Twice a year	1	20.00
More than twice a year	--	--
Bi-monthly	--	--
Monthly	--	--
When need arises	4	80.00
Total	5	100.00

The table reveals that the organisation of capacity building programs in a year shows that almost all the university libraries i.e. 80.00% conduct capacity building program when need arises and around 20.00% universities organise capacity building program twice a year.

The results of the above table indicate that almost all the university libraries conduct capacity building program only 'when need arises'

TABLE 6 EFFECTS OF CAPACITY BUILDING PROGRAMME

Table – 6 summarizes the effect of capacity building programmes in university libraries

Effects	Male n=23	Female n=16	Total n=39
It improves employee skills and knowledge	14 (60.87)	06 (37.50)	20 (51.28)
It improves quality of services to patrons	14 (60.87)	07 (43.75)	21 (53.85)
It facilitates control of overhead expenses	14 (60.87)	06 (37.50)	20 (51.28)
It improves employee's IT skills	16 (69.57)	05 (31.25)	21 (53.85)
It improves confidence in handling e-resources	16 (69.57)	05 (31.25)	21 (53.85)

Figures in parenthesis indicate percentage (Note: Multiple choices were permitted)

The table explains that 53.85% respondents affirmed that it improves quality of services to patrons, employee's IT skills, confidence in handling e-resources, 51.28% respondents said it improves employee skills and knowledge and facilitates control of overhead expenses. This makes capacity building programmes provision inevitable.

It is observed from the table that capacity building programmes in the university libraries improves employee's confidence in handling e-resources, IT skills and knowledge.

TABLE 7 DISTRIBUTION OF ARTICLES PUBLISHED IN JOURNALS AND BOOKS/SEMINARS/CONFERENCES

In addition to attending the various capacity building programmes the professionals have to write articles on the various aspects so as to keep them up to date about the latest trends in the libraries. Hence, here with help of the Table 7 the researcher has tried to show how the professionals and semi-professionals are involved in updating themselves about the development of libraries and its latest tools and techniques.

Publications	Journals	Books/Seminars/ Conferences
Male	16(69.57)	17(73.91)
Female	09(56.25)	14(87.50)
Total	25(64.10)	31(79.49)

Figures in parenthesis indicate percentage

It is observed from the Table –7 that the publications of articles in journals are good in number i.e. around 64.10% articles are being published in the journals out of which the male professionals have published 69.57% articles and female professionals have published 56.25% articles in the journals. Similarly, the publications of book/seminars/conference articles are also in good quality with total publications of 79.49% out of which male professionals have published 73.91% articles and 87.50% articles by female professionals. In both the case male professionals have dominated the female professionals.

TABLE 8 WAYS OF IMPROVING CAPACITY BUILDING PROGRAMME

Table - 8 shows the responses of the participants for the ways to improve the Capacity Building Programme (CEP) in the university libraries of Karnatak state. Based on the five-point scale (1) for not at all important and (5) for the most important the responses are sougnd out.

Ways of improving capacity building	Not at all Important	Not Important	Neutral	Important	Most Important
Adequate funding for capacity building programmes	--	--	--	16 (41.03)	23 (58.97)
Frequent organisation of capacity building programmes	--	--	--	23 (58.97)	16 (41.03)
Capacity building programmes must be free of sentiments	--	--	--	22 (56.41)	17 (43.59)
Must be available to all categories of staff (junior, senior academic library)	1 (02.56)	--	--	18 (46.15)	20 (51.28)
Deploy/introduce modern information technology	--	1 (02.56)	2 (05.13)	23 (58.97)	13 (33.33)

Figures in parenthesis indicate percentage (Note: Multiple choices were permitted)

Table - 8 clearly indicates ways of improving the capacity building with the combined scores of 'important' and 'most important'. The above table shows that 100.00% of the respondents indicate capacity building must be adequately funded, must be frequently organised and must be free of sentiments (i.e. Personal problems away from bias) as the reasons to improve the CEPs, followed by 97.43% respondents indicate capacity building must be available to all categories of staff (junior, senior academic library) and 92.30% respondents indicate capacity building must deploy/introduce modern information technology to improve the capacity building programmes.

The table clearly enlightens that adequate funding for capacity building programmes, frequent organisation of capacity building programmes, capacity building programmes must be free of sentiments are the ways of improving capacity building.

