

Women Library Professionals' View on ICT Applications in Libraries

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(Received 9 July 2016; Revised 28 July 2016; Accepted 11 August 2016; Available online 18 August 2016)

Abstract - The biggest challenges facing the library profession today is preparing the professionals to use technology effectively. This study identifies the views of the women professionals in regard to ICT specifically in the working environment. Further this study analysis the perception on limitation and utility of the ICT by the women professionals. Out of the 95 questionnaire distributed 72 were received and the response rate is 75.79%. More over it can be seen that 70% of responses were received from Arts and Science, 75% from Engineering and Technology, 72% from medical institutions and 83.3% from other domain professionals. The importance of ICT has been realised by the women professionals. The women LIS professionals have indicated that ICT is a part of service. They further indicated it is not formalities. However ICT is beneficial if it is updated frequently. The study further indicates that there were limitations such as feminine, cultural and environmental which are to be overcome by the women LIS professionals. **Keywords:** Perception on ICT, Women perception on ICT, Women LIS profession Limitations in ICT, ICT, Library Management

I. INTRODUCTION

Libraries rapidly changing in IT and organizing information on how users seek, gain access to, and obtain library materials. Today, library as a space is better agreed upon than the notion of the library as a store or service and designing user-centered information access becomes a primary task of a day. It is found that ICT applications becomes a mandatory in library operations and services specifically in day to day activities too.

In the UNESCO training module for ICT, Information Communications Technologies (ICT) are described as the technologies that enable society to create, collect, consolidate, communicate, manage and process information in multimedia and various digital formats for different purposes, i.e., computing and telecommunications technologies like the personal computer, CD-ROM, cable TV, cellular phones and the Internet (David, 2001). Typical expectations of library services include the following:

- a. comprehensive – include everything;
- b. accessible – everything immediately available;
- c. immediate gratification – speed of response;
- d. followability of data – seamless;
- e. ease of use – single interface;
- f. Multiple formats – text, images, sound.

Library users are now expecting fast, easy access to unlimited, full-text content using interfaces that require no critical thought or evaluation. At this juncture it is essential to know the perception of ICT among the library professional in the use in library and information services. An attempt has been made to identify the perception of women library professionals on ICT applications in Library services.

II. REVIEW OF LITERATURE

Libraries today must find ways to optimize operations, maximize resources, enhance services, extend 'market' penetration, and serve 'customers'. ICT has played a leading role in carrying out the above tasks. Few studies concentrate on attitude on ICT (Temjen and Saraf (2003)), literacy (Watane, Vinchurkar and Chaukande (2005)), level of knowledge and skills (Nath, Bahl and Kumar(2007)). Few of the skills such as ICT skills (Thomas and Rulter 2008, Owvia, Bada & Aimbomam 2006), Soft Skills (Harris 2007), Information Skills (Pintos, Molina 2008, Walker 2008, Dell –Price and Cotton 2008), Information Literacy Skills (Ramesh Babu 2011, Ramesh Babu & Nageswara Rao 2011, Hagland and Herson 2008), that are need has been discussed in the literature.

III. NEED FOR THE STUDY

The biggest challenges facing the library profession today is preparing the professionals to use technology effectively. An academic library professional will be required to serve as an information service consultant with specific information technology skills (Li, 2009).

IV. OBJECTIVES

The major objectives of the study are

1. To identify the views of the women professionals in regard to ICT specifically in the working environment.
2. To identify the views on utility of ICT among women LIS professionals
3. To identify whether similar opinion persist among the professionals working in different domain of institutions.
4. To elucidate the current challenges faced by women library professionals in managing the Libraries in the present day environment in respect of ICT.

5. To explore the ICT facilities expected by the women library and information science professionals
6. To determine any association between category of LIS professionals and ICT views and To study whether ICT has influenced professional development.

V. HYPOTHESES

Based on the objectives the following hypotheses were formulated.

1. There exist significant differences in perception on views of ICT among the women LIS professionals irrespective of designation, experience and domain of institutions.
2. There is no significant difference in their opinion in regard to the utility of ICT among the Women LIS Professionals irrespective of designation, experience and domain of institutions.

