Awareness and Use of Web technology in Academic Libraries among the Library Professionals in Higher Educational Institutions on Tamil Nadu

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Abstract

This study is to analyses the Awareness and use of Web Technology among the library Professionals in Higher Educational Institutions in Tamil Nadu. The findings of this study based on the information provided by library professionals of Higher Educational Institutions libraries of South Tamil Nadu which includes Engineering & Technology and Arts & Science Colleges and they do not represent other institutions. 600 library professionals working in 556 Higher Educational Institutions situated in South Tamil Nadu in Tamil Nadu, alone taken up for the study. It found that Out of 556, 45.50% of the professionals are 'More than 60 Months' about the awareness of Web Technologies. And 19.96% of them have 'Below 6 Months', 13.31% of them have '6-12 Months', 12.95% of them have '24-60 Months' and 8.27% of them '12-24 Months' about the aware of Web Technologies.

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Keywords

Awareness; Use of Web Technology; Academic Libraries; Tamil Nadu

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1. Web Technology in Libraries

Today libraries are equipped to accomplish the newly web technology based services. ... The emerging technology such as, Instant Messaging, Podcast, Vodcast, blog, RSS and their application has been discussed in this paper. Key words: CAS, SDI, Web OPAC, Blog, Podcasting, RSS, IM, Tagging, Cloud computing, Semantic web. Web services are the latest application in technology for computing. Web service provides an opportunity to allow a user to establish a client application to access their desired functionality. A web service is nothing but a software system designed to support from computer to computer interaction over the internet.

The application of modern communications technology in the academic libraries is made more near to the library professionals as it gives the user some new services. Due to improved communication and networking facilities, the academic library users are much aware of online database and other information services. Information and communication technology provide the library professional with new opportunities to improve their sources and services. The recent developments are made available to them precisely and currently in the academic libraries. Academic library and information centers with the intensive use of electronic systems and networks have traditional libraries to become modern libraries which aim to facilitate access to information just in time to the critical want of the users. The impacts of ICT on library activities change the types of services and resources available in libraries. The application of computer and telecommunication technology has greatly influenced the teaching and research community to get access to information irrespective of space and cost factors. The networking of libraries has dramatically changed the old concept of libraries in new information storage and retrieval mechanism has now become very faster, easier and specifically the computer to manual card system.

2. Review of literature

Raiiv Kumar and Joginder Singh (2020) highlighted the information needs and information sources used by the farmers of Kurukshetra district. Data were elicited through the questionnaire. The majority of the respondents (59.6%) were using newspapers in which Dainik Bhaskar (46.2%) was the first choice of farmers and (30.8%) banners and wall paintings were also assisted. Mobile phones (69.2%) and Television (67.3%) were major electronic sources among them. Mishra, Debbarma, S Das and Manoj Kumar (2019)

investigated the awareness and understanding of e-learning among the students of Tripura University and found that 87% of the total respondents belong to the male category. The majority of respondents (73.49%) are in the age group of 21-25 years followed by age group 26-30 years (20.48%). Most of the respondents are post-graduate students (85.54%) followed by undergraduate students (12.65%). Maximum (86.75%) of respondents understand E-learning which is very encouraged itself. More than half of the total respondents (88.58%) are interested in registered e-learning in the near future. Antony (2015) analyzed the total numbers of women library professionals in these institutions were 35, of whom 31 respondents had completed and returned the questionnaires, this represents 88.57% of the response rate. It is therefore recommending that the librarians all over the world need to update this skills and upgrade their service to meet the rising demand of this age. Oweghoro (2015)[32] studied the potentials to prepare healthcare professionals for dealing appropriately with internet-informed patients and restore their confidence. The Nigerian healthcare systems need to formulate policies on access and use of internet-based health information by their patients. Rose (2015) conduct the study going beyond, the study suggests ICT adoption model, very specific to higher education academia in India. The model is being tested already and has been recommended as a policy measure to the challenges faced in ICT adoption.Donkor and Dzand (2015) investigated the information-seeking behaviour of crops research scientists in Ghana using the Council for Scientific and Industrial Research, Crops Research Institute (CSIR-CRI), Kumasi, Ghana scientists seek information in terms of use, type, when, where and the purpose for which they use information as well as how they search for information. Wilson's Information Behaviour Model was adopted as the theoretical framework for the study.. The study revealed that the crop research scientists used information centers/libraries for research purposes and prefer to use journals articles (both print/electronic) but preferred electronic format to other types of materials.