TABLE 9 PROFESSIONAL ASSOCIATED TO PROFESSIONAL ASSOCIATIONS HAVING ANNUAL/LIFE MEMBERSHIP

Professional Association	Male (n=23)	Female (n=16)	Total (n=39)
KALA	17 (73.91)	11 (68.75)	28 (71.79)
KSCLA	01 (04.35)	--	01 (02.56)
IFLA	02 (08.70)	01 (06.25)	03 (07.69)
IATLIS	03 (13.04)	02 (12.50)	05 (12.82)
IASLIC	05 (21.74)	01 (06.25)	06 (15.38)
ILA	10 (43.48)	08 (50.0)	18 (46.15)
SRELS	02 (08.70)	01 (06.25)	03 (07.69)
KHSLA	02 (08.70)	02 (12.50)	04 (07.19)

Figures in parenthesis indicate percentage (Note: Multiple choices were permitted)

Table - 9 shows the membership in the professional associations of the respondents. Majority of the respondents i.e. 71.79% are associated with Karnataka Library Association (KALA) professional association; followed by 46.15% of the respondents associated with Indian Library Association (ILA). However, the 15.38% of respondents are members Indian Association of Special Libraries and Information Centers (IASLIC), 12.82% respondents are members of Indian Association of Teachers of Library and Information Science (IATLIS), 07.69% respondents are members of International Federation of Library Associations and Institutions (IFLA) and SharadaRanganathan Endowment for Library Science (SRELS), 07.19% respondents are members of Karnataka Health Science Library Association (KHSLA).

The table explains that majority of the professionals are associated to Karnataka Library Association (KALA) and Indian Library Association (ILA) Professional Associations and very less participation in the international association.

TABLE 10 PREFERENCES TO ACCESS ELECTRONIC INFORMATION RESOURCES (EIR)

Table - 10 shows the responses of the participants as which source of electronic information resources they prefer to access the requisite information.

E-Information Resources (n=39)	Least Preferred	Less Preferred	Somewhat Preferred	Preferred	Most Preferred
Search Engines	01 (02.56)	01 (02.56)	02 (05.13)	13 (33.33)	23 (58.97)
Library website	01 (02.56)	01 (02.56)	05 (12.82)	15 (38.46)	18 (46.15)
Web OPACs	--	01 (02.56)	07 (17.95)	15 (38.46)	16 (41.03)
E-Books	--	01 (02.56)	09 (23.08)	17 (43.59)	12 (30.77)
Online Journals	--	--	03 (07.69)	16 (41.03)	20 (51.28)
Online databases	--	02 (05.13)	06 (15.38)	16 (41.03)	15 (38.46)
Email list serves	--	03 (07.69)	06 (15.38)	19 (48.72)	11 (28.21)

Institutional Repositories	01 (02.56)	01 (02.56)	07 (17.95)	17 (43.59)	13 (33.33)
Library networks	01 (02.56)	01 (02.56)	07 (17.95)	18 (46.15)	12 (30.77)

Figures in parenthesis indicate percentage (Note: Multiple choices were permitted)

On a five-point scale (1 for the least preferred and 5 for the most preferred), on the combined scores of preferred and most preferred, Table – 10 clearly indicates that the respondents of 92.31% are preferring online journals 92.30% prefer search engines, 84.61% prefer library websites, followed 79.49% respondents are preferring Web OPACs and Online databases, 76.93% respondents prefer email list serves 76.92% prefer institutional repositories and library networks and finally 74.36% respondents are preferring e-books to access the requisite information.

Most professionals have preferred online journals, search engines and online databases as the source for electronic information resources to access the requisite information.

TABLE 11 PREFERENCES GIVEN FOR THE ATTITUDE TOWARDS ATTENDING THE CONTINUING EDUCATION PROGRAMMES (CEPS)

Table - 11 shows the respondents rating for the attitudes towards the Continuing Education Programmes (CEPs).

Education Programmes (n=39)	Least Preferred	Less Preferred	Somewhat Preferred	Preferred	Most Preferred
Conference Attendance: Institution sponsored	--	--	--	07 (17.95)	32 (82.05)
Conference attendance: Self sponsored	--	--	01 (02.56)	34 (87.18)	04 (10.26)
Workshop participation: Institution sponsored	--	--	--	12 (30.76)	27 (69.23)
Workshop participation: Self sponsored	--	--	01 (02.56)	22 (56.41)	16 (41.03)
Refresher courses/ Orientation courses	--	--	--	25 (64.10)	14 (35.90)
In-house training programmes/Workshops	--	05 (12.82)	08 (20.51)	23 (58.97)	03 (07.69)

Figures in parenthesis indicate percentage (Note: Multiple choices were permitted)

On a five-point scale (1 for the least preferred and 5 for the most preferred), on the combined scores of preferred and most preferred, Table - 11 clearly indicates that 100.00% of the respondents prefer to improve attitude towards the Continuing Educational Programmes (CEPs) by attending Conference: Institution sponsored and Refresher courses/ Orientation courses, followed by 99.99% respondents prefer Workshop: Institution sponsored, 97.44% prefer Conference: Self sponsored and Workshop: Self sponsored and In house training programmes/Workshops are prefer by 65.88% respondents to attend CEPs and to develop attitude in themselves.

