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THE ADOPTION OF INFORMATION AND COMMUNICATION TECHNOLOGY (ICT) BY WOMEN LIBRARY PROFESSIONALS

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Abstract

This study aims to explore the extent of adoption of information and communication technology (ICT) in the college libraries of India. This study discusses the present conditions of using ICT by the women library & information Science professionals in south India. The study also finds out the systems and services provided by the college libraries. The paper investigates the original views of the library and information Science professionals in the Country regarding the adoption of Information and Communication Technology (ICT) by the women library & information Science professionals in south India. Data have been collected through Post and electronic survey. Finally it finds the problems faced by the women library professionals and made some specific recommendations as solutions.

Keywords: *Women and ICT, Acquiring IT skills, ICT preserving methods, Adoption of ICT.*

INTRODUCTION

In the era of globalization and liberalization and with the advent of hi-fi technologies, the whole world has been condensed in to very small frame. With enormous knowledge explosion the need to quench the thirst of information cannot be over emphasized. Libraries and librarianship are undergoing rapid changes to cope with the demands of fast changing information requirements of its users. Since there are limitations in the traditional librarianship, we have to adopt new technology to provide better access to the collections as well as users. The advent of computers, the advancement in telecommunications and storage devices, display technologies have opened up new possibilities in dealing with the problems arising from collecting, organizing and disseminating a vast amount of information which is the result of information explosion. This has resulted in the digital extension of the research libraries. Today's digital libraries are built around information and web technologies with e-objects as their building blocks increasing popularity of information and developments in web technology. ICTs comprise a complex and heterogeneous set of goods, applications and services used to produce, process, distribute and transform information. The ICT sector consists of telecommunications, television, radio broadcasting, computer hardware, software and services and electronic media such as Internet and electronic mail. Information is disseminated by more traditional means, such as print media and fixed telephone lines, or satellite technology, mobile phones and the Internet.

WOMEN AND ICT

A large group of working women of India is in the rural and unorganized sectors. Socially the majorities of Indian women are still tradition bound and in a disadvantageous position. Inequality in women's access to participation in all communications systems, especially in media and their insufficient mobilization to promote women's contribution to society. Since globalisation is opening up the Indian economy suddenly at a very high speed, during the past decades, advances in information technology have facilitated a global communications network that transcends national boundaries and have an impact on public policy, private attitudes and behaviours, especially of children and young adults. Everywhere the potential exists for the media to make a greater contribution to the advancement of women. More women are involved in the communication sector as their career, but few have attained the level of decision-making or serve on governing boards and bodies. Now women are in forefront to execute/ apply the ICT for their development and betterment of the society.

Literature Review

Ranadive, (2005) The mental space of women remains the most critical issue since it has a complex relationship with other non-mental spaces. Mental or psychological space consists of the feeling of freedom that allows a person to think and act. For example, it often happens that interventions that expand a women's economic space with increased income do not empower her if she has no control over the income. Therefore, expansion in economic space alone will not bring empowerment. If the interventions increase a woman's

level of confidence and self esteem, then a process of empowerment has began. An expansion of this space implies a change in perception and leads to a feeling of strength. Hence, understanding the link with other spaces will help policy makers to understand why some interventions fail in spite of an increase in physical, economic and political spaces. Though some ICT interventions in Bangladesh is not benefiting rural women economically (Alam, 2006; D.Net, 2007), they are helping to provide required information to rural women, which eventually changes their perceptions and expands their self-esteem as human beings. This issue needs to be investigated; that is, whether ICT can empower rural women with or without economic benefit. Robinson (2008) has noted that the use of distance education and ICT have the potential to distribute opportunities for learning more widely and equitably. ICT is thus a powerful tool for providing educational services for both male and female and most importantly, meeting the gender equality goal. Studies have shown that ICTs offer possibilities to women especially to engage is not only distance learning programs but E-commerce, E-governance, and all other aspects of developmental activities.

5. RESEARCH METHODOLOGY

5.1. Research Objectives

The objectives of the present study are,

1. To measure the available library facilities in south India.
2. To identify the methods adopted for acquiring IT skills for searching electronic resources.
3. To study the ICT preservation methods
4. To analyze the usage of web browser, search engines and file format for adoption of ICT.

5.2. Data Collection

Primary data were collected through a structured questionnaire, which was distributed among women LIS professional (among the respondents) in all academic institutes in south India. The questionnaire contained open-ended questions and it also incorporated with various parameters that were identified for analyzing those parameters. Data have been collected through Postal and electronic survey. Only women library professional are chosen for this study.