VI. DATA ANALYSIS

The perception on ICT has an association with three factors such as views, limitations and Utility. These three factors

put together will enhance the use of ICT. A well structured questionnaire was distributed among the library and information professionals working in higher educational institution libraries in and around Dindigul district, in Tamil Nadu in India. Their opinions were obtained and analyzed using the SPSS Software.

Distribution Of Questionnaire

There exist number of higher educational institutions in different domain such as Arts & Science, Engineering and Technology, Medical sciences and other domain institutions. Towards a pilot study 20 questionnaires each were distributed to Arts & Science and Engineering women professionals. Similarly 25 questionnaires were distributed among women professionals working in Medical institutions and 30 questionnaires were distributed among women professionals working in different domains.. The responses received from each domain has also shown in table 1 The percentage thus calculated between received and distributed in each domain is shown in table

TABLE 1 DISTRIBUTION OF QUESTIONNAIRE

S.No.	Domain	Distributed	Responses	%
1	Arts and Science	20	14	70.0
2	Engineering	20	15	75.0
3	Medical	25	18	72.0
4	Others	30	25	83.3
Total		95	72	75.79

Out of the 95 questionnaire distributed 72 were received and the response rate is 75.79%. More over it can be seen that 70% of responses were received from Arts and Science, 75% from Engineering and Technology, 72% from medical institutions and 83.3% from other domain professionals. .

Demographic Details

The demographic details of the respondents are given in Table 2.

Based on their age the respondents are divided into 4 groups such as below 30 (7, 9.7%), 31 to 40 (24, 33.3%), 41 to 50. (17, 23.6%) and above 51 (24, 33.3%) years. The data were collected from Women Librarians and other women Library Professionals only. There are 32 (44.4%) responses received from Librarians and 40 (55.6%) are other library professionals. Out of 72 responses received, 19(26.4%) are having experience less than 5 years. It is followed by 21 (29.2%) are between 6 and 10 years of experience, 14 (19.4%) are between 11 and 15; 13 (18.1%) are between 16 and 20 and 5 (6.9%) were above 21 years.

Views on ICT

The Views on ICT were ascertained from Women LIS professionals on four variables that exhibits the individual opinions. The opinions thus obtained on four variables in a five point scale were shown in table 3. The respondent’s opinions were shown in table 3. The mean and standard deviation thus calculated based on the opinion were also shown in the table. The ranks were assigned based on the mean and standard deviation

The women professionals has indicated that ICT is part of service has their first preference. It is followed by ICT is not formalities; ICT is beneficial and ICT is to be updated. The mean value ranges between 3.24 and 3.97 which indicate the LIS professionals’ views were migrated from no opinion to Agree. The standard deviation ranges between 0.903 and 1.307 in a five point scale which indicates that there no significant deviation in their opinion. Thus the importance of ICT has been realised by the women professionals.

TABLE 2 DEMOGRAPHIC DETAILS OF RESPONDENTS

S.No.	Description	Arts and Science	Engineering	Medicine	Others	Total
Designation						
1	Librarian	8 (11.1)	9 (12.5)	8 (11.1)	7 (9.7)	32 (44.4)
2	Others	6 (8.3)	6 (8.3)	10 (13.9)	18 (25.0)	40 (55.6)
AGE						
1	>30	1 (1.4)	1 (1.4)	4 (5.6)	1 (1.4)	7 (9.7)
2	31- 40	4 (5.6)	4 (5.6)	5 (6.9)	11 (15.3)	24 (33.3)
3	41-50	3 (4.2)	3 (4.2)	3 (4.2)	8 (11.1)	17 (23.6)
4	above 51	6 (8.3)	7 (9.7)	6 (8.3)	5 (6.9)	24 (33.3)
Experience						
1	below 5	5 (6.9)	4 (5.6)	4 (5.6)	6 (8.3)	19 (26.4)
2	6-10	1 (1.4)	2 (2.8)	6 (8.3)	12 (16.7)	21 (29.2)
3	11-15	4 (5.6)	0 (0.0)	5 (6.9)	5 (6.9)	14 (19.4)
4	16-20	4 (5.6)	6 (8.3)	1 (1.4)	2 (2.8)	13 (18.1)
5	above 21	0 (0.0)	3 (4.2)	2 (2.8)	0 (0.0)	5 (6.9)
Total		14 (19.4)	15 (20.8)	18 (25.0)	25 (34.7)	72 (100.0)