It is clearly seen from the above table that institutions must sponsor and encourage more for the training programmes of the library professionals by directing them to attend Conference, Workshop, Refresher courses/ Orientation courses, Conference attendance: Self sponsored and Workshop participation: Self sponsored, whereas In-house training programmes/Workshops must be carried out regularly by the university libraries.

TABLE 12 REASONS FOR ATTENDING THE CONTINUING EDUCATION PROGRAMMES (CEPS)

Table - 12 reveals the reasons why library professionals are attending the Continuing Education Programmes (CEPs).

Reasons (n=39)	Male (n=23)	Female (n=16)	Total (n=39)
To acquire new skills	35 (89.74)	37 (94.87)	36 (92.31)
To update knowledge or basic education	32 (82.05)	31 (79.49)	32 (82.05)
To get trained in the latest technologies	31 (79.49)	32 (82.05)	31 (79.49)
To improve library services	26 (66.67)	24 (61.54)	25 (64.10)
To train junior staff	17	20	25

	(43.59)	(51.28)	(46.15)
To improve relations with fellow professionals	21 (53.85)	20 (51.28)	21 (53.85)
It is mandatory for promotion	17 (43.59)	18 (46.15)	18 (46.15)

Figures in parenthesis indicate percentage (Note: Multiple choices were permitted)

From Table - 12 it is observed that 92.31% participants want to attend CEPs to acquire new skills, followed by 82.05% respondents attend to update knowledge or basic education, 79.49% attend to get trained in the latest technologies, while 64.10% respondents attend to improve library service and train junior staff, followed by 53.85% respondents attending to improve relations with fellow professionals and 46.15% attend because of it is mandatory for promotion.

The table reveals that majority of the participant's response for the reasons that they attend Continuing Education Programmes (CEPs) to acquire new skills, to update knowledge or basic education and to get trained in the latest technologies.

TABLE 13 CONTRIBUTION OF CONTINUING EDUCATION PROGRAMMES (CEPS) IN UPDATING THE SKILLS

Table - 13 explains to what extent CEPs have contributed the participants in updating their skills after the attending the CEPs.

CEPs contribution	Male (n=23)	Female (n=16)	Total (n=39)
To some extent	13 (56.52)	10 (62.50)	23 (58.97)
To a great extent	08 (34.78)	06 (37.50)	14 (35.90)
Not at all	01 (04.35)	--	01 (02.56)
Not applicable	01 (04.35)	--	01 (02.56)
Total	23 (100.00)	16 (100.00)	39 (100.00)

Figures in parenthesis indicate percentage

Table - 13 highlights that about 58.97% respondent's consent that they have updated their skills to some extent after attending the Continuing Education Programmes (CEPs), followed 35.90% respondents have updated their skills to a great extent.

Hence, from the above table indicates that majority of the library professionals are keen to update their skills/knowledge to cope with the latest technology, tools and techniques that are emerging in the present digital environment. It also explains that a positive competition is being developed among the co-workers of the university libraries.

TABLE 14 TOPICS OF CURRENT INTEREST OF WHICH CEP COURSES ARE TO BE ORGANIZED AT THE UNIVERSITY LEVEL

In response to the question to what extent do you agree or disagree that the topics of the current interest on which CEP courses are to be organised at the university level? The responses of the respondents are illustrated in Table - 14.