5.3. Sample Size

The sample size consists of 119 respondents for LIS women professional. Convenience sampling technique was used for a period of 2 months (November –December 2014).

5.4. Research Design

Question-wise analysis was carried out with the help of Microsoft Excel Workbook and SPSS version 20. The questionnaire was based on difference variables, which were considered to be significant while analyzing LIS women professional. Some analytical techniques like tables, percentage, scouring and ranking were used to analyse the collected data.

Table 1. AGE WISE RESPONDENTS

Age	No. of Respondents	Percentage
Less than 30 Years	33	27.7
Between 31 – 40 Years	72	60.6
Between 41 – 50Years	06	05.0
51 years and above	08	06.7
Total	119	100.00

Source: Primary data

Table 1 presents the age-wise distribution frequency of the respondents. It is found from the table that 72(60.6%) respondents who belong to the age group between 31-40 years are followed by 33 (27.7%) in the age group of Less than 30 years. Majority of the respondents of the present survey belong to the age group category between 31-40 years.

Table 2. QUALIFICATION WISE RESPONDENTS

Qualification	No. of Respondents	Percentage
PG Degree	50	42.0

M.Phil / Ph.D	60	50.4
NET / SLET	09	7.6
Total	119	100.0

Source: Primary data

Table 2 provides information regarding the academic qualifications of the users who responded to the study. It is clear from the above table that the ICTs resources have been used mostly by the research scholars of M.Phil / Ph.D holders.

Table 3. EXPERIENCE OF ICT SKILLS WISE RESPONDENTS

Experience of ICT Skill	No. of Respondents	Percentage
Complete Neophyte	23	19.3
Petite Knowledge	45	37.8
Expert	51	42.9
Total	119	100.0

Source: Primary data

The table 3 shows the experience of ICT skill by the respondents. Out of 119, 23 respondents have vast experience in complete neophyte. 45 respondents have got experience in acquiring petite knowledge and the rest of 51 respondents are the experts in ICT skill.

Table 4. METHODS ADOPTED FOR ACQUIRING IT SKILLS FOR SEARCHING ELECTRONIC RESOURCES WISE RESPONDENTS

Methods adopted for ICT	No. of Respondents	Percentage
Formal Training	15	12.6
Trial and Error Method	16	13.4
Training at Private Centre	46	38.7
Friends	15	12.6
Basic Degree / Allied Subject	24	20.2
Colleagues	3	2.5
Total	119	100.0

Source: Primary data

The above table 4 furnishes the information about the various methods adopted for acquiring ICT skills. Majority of the respondents preferred to undergo a special training at private centre. It may be due to their desire of not depending others for acquiring their IT skills.

Table 5.FREQUENCY WISE RESPONDENTS

Frequency	No. of Respondents	Percentage
Daily	53	44.5
Alternative day	17	14.3
Twice in a week	2	1.7

Thrice in a week	8	6.7
Once in a week	16	13.4
once in a month	23	19.3
Total	119	100.0

Source: Primary data

The table 5 shows periodical wise usage of the e-resources by the respondents. Among 119 respondents, 53 (44.5%) respondents use the e-resources Daily. 23 (19.3%) respondents are used it once in a month. From the table it is an evident that majority of the respondents access the electronic resources daily. It may be due to their interest in their research topic.

Table 6. RANK WISE OPINION ABOUT PRESERVATION METHODS

S.NO	Preservation Methods	Regularly	Occasionally	Never	Total Score	Rank
	Score	1	0.5	0		
1	HARD DRIVE	64	48	7	88.00	I
2	USB FLASH	66	38	15	85.00	II
3	CD AND DVD	35	54	30	62.00	III
4	SD (Secure Digital-memory cards)	25	38	56	44.00	IV
5	I PAD (Internet Protocol Adaptor)	12	25	82	24.50	V
6	Online network storage	11	24	84	23.00	VI
7	NAS (Network Attached Storage)	5	10	104	10.00	VII
8	FLOPPY / TAPE	4	2	113	5.00	VIII

Source: Primary data

The table 6 describes preservation methods that are used to preserve the Electronic devices that, Hard Drive is used by 64 respondents regularly and it is ranked first. USB Flash is used by 66 respondents regularly and it is ranked second. CD and DVD are used by 35 respondents regularly, 54 respondents use it occasionally and it occupies the third place. Secure Digital Memory Cards are used by 25 respondents regularly, 38 respondents used it occasionally and it is ranked fourth place. I PAD is used by 12 respondents regularly, 25 respondents used it occasionally and it is ranked fifth. Online Network Storage is preferred by 11 respondents regularly, 24 respondents used it occasionally and it is ranked sixth. Network Attached Storage is used by 5 respondents regularly, 10 respondents used it occasionally and it is placed seventh rank. Floppy / Tape is used by 4 respondents regularly, 2 respondents used it occasionally and it is ranked eighth. USB Flash is preferred by the majority of the respondents for preserving the data and it may be due to the reason of carrying it anywhere.