3. Objectives of the Study

The following objectives are framed;

1. To identify the awareness of Web Technology among the Library Professionals.
2. To know the use of Web Technology in Academic Libraries.
3. To identify the using of Web technology in library services.
4. To assess the average time spent for Web Technology

4. Methodology

This study is to analyses the Awareness and use of Web Technology among the library Professionals in Higher Educational Institutions in Tamil Nadu. The vital role of Higher Educational Institutions in the educational development is quite important. The findings of this study based on the information provided by library professionals of Higher Educational Institutions libraries of South Tamil Nadu which includes Engineering & Technology and Arts & Science Colleges and they do not represent other institutions. 600 library professionals working in 556 Higher Educational Institutions situated in South Tamil Nadu in Tamil Nadu, alone taken up for the study. This study is mainly based on Awareness and use of Web Technology among library Professionals in Higher Educational Institutions in Tamil Nadu. Hence, this study is undertaken with certain degree of caution.

The study covered only library professionals working in Higher Educational Institutions in South Tamil Nadu, Tamil Nadu which covers institutions only on 'Engineering & Technology' and Arts & Science'. This study not covered the other higher educational institutions like Universities, Deemed to be Universities, Polytechnic Colleges, Nursing Colleges, and Education Colleges etc.,. due to the time constraints, cost and others.

5. Data Analysis

The researcher has collected relevant data from the library professionals of the Higher Educational Institutions situated in South Tamil Nadu. Totally 600 questionnaires were distributed among the library professionals in the higher educational institutions in Southern Tamil Nadu which covers ten districts like Dindigul, Kanyakumari, Madurai, Ramanathapuram, Sivagangai, Tenkasi, Theni, Tutucorin, Tirunelvaeli and Virudhunagar Totally 109 'Engineering & Technology' and 243 'Arts & Science' institutions. The 600 questionnaires were distributed among the library professionals are working all the higher educational institutions which consists of 235(39.17%) in 'Engineering & Technology' and 365(60.83%) in 'Arts & Science' institutions. Among the 600, 556(92.67%) were responded which consists of 210(35.00%) in 'Engineering & Technology' and

346(57.67%) in 'Arts & Science' institutions.. The response rate is 92.67%. To test the hypothesis, chi-square test, Correlations, Mean and Standard Deviation are applied besides percentile analysis. The diagrammatic and graphical representations of the data are also presented for visualizing the data.

5.1. Distribution of Library Professionals

The library professionals were distributed by the type of institutions with district wise in the higher educational institutions in Tamil Nadu in Table 1.

Table 1: Distribution of Library Professionals

Sl. No.	District	Engg. & Tech.	Arts & Science	Total
1	Dindigul	17(3.06)	39(7.01)	56(10.07)
2	Kanyakumari	39(7.01)	41(7.37)	80(14.39)
3	Madurai	27(4.86)	70(12.59)	97(17.45)
4	Ramanathapuram	7(1.26)	29(5.22)	36(6.47)
5	Sivagangai	17(3.06)	27(4.86)	44(7.91)
6	Tenkasi	11(1.98)	19(3.42)	30(5.4)
7	Theni	9(1.62)	14(2.52)	23(4.14)
8	Tirunelvaeli	28(5.04)	23(4.14)	51(9.17)
9	Tutucorin	27(4.86)	35(6.29)	62(11.15)
10	Virudhunagar	28(5.04)	49(8.81)	77(13.85)
	Total	210(37.77)	346(62.23)	556(100)

(Figures in Parentheses denote percentage)

The table 1 shows the The library professionals were distributed by the type of institutions with district wise in the higher educational institutions in Tamil Nadu which covers ten districts like Dindigul, Kanyakumari, Madurai, Ramanathapuram, Sivagangai, Tenkasi, Theni, Tutucorin, Tirunelvaeli and Virudhunagar Totally 109 'Engineering & Technology' and 243 'Arts & Science' institutions. The 600 questionnaires were distributed among them 556 were responded which consists of 210(37.77%) in 'Engineering & Technology' and 346(62.23%) in 'Arts & Science' institutions. It is observed from the table , majority of the respondent from 'Arts & Science institutions.

5.2. From how long are you aware of Web Technologies

The Awareness of web technologies among the Library professionals has been analysed based on the responses and it is shown in the table 2.