Topics (n=39)	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Use of modern technologies in the libraries	--	--	--	18 (46.15)	21 (53.85)
Computer application	--	--	01 (02.56)	18 (46.15)	20 (51.28)
Library automation	--	--	01 (02.56)	11 (28.21)	27 (69.23)
Application of IT	--	--	01 (02.56)	20 (51.28)	18 (46.15)
Refresher courses in LIS	--	--	01 (02.56)	21 (53.85)	17 (43.59)
Networking	--	01 (02.56)	01 (02.56)	07 (17.95)	30 (76.92)

Library management	--	02 (05.13)	01 (02.56)	20 (51.28)	17 (43.59)
Internet	--	--	01 (02.56)	15 (38.46)	23 (58.97)
Latest LIS softwares	--	--	--	09 (23.07)	30 (76.92)
Database Management	--	01 (02.56)	03 (07.69)	20 (51.28)	15 (38.46)
Multimedia	--	01 (02.56)	04 (10.25)	16 (41.03)	18 (46.15)
Distributed information services	--	01 (02.56)	03 (07.69)	19 (48.71)	16 (41.03)
Reference services	--	02 (05.13)	03 (07.69)	17 (43.59)	17 (43.59)

Figures in parenthesis indicate percentage (Note: Multiple choices were permitted)

Table - 14 indicates those as per the combined scores of 'agree' and 'strongly agree', 100.00% of the respondents agree use of modern technologies in the libraries should be organized at the university level, 99.99% respondents want to organize CEP on the topic Latest LIS softwares, followed by 97.43% respondents want to have the topics on Library automation, Refresher courses in LIS, application of IT and internet. Further, 94.87% respondents are interested in CEPs with topics on Networking and Library Management while 89.74% of the respondents want the topics on database management and distributed information services and finally 87.18% respondents want to attend the CEPs with the topics Multimedia and reference services.

The above discussion clearly indicates that the majority of the library professionals agreed to attend the CEPs with topics having Use of modern technologies in the libraries, Library automation, Latest LIS softwares, Application of IT, Networking, Refresher courses in LIS and Library management because they want to keep them updated to the present electronic information environment through the above mentioned topics of CEPs.

TABLE 15 PREFERENCES OF TRADITIONAL SKILLS REQUIRED IN THE PRESENT UNIVERSITY LIBRARIES

The traditional skills have a unique significance even after the emergence of the new and the latest technologies into the libraries. Here the respondents are highlighting which are the traditional skills that have to be retained even after the introduction of the new Information Communication Technology (ICT) applications and tools into the library.

Traditional skills (n=39)	Preferences		
	1st	2nd	3rd
Indexing	21 (53.85)	10 (25.64)	08 (20.51)
Cataloguing	12 (30.77)	11 (28.21)	16 (41.03)
Marc (Machine Readable Catalogue)	18 (46.15)	08 (20.51)	13 (33.33)
Classification	13 (33.33)	14 (35.90)	12 (30.77)
Customer Service	20 (51.28)	10 (25.64)	09 (23.08)
Information Handling	21 (53.85)	10 (25.64)	08 (20.51)

Figures in parenthesis indicate percentage (Note: Multiple choices were permitted)

The participant's preference (n=39) in order of the ranks given by them between rank 1 (most preferred) and rank 3 (least preferred) to each of the traditional skills specified in the list provided in the survey instrument is illustrated in the Table - 15. The tabulated states that 79.49% of the respondents prefer Indexing and information handling traditional skills have to be retained in the present electronic information environment, followed by 76.92% respondents want to retain customer service, 69.23% respondents prefer classification skills, 66.66% respondents want MARC (Machine Readable Catalogue) skills to be retained and finally 58.98% respondents want to hold on cataloguing skills as the traditional skills in the present digital environment.

From the above table the library professionals prefer to have traditional skills like Indexing, Information handling and Machine Readable Catalogue (MARC) in the present electronic information environment.

A. Various Skills Required for the Better Performance of Job Assigned

The digital environment requires ICT applications and to handle these applications, efficient and skilled professionals are required to perform the job assigned to them. Hence, the below mentioned tables are showing various such skills through which the university library professionals adopt and show the performance in their respective

job. These are broadly classified into different categories like Professional skills, Management skills, Information Technology (IT) skills, Communication skills and Learning and Teaching skills.

TABLE 16 PREFERENCES OF PROFESSIONAL SKILLS IN ORDER TO PERFORM BETTER IN JOB

The participant's preference (n=39) in order of the ranks given by them between rank 1 (most preferred) and rank 3 (least preferred) to each of the professional skills specified in the list provided in the survey instrument is illustrated in the table below.