Table 7. RANK WISE OPINION ON USAGE OF FILE FORMAT

S.No	File Format	Yes	No	Score	Rank
	Score	0.5	0		
1	Images	77	42	38.50	I
2	Audio files	74	45	37.00	II
3	Video files	72	47	36.00	III

4	MS Word	71	48	35.50	IV
5	PDF	67	52	33.50	V
6	PPT	44	75	22.00	VI
7	Compressed format	41	78	20.50	VII
8	Animation files	39	80	19.50	VIII
9	MS Excel	32	87	16.00	IX
10	Notepad	26	93	13.00	X
11	HTML	20	99	10.00	XI
12	Others file format	15	104	7.50	XII
13	XML	5	114	2.50	XIII

Source: Primary data

The table 7 shows the opinion given by the respondents for different types of file format. Among the total 119 respondents, 77 respondents have given their opinion 'Yes' for 'Images' and 42 respondents have given their opinion 'No' and it is ranked first. 74 respondents have given their opinion 'Yes' for 'Audio files' and 45 respondents have given their opinion 'No' and it is ranked second. 72 respondents have given their opinion 'Yes' for 'Video files' and 47 respondents have given their opinion 'No' and it is ranked third. 71 respondents have given their opinion 'Yes' for 'MS Word' and 48 respondents have given their opinion 'No' and it is ranked fourth. 67 respondents have given their opinion 'Yes' for 'PDF' and 52 respondents have given their opinion 'No' and it is ranked fifth. 44 respondents have given their opinion 'Yes' for 'PPT' and 75 respondents have given their opinion 'No' and it is ranked sixth. 41 respondents have given their opinion 'Yes' for 'Compressed format' and 78 respondents have given their opinion 'No' and it is ranked seventh. 39 respondents have given their opinion 'Yes' for 'Animation files' and 80 respondents have given their opinion 'No' and it is ranked eighth. 32 respondents have given their opinion 'Yes' for 'MS Excel' and 87 respondents have given their opinion 'No' and it is ranked ninth. 26 respondents have given their opinion 'Yes' for 'Notepad' and 93 respondents have given their opinion 'No' and it is ranked tenth. 20 respondents have given their opinion 'Yes' for 'HTML' and 99 respondents have given their opinion 'No' and it is ranked eleventh. 15 respondents have given their opinion 'Yes' for 'others file format' and 104 respondents have given their opinion 'No' and it is ranked twelfth. 05 respondents have given their opinion 'Yes' for 'XML' and 114 respondents have given their opinion 'No' and it is ranked last in the list.

Table 8. RANK WISE OPINION ON WEB BROWSER

S.No	Web Browser	Regularly	Occasionally	Never	Score	Rank
		1	0.5	0		
1	Mozilla Fire Fox	68	47	4	91.50	I
2	Google Chrome	62	42	15	83.00	II
3	Internet Explorer	58	42	19	79.00	III
4	Opera	25	48	46	49.00	IV
5	MSN Explorer	12	19	88	21.50	V
6	Netscape Navigator	8	21	90	18.50	VI
7	IBM Web Explorer	5	15	99	12.50	VII

8	Others Browser	1	14	104	8.00	VIII
9	Apple-Safari	2	5	112	4.50	IX

Source: Primary data

The Table 8 furnishes the information about the various web browsers used by the respondents. 'Mozilla Firefox' is used by 68 respondents regularly and 47 respondents occasionally use this web browser and this is ranked first as majority of the respondents preferred this web browser for searching the materials for their research study. 62 respondents preferred 'Google Chrome' for collecting the materials and it is used by 42 respondents occasionally and it is ranked second. 58 respondents preferred 'Internet Explorer' for collecting the materials and it is used by 42 respondents occasionally and it is ranked third. 25 respondents preferred 'Opera' for collecting the materials and it is used by 48 respondents occasionally and it is ranked fourth. 12 respondents preferred 'NSN Explorer' for collecting the materials and it is used by 19 respondents occasionally and it is ranked fifth. 08 respondents preferred 'Netscape Navigator' for collecting the materials and it is used by 21 respondents occasionally and it is ranked sixth. 05 respondents preferred 'IBM Web Explorer' for collecting the materials and it is used by 15 respondents occasionally and it is ranked seventh. 01 respondent preferred 'Other Browser' for collecting the materials and it is used by 14 respondents occasionally and it is ranked eighth. 02 respondents preferred 'Apple-Safari' for collecting the materials and it is used by 05 respondents occasionally and it is ranked ninth.