Table 2. How long aware of Web Technologies

Sl. No.	Frequency	Respondent	Percent	Rank
1	Below 6 Months	111	19.96	2
2	6-12 Months	74	13.31	3
3	12-24 Months	46	8.27	5
4	24-60 Months	72	12.95	4
5	More than 60 Months	253	45.50	1
	Total	556	100.00	

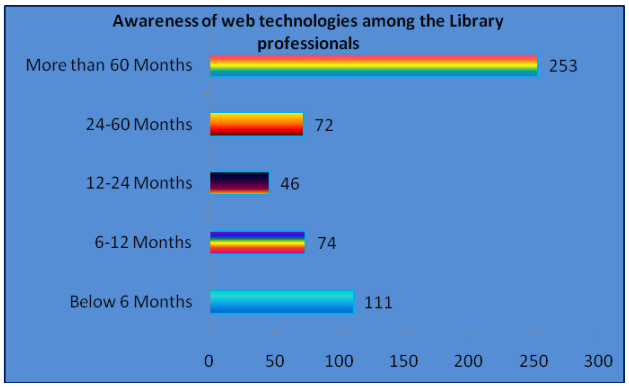


Fig.1 Awareness of Web Technologies

Table 2 indicates the level of how long they are having awareness of Web Technologies among the library professionals in higher education intuitions in Southern Tamil Nadu. Out 556, 253(45.50%) of the professionals are 'More than 60 Months' about the awareness of Web Technologies. Followed by 111(19.96%) of them have 'Below 6 Months', 74(13.31%) of them have '6-12 Months', 72(12.95%) of them have '24-60 Months' and 46(8.27%) of them '12-24 Months' about the aware of Web Technologies. It simply shows the more than 45% of the library professionals have awareness about the aware of Web Technologies 'More than 60 Months'.

5.3. Frequency of Awareness on Web Technologies Vs Demographic Details

The study has been further extended with the demographic details like type of Institutions, Gender, age group and year of experiences. The variables Mean value, Standard Deviation and their Rank for Experience have been calculated and the same has been shown in Table 3.

Table 3: Frequency of Awareness on Web Technologies Vs Demographic Details

Sl. No.	Demographic Details	Below 6 Months	6-12 Months	12-24 Months	24-60 Months	More than 60 Months	Sig.
Type of Institutions							
1	Engg. &Tech	43(7.73)	27(4.86)	17(3.06)	25(4.5)	98(17.63)	Chi.Square: 0.494 df :4, Sig.: 0.974
2	Arts& Science	68(12.23)	47(8.45)	29(5.22)	47(8.45)	155(27.88)	
Gender							
3	Male	77(13.85)	57(10.25)	27(4.86)	51(9.17)	183(32.91)	Chi.Square: 5.054 df :4, Sig.: 0.282
4	Female	34(6.12)	17(3.06)	19(3.42)	21(3.78)	70(12.59)	
Age Group							
5	Below 30	6(1.08)	9(1.62)	3(0.54)	4(0.72)	17(3.06)	Chi.Square: 19.261, df :12, Sig.: 0.082
6	31-40	48(8.63)	26(4.68)	27(4.86)	30(5.4)	89(16.01)	
7	41-50	32(5.76)	26(4.68)	9(1.62)	29(5.22)	102(18.35)	
8	Above 50	25(4.5)	13(2.34)	7(1.26)	9(1.62)	45(8.09)	
Years of Experience							
9	Less than 5 Years	19(3.42)	12(2.16)	6(1.08)	14(2.52)	33(5.94)	Chi.Square: 9.203, df :12, Sig.: 0.686
10	6-10 Years	41(7.37)	25(4.5)	23(4.14)	22(3.96)	93(16.73)	
11	11-15 Years	25(4.5)	17(3.06)	11(1.98)	15(2.7)	64(11.51)	
12	Above 15Years	26(4.68)	20(3.6)	6(1.08)	21(3.78)	63(11.33)	
	Total	111(19.96)	74(13.31)	46(8.27)	72(12.95)	253(45.5)	

(Figures in Parentheses denote percentages

It is indicated in table 3 towards the frequency of awareness of web technologies among the library professionals has been analysed with the type of Institutions. Among the library professionals from 'Engineering & Technology' institutions 43(7.73%) of them having awareness 'Below 6 Months', 27(4.86%) of them '6-12 Months', 17(3.06%) of them '12-24 Months', 25(4.5%) of them '24-60 Months' and 98(17.63%) of them 'More than 60 Months'. Followed by 68(12.23%) library professionals from 'Arts & Science' institutions are having awareness 'Below 6 Months', 47(8.45%) of them '6-12 Months', 29(5.22%) of them '12-24 Months', 47(8.45%) of them '24-60 Months' and 155(27.88%) of them 'More than 60 Months'. Further, Chi square test has been administered and table value is 5.991 for 5% level of significance. The calculated value for all the values were less than the table value which indicated the variables are insignificant