Professional Skills(n=39)	Preferences		
	1st	2nd	3rd
Reference service	27 (69.23)	10 (25.64)	02 (05.13)
Information Organisation	23 (58.97)	09 (23.07)	07 (17.95)
Collection Development	25 (64.10)	09 (23.07)	05 (12.82)
Abstracting	18 (46.15)	06 (15.39)	15 (38.46)
Conservation and Preservation	19 (48.72)	07 (17.95)	13 (33.33)
Professional development	20 (51.28)	07 (17.95)	12 (30.77)
Information services for disable persons	18 (46.15)	07 (17.95)	14 (35.90)
User need analysis	23 (58.97)	08 (20.51)	08 (20.51)
Knowledge Management	24 (61.54)	09 (23.08)	06 (15.39)
Subject Knowledge	21 (53.85)	08 (20.51)	10 (25.64)
Cataloguing skills	21 (53.85)	08 (20.51)	10 (25.64)
Acquisition	20 (51.28)	08 (20.51)	11 (28.21)
Customer service	18 (46.15)	06 (15.39)	15 (38.46)

Figures in parenthesis indicate percentage (Note: Multiple choices were permitted)

Table - 16 shows the top ranked skills among the professional skills category from the combined scores of 'Rank 1' and 'Rank 2' preferences given by the participants, majority of the participants i.e. 94.87% have preferred Reference service skills followed by 87.17% participants prefer Collection Development skills and 84.62% respondents prefer Knowledge management skills as the important professional skills for the electronic information environment.

TABLE 17 PREFERENCES OF MANAGEMENT SKILLS IN ORDER TO PERFORM BETTER IN JOB

The participant's preference (n=39) in order of the ranks given by them between rank 1 (most preferred) and rank 3 (least preferred) to each of the management skills specified in the list provided in the survey instrument is illustrated in the table below.

Management Skills (n=39)	Preferences		
	1st	2nd	3rd
Personnel management	24 (61.54)	09 (23.08)	06 (15.38)
Leadership	22 (56.41)	08 (20.51)	09 (23.08)
Creative thinking	24 (61.54)	08 (20.51)	07 (17.95)
Project Management	18 (46.15)	07 (17.95)	14 (35.90)
Advocating	19 (48.72)	07 (17.95)	13 (33.33)
Change Management	19 (48.72)	07 (17.95)	13 (33.33)
Crisis Management	15 (38.46)	05 (12.82)	19 (48.72)

Occupational safety	19 (48.72)	06 (15.38)	14 (35.90)
Time management	23 (58.97)	09 (23.08)	07 (17.95)
Planning skills	21 (53.85)	08 (20.51)	10 (25.64)
Work documentation	18 (46.15)	08 (20.51)	13 (33.33)

Figures in parenthesis indicate percentage (Note: Multiple choices were permitted)

The top ranked skills among the management skills category from the combined scores of 'Rank 1' and 'Rank 2' preferences given by the participants, majority of the participants i.e.84.62% respondents have preferred personnel management skills, followed by 82.05% respondents have preferred creative skills and time management skills and 76.92% have preferred leadership skills.

TABLE 18 PREFERENCES OF INFORMATION TECHNOLOGY (IT) SKILLS IN ORDER TO PERFORM BETTER IN JOB

The participant's preference (n=39) in order of the ranks given by them between rank 1 (most preferred) and rank 3 (least preferred) to each of the IT skills specified in the list provided in the survey instrument is illustrated in the table below.

IT Skills (n=39)	Preferences		
	1st	2nd	3rd
Database management	23 (58.97)	09 (23.08)	07 (17.65)
Web development	22 (56.41)	09 (23.08)	08 (20.51)
Computer skills	24 (61.54)	09 (23.08)	06 (15.38)
Microsoft words/excel	20 (51.28)	06 (15.38)	13 (33.33)
System management	20 (51.28)	08 (20.51)	11 (28.21)
Utility development	17 (43.59)	07 (17.65)	15 (38.46)

Figures in parenthesis indicate percentage (Note: Multiple choices were permitted)

The top ranked skills among the Information Technology (IT) skills category from the combined scores of 'Rank 1' and 'Rank 2' preferences given by the participants, majority of the participants i.e.84.62% respondents have preferred computer skills, followed by 82.05% respondents preferring database management skills and 79.49% prefer web development skills.

TABLE 19 PREFERENCES OF COMMUNICATION SKILLS IN ORDER TO PERFORM BETTER IN JOB

The participant's preference (n=39) in order of the ranks given by them between rank 1 (most preferred) and rank 3 (least preferred) to each of the communication skills specified in the list provided in the survey instrument is illustrated in the table below.