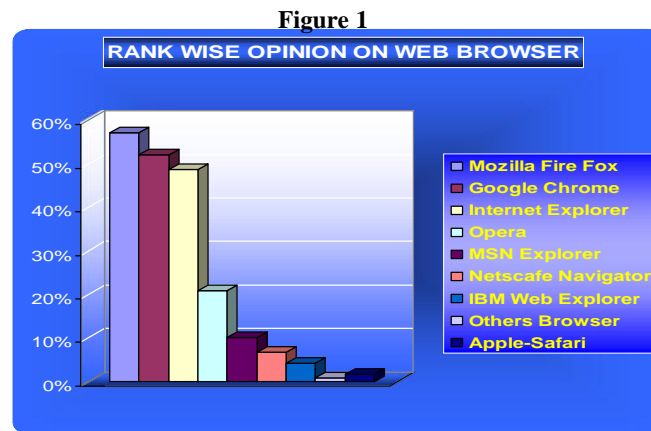


TABLE 9. RANK WISE OPINION ON SEARCH ENGINES

S.No	Search Engines	Used	Not Used	Score	Rank
		0.5	0		
1	Google	118	1	59.00	I
2	Yahoo	65	54	32.50	II
3	Rediff	48	71	24.00	III
4	AOL Search	37	82	18.50	IV
5	Sify	32	87	16.00	V
6	Bing	26	93	13.00	VI
7	Msn	21	98	10.50	VII
8	Web crawler	10	109	5.00	VIII
9	Alta vista	5	114	2.50	IX
10	Hot bot	3	116	1.50	X

11	Business.Com	3	116	1.50	X
12	Ask Jeeves	2	117	1.00	XI
13	Gigablast	2	117	1.00	XII
14	Galaxy	1	118	0.50	XIII
15	Alexa	0	119	0.00	IVX
16	Ixquick	0	119	0.00	IVX
17	Others Search Engines	0	119	0.00	IVX

Source: Primary data

The table 9 describes the different search engines used by the respondents. Among the total of 119 respondents, 118 respondents used 'Google' search engines for collecting the data for their research study and 01 respondent do not use this search engines and 'Google' occupies the first place as it is used by majority of the respondents. 65 respondents used 'Yahoo' search engines for collecting the materials for their research study and 54 respondents do not use this search engine and it is ranked second. 65 respondents used 'Yahoo' search engines for collecting the materials for their research study and 54 respondents do not use this search engine and it is ranked second. 48 respondents used 'Rediff' search engines for collecting the materials for their research study and 71 respondents do not use this search engine and it is ranked third. 37 respondents used 'AOL Search' search engines for collecting the materials for their research study and 82 respondents do not use this search engine and it is ranked fourth. 32 respondents used 'Sify' search engines for collecting the materials for their research study and 87 respondents do not use this search engine and it is ranked fifth. 26 respondents used 'Bing' search engines for collecting the materials for their research study and 93 respondents do not use this search engine and it is ranked sixth. 21 respondents used 'MSN' search engines for collecting the materials for their research study and 98 respondents do not use this search engine and it is ranked seventh. Other search engines are used by the minimum level of the respondents for the research study.

FINDINGS

1. Majority of the respondents of the present survey belong to the age group category between 31-40 years
2. ICTs resources have been used mostly by the research scholars of M.Phil / Ph.D.
3. Majority of the respondents are experts in ICT skill
4. Majority of the respondents access the electronic resources daily.
5. Most of the respondents use to storage for Hard Drive, web browsers used the 'Mozilla Firefox', file format is 'Images' and 'Google' search engines for collecting the data

Conclusion

ICTs no longer an optional "extra" which is provided complement and other services. Internet, mobile phones and social networking sites and communication media such as television, newspapers and radio and others are playing a vital role in women's life to develop their professional skills and help to empowerment them. ICT which plays a major role among women professionals to reach their goals and enhance the capabilities. So, we can conclude that if women Library and Information science professional are given an active and in-depth training in acquiring the ICT skills they will provide better services to the society and it will develop confident in them to become empowered.

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