TABLE 3 VIEWS ON ICT

S, No	Description	Strongly Disagree		Disagree		No opinion		Agree		Strongly Agree		Mean	Std	Rank
1	ICT beneficial	9	12.5%	9	12.5%	14	19.4%	24	33.3%	16	22.2%	3.40	1.307	3
2	ICT part of service	2	2.8%	2	2.8%	12	16.7%	36	50.0%	20	27.8%	3.97	.903	1
3	ICT not updated	6	8.3%	15	20.8%	13	18.1%	32	44.4%	6	8.3%	3.24	1.132	4
4	ICT not formalities	5	6.9%	13	18.1%	4	5.6%	37	51.4%	13	18.1%	3.56	1.185	2

The study has further been extended to designation wise. Based on the opinion the mean and standard deviation were calculated. The ranks were assigned based on mean and

standard deviation. The mean, standard deviation and rank were shown in Table 4 based on designation.

TABLE 4 VIEWS ON ICT VS DESIGNATION

S.No	Description	Librarian			Others		
		Mean	Std.	Rank	Mean	Std	Rank
1	ICT beneficial	3.47	1.391	3	3.35	1.252	3
2	ICT part of service	3.91	.995	1	4.02	.832	1
3	ICT not updated	3.19	1.148	4	3.27	1.132	4
4	ICT not formalities	3.47	1.344	2	3.62	1.055	2

The preferences of both librarian and other library professionals are identical. The mean value of librarian ranges between 3.19 and 3.91. The standard deviation of librarian ranges between 0.995 and 1.391 which indicates that there is no significant variance in their opinion. The mean value of other library professionals ranges between 3.27 and 4.02. This mean value has an edge over librarians mean value. The standard deviation of other library

professionals ranges between 0.832 and 1.252. This indicates that other library professionals have more positive view than women librarians.

The study has further been extended to professionals and their domain of institutions. The mean and standard deviation thus calculated based on their opinion and ranks were shown in Table 5.

TABLE 5 VIEWS ON ICT VS DOMAIN OF INTUITIONS

	Arts and Science			Engineering			Medicine			Others		
	Mean	Std.	Rank	Mean	Std.	Rank	Mean	Std.	Rank	Mean	Std.	Rank
ICT beneficial	2.93	1.492	4	3.13	1.187	4	3.33	1.328	2	3.88	1.166	2
ICT part of service	4.43	.514	1	4.27	.799	1	3.44	1.097	1	3.92	.812	1
ICT not updated	3.64	1.008	3	3.47	.915	3	2.72	1.274	4	3.24	1.128	4
ICT not formalities	3.93	.917	2	3.80	1.265	2	3.28	1.274	3	3.40	1.190	3

The professionals of Arts and Science and Engineering have identical preferences. Similarly the professionals of Medicine and other library professionals has identical views on ICT. The women professionals working different domain has given first preference to ICT has part of services. ICT is considered as beneficial by professionals of medicine and other domain library professionals where as Arts and Science and Engineering domain women professionals has identified as least preference and considered ICT is not formalities. ICT not updated has been marked as least preference by professionals of medicine and other domain institutions. The mean value and standard

deviation indicates the positive view on ICT by women LIS professionals placed in different domain institutions.

Limitations in learning ICT

The limitations in learning ICT by women professionals were ascertained using the variables such as Financial, Feminine, Cultural, Environmental and Learning limitations in five point scale such as strongly disagree, disagree, no opinion, agree and strongly agree. The mean and standard deviation were calculated based on opinion. The ranks were assigned based on mean and standard deviation. The opinion, mean, standard deviation and rank were shown in Table 6.