CommunicationSkills (n=39)	Preferences		
	1st	2nd	3rd
Team work	26 (66.67)	11 (28.21)	02 (05.13)
Foreign language	15 (38.46)	06 (15.38)	18 (46.15)
Interpersonal communications	20 (51.28)	07 (17.95)	01 (02.56)
Marketing	19 (48.72)	06 (15.38)	11 (28.21)
Negotiation skills	19 (48.72)	07 (17.95)	13 (33.33)
Soft skills	21 (53.85)	09 (23.08)	09 (23.08)
Collaboration	19 (48.72)	08 (20.51)	12 (30.77)
Team work	26	11	02

	(66.67)	(28.21)	(05.13)
Foreign language	15 (38.46)	06 (15.38)	18 (46.15)
Interpersonal communications	20 (51.28)	07 (17.95)	01 (02.56)
Marketing	19 (48.72)	06 (15.38)	11 (28.21)
Negotiation skills	19 (48.72)	07 (17.95)	13 (33.33)
Soft skills	21 (53.85)	09 (23.08)	09 (23.08)

Figures in parenthesis indicate percentage (Note: Multiple choices were permitted)

The communication skills play a very important role in any organization. The top ranked skills among the communication skills category from the combined scores of Rank 1' and 'Rank 2' preferences given by the participants, majority of the participants i.e. 94.88% respondents have preferred team work skills, 76.93% respondents have preferred soft skills and 69.23% respondents have preferred interpersonal communication skills and collaboration skills.

TABLE 20 PREFERENCES OF TEACHING AND LEARNING SKILLS IN ORDER TO PERFORM BETTER IN JOB

The participant's preference (n=39) in order of the ranks given by them between rank 1 (most preferred) and rank 3 (least preferred) to each of the teaching and learning skills specified in the list provided in the survey instrument is illustrated in the table below.

Teaching and Learning skills (n=39)	Preferences		
	1st	2nd	3rd
Information literacy skills	28 (71.79)	10 (25.64)	01 (02.56)
Research	25 (64.10)	10 (25.64)	04 (10.26)
Monitoring	20 (51.28)	08 (20.51)	11 (28.20)
e-learning	24 (61.54)	09 (23.08)	06 (15.38)
Instruction	17 (43.59)	06 (15.38)	16 (41.03)
Counselling	19 (48.72)	07 (17.95)	13 (33.33)

Figures in parenthesis indicate percentage (Note: Multiple choices were permitted)

Finally, the top ranked skills among the teaching and learning skills category from the combined scores of Rank 1' and 'Rank 2' preferences given by the participants, majority of the participants i.e. 97.43% respondents have preferred Information literacy skills, followed by 89.74% respondents have preferred research skills and 84.62% respondents have preferred e learning skills.

However, each and every skill of the individual categories is important for the library professionals to perform their jobs and to reach the goals of the organisation. Therefore, from the above discussion the professionals have to adopt all the possible skills as required to them while performing their jobs.

VIII. FINDINGS AND CONCLUSION

Majority of the libraries have got minimum basic infrastructure like campus network (LAN), computers, connectivity to internet for libraries and library automation softwares where as to manage electronic resources there are no technology for Electronic Resource Management System (ERMS) also there are many technologies which traditional libraries cannot afford to or like discovery tools. Majority of the training programmes are undergone by the professionals or after the completion of the education and got the job and 95.00% having positive attitude towards ICT applications. However the training programmes conducted at university level are not based on the needs of individual library or librarians. Hence, it is required to conduct costumed training more frequently at different location so as to enable librarians to attend the programme. However user perception, management perception and branding of the library becomes the motivating factor o conduct highly customized training like entry level, supervision level, middle management level and management level.

Capacity building programme is very much needed in the university libraries which comprises of the following 5M's viz. **M**an (library professionals), **M**aterials (information resources), **M**achines (ICT infrastructure), **M**ethods (imparting training and updating knowledge) and **M**oney (funding). The existing skills of the library professionals is poor and respondents are very clearly asking for imparting the following skills: Information literacy skills, Reference services, Team work skill, Research skills, Collection development skills, Knowledge management skills, Use of current methods

of cataloguing, Personnel management skills, E learning skills, Evaluating information resources, Knowledge of handling computer, Knowledge of research methodologies, Creative skills, Time management skills, Database management skills, Web development skills, Soft skills, Indexing skills, Information handling skills, Machine Readable Catalogue (MARC), Institutional Repositories, Database development, Installation of software, Antivirus tools and hardware troubleshooting, Webpage designing skill and Knowledge of network management.

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