TABLE 6 LIMITATIONS IN USE OF ICT

	Strongly Disagree		Disagree		No opinion		Agree		Strongly Agree		Mean	Std	Rank
Financial	1	1.4%	9	12.5%	15	20.8%	40	55.6%	7	9.7%	3.60	.883	3
Feminine	0	.0%	1	1.4%	9	12.5%	37	51.4%	25	34.7%	4.19	.705	1
Cultural	3	4.2%	6	8.3%	9	12.5%	25	34.7%	29	40.3%	3.99	1.120	2
Environmental	10	13.9%	15	20.8%	13	18.1%	30	41.7%	4	5.6%	3.04	1.192	4
Learning	21	29.2%	24	33.3%	11	15.3%	9	12.5%	7	9.7%	2.40	1.296	5

The women professionals were indicated feminine limitations has their first preferences. It is followed by the cultural, financial, environmental and learning limitations. The mean value ranges between 3.04 and 4.19 except the mean value of the variable learning limitations was only 2.40. The standard deviation ranges between 0.705 and 1.296 in a five point scale which indicates that there is no significant deviation in the opinion. It can be inferred that learning limitation was not a major limitations. However major limitations were feminine, cultural and financial

limitations were the first three major limitations. The mean value of these three limitations ranges between 3.60 and 4.19 which indicate that the women LIS professionals agreed for the limitations.

The study has further been extended to designation wise. Based on the opinion the mean and standard deviation were calculated. The ranks were assigned based on mean and standard deviation. The mean, standard deviation and rank were shown in Table 7 based on designation.

TABLE 7 LIMITATIONS IN USE OF ICT VS DESIGNATION

S.No	Description	Librarian			Others			Total		
		Mean	Std.	Rank	Mean	Std.	Rank	Mean	Std.	Rank
1	Financial	3.62	.751	3	3.58	.984	3	3.60	.883	3
2	Feminine	4.09	.641	1	4.28	.751	1	4.19	.705	1
3	Cultural	3.66	1.335	2	4.25	.840	2	3.99	1.120	2
4	Environmental	3.50	1.164	4	2.68	1.095	4	3.04	1.192	4
5	Learning	2.56	1.435	5	2.28	1.176	5	2.40	1.296	5

The preferences of both librarian and other library professionals are identical. The mean value of librarian ranges between 3.50 and 4.09 except the mean value of the variable learning limitations was only 2.56. The standard deviation of librarian ranges between 0.641 and 1.435 which indicates that there is no significant variance in their opinion. It can be inferred that learning limitation was not a major limitations as far as women librarians are concerned.

The mean value of other library professionals ranges between 3.58 and 4.28 except the mean value of the variable learning limitations was only 2.28 and environmental

limitation was only 2.68. This mean value has an edge over librarians mean value. The standard deviation of other library professionals ranges between 0.751 and 1.176. This indicates that other library professionals have more positive view than women librarians. It can be inferred that learning and environmental limitation was not a major limitations as far as women other library professionals are concerned.

The study has further been extended to professionals and their domain of institutions. The mean and standard deviation thus calculated based on their opinion and ranks were shown in Table 8.

TABLE 8 LIMITATIONS IN USE OF ICT VS DOMAIN

S.No	Description	Arts and Science			Engineering			Medicine			Others		
		Mean	Std.	Rank	Mean	Std.	Rank	Mean	Std.	Rank	Mean	Std.	Rank
1	Financial	3.71	.469	3	3.60	.910	3	3.72	.752	3	3.44	1.121	3
2	Feminine	4.36	.633	1	3.87	.743	1	4.22	.808	2	4.28	.614	1
3	Cultural	4.14	1.099	2	3.80	1.082	2	4.28	.958	1	3.80	1.258	2
4	Environmental	3.71	.825	4	2.80	1.320	5	2.94	1.349	4	2.88	1.092	4
5	Learning	2.21	1.122	5	2.87	1.407	4	2.11	1.410	5	2.44	1.227	5

The professionals of Arts and Science, Engineering and other domain institutions have identical preferences. The professionals of Medicine little bit different compare to other domain institutions. The women professionals working Arts and science, Engineering and other domain gave their order of preferences as Feminine, Cultural, Financial, Environment and Learning limitations. As far as library professionals working in medical institutions order of first two preferences were interchanged. The first preferences were given for cultural rather than feminine. The least mean value has been given for learning limitation by all the professionals irrespective of domain. Similarly the mean value of environmental limitations professionals

working engineering, medicine, and other domain were given least which indicates that they can overcome the limitations of environment and learning limitations.

Utility

The opinion on the utility of ICT realized by women LIS professionals were obtained using ten variables in a five point scale such as strongly disagree, disagree, no opinion, agree and strongly agree. The mean and standard deviation were calculated based on opinion. The ranks were assigned based on mean and standard deviation. The opinion, mean, standard deviation and rank were shown in Table 9.

TABLE 9 UTILITY OF ICT IN LIBRARY

S.No	Description	Strongly Disagree		Disagree		No opinion		Agree		Strongly Agree		Mean	Std.	Rank
1	Provides a platform for discussing the professional issues	12	16.7%	20	27.8%	9	2.90	25	34.7%	6	8.3%	2.90	1.280	7
2	Help to improve the professional developments	9	12.5%	25	34.7%	10	2.94	17	23.6%	11	15.3%	2.94	1.310	6
3	Help to update the knowledge	12	16.7%	9	12.5%	4	3.47	27	37.5%	20	27.8%	3.47	1.444	4
4	It is an opportunity to interact with friends and experts	19	26.4%	31	43.1%	2	2.43	12	16.7%	8	11.1%	2.43	1.341	9
5	Resolve disagreements	18	25.0%	26	36.1%	14	2.46	5	6.9%	9	12.5%	2.46	1.288	8
6	Facilitates to make important decision	20	27.8%	40	55.6%	12	1.89	0	.0%	0	.0%	1.89	.662	10
7	Get to know someone	2	2.8%	2	2.8%	10	4.21	23	31.9%	35	48.6%	4.21	.978	2
8	Exchange of confidential or sensitive information	15	20.8%	2	2.8%	27	3.22	8	11.1%	20	27.8%	3.22	1.436	5
9	To keep in touch with old friends	0	.0%	1	1.4%	13	4.26	24	33.3%	34	47.2%	4.26	.805	1
10	Time saving	8	11.1%	7	9.7%	6	3.81	21	29.2%	30	41.7%	3.81	1.370	3

The women professionals were indicated “To keep in touch with old friends”; “Get to know someone” and “Time Saving” has the first three preferences. The least preferences were given for “Facilitates to make important decision”, “It is an opportunity to interact with friends and experts” and “Resolve disagreements”. The mean value ranges between 1.89 and 4.26. The standard deviation ranges between 0.662 and 1.444 in a five point scale which indicates that there is no significant deviation in the opinion.

VII. MAJOR FINDINGS

The findings of the study are

1. The importance of ICT has been released by the women professionals. The women LIS professionals have indicated that ICT is a part of service. They further indicated ICT is not formalities; ICT is beneficial and ICT is to be updated are the other view expressed by the professionals. The preferences were identical irrespective of the designation and the domain the professionals were placed.
2. The women professionals were indicated feminine limitations has their first preferences. It is followed by the cultural, financial, environmental and learning limitations. The study inferred that learning limitation was not a major limitation which can be easily overcome by the women professionals.

3. There has been synchronized opinion irrespective of designation and domains of the professionals there were working. However the mean value of environmental limitations professionals working engineering, medicine, and other domain were given least which indicates that they can overcome the limitations of environment and learning limitations.
4. The women professionals were indicated the utility of the ICT has “To keep in touch with old friends”; “Get to know someone” and “Time Saving” has the first three preferences. The least preferences were given for “Facilitates to make important decision”, “It is an opportunity to interact with friends and experts” and “Resolve disagreements”.

VIII. CONCLUSION

Though information is considered as an important resource, the use of ICT tools to collect and disseminate information has been in a slow pace in majority of the libraries primarily due to the perception on ICT. This may be due to various factors like insufficient funds, inadequate staff trained in handling computers and software packages, administrative concerns, etc. However it is believed that the LIS professionals were not keenly interested in incorporating the ICT in libraries. It is felt that there are number of limitations in implementing the ICT in libraries. This study paved way to list the perceptions of the women LIS professionals on ICT. The perceptions were identified using

the views, limitations and utility. This study will facilitate in overcoming the limitations, redressing the negative implications and finding way in increasing the utility.

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