In the Gender wise analysis of awareness of web technologies among the library professionals has been analysed. Among the library professionals from 'Male' professionals 77(13.85%) of them having awareness 'Below 6 Months', 57(10.25%) of them '6-12 Months', 27(4.86%) of them '12-24 Months', 51(9.17%) of them '24-60 Months' and 183(32.91%) of them 'More than 60 Months'. Followed by 34(6.12%) 'Female' library professionals are having awareness 'Below 6 Months', 17(3.06%) of them '6-12 Months', 19(3.42%) of them '12-24 Months', 21(3.78%) of them '24-60 Months' and 70(12.59%) of them 'More than 60 Months'. Further, Chi square test has been administered and table value is 5.991 for 5% level of significance. The calculated value for all the values were less than the table value which indicated the variables are insignificant

In the age group wise analysis of awareness of web technologies among the library professionals has been analysed with the type of Institutions. Among the library professionals from age group of '31-40 years' 48(8.63%) of them having awareness 'Below 6 Months', 26(4.68%) of them '6-12 Months', 27(4.86%) of them '12-24 Months', 30(5.4%) of them '24-60 Months' and 89(16.01%) of them 'More than 60 Months'. Followed by 32(5.76%) professionals from the age group '41-50years' are having awareness 'Below 6 Months', 26(4.68%) of them '6-12 Months', 9(1.62%) of them '12-24

Months', 29(5.22%) of them '24-60 Months' and 102(18.35%) of them 'More than 60 Months'. Further, Chi square test has been administered and table value is 12.592 for 5% level of significance. The calculated value for all the values were less than the table value which indicated the variables are insignificant

In the year of experiences wise analysis, the awareness of web technologies among the library professionals has been analysed. Among the library professionals from frequency of experiences of '6-10 years' 41(7.37%) of them having awareness 'Below 6 Months', 25(4.5%) of them '6-12 Months', 23(4.14%) of them '12-24 Months', 22(3.96%) of them '24-60 Months' and 93(16.73%) of them 'More than 60 Months'. Followed by 25(4.5%) professionals from the frequency of experiences of '11-15 years' are having awareness 'Below 6 Months', 17(3.06%) of them '6-12 Months', 11(1.98%) of them '12-24 Months', 15(2.7%) of them '24-60 Months' and 64(11.51%) of them 'More than 60 Months'. Further, Chi square test has been administered and table value is 12.592 for 5% level of significance. The calculated value for all the values were less than the table value which indicated the variables are insignificant.

5.4 Frequency of using Web Technologies in your Library

The Using of web technologies among the Library professionals has been analysed based on the responses and it is shown in the table.4.

Table 4: Frequency of using Web Technologies in your Library

Sl.No.	Frequency	Respondents	Percent	Rank
1	Below 6 Months	70	12.59	4
2	6-12 Months	97	17.45	2
3	12-24 Months	49	8.81	5
4	24-60 Months	74	13.31	3
5	More than 60 Months	266	47.84	1
	Total	556	100.00	100.0

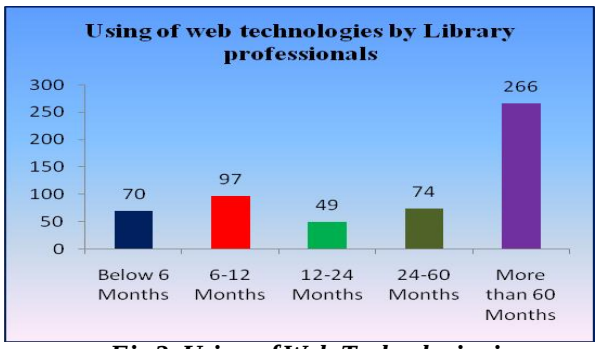


Fig.2. Using of Web Technologies in your library

Table 4 indicates the frequency of using Web Technologies in among the library professionals in higher education intuitions libraries in Southern Tamil Nadu. Out 556, 266(47.84%) of the professionals are 'More than 60 Months' about the frequency of using Web Technologies. Followed by 70(12.59%) of them have 'Below 6 Months', 97(17.45%) of them have '6-12 Months', 74(13.31%) of them have '24-60 Months' and 49(8.81%) of them '12-24 Months' are using the Web Technologies in their libraries. It simply shows the more than 45% of the library professionals are using Web Technologies 'More than 60 Months' in their library.

5.5 Frequency of using Web Technologies in your Library

The study has been further extended with the demographic details like type of Institutions, Gender, age group and year of experiences. The variables Mean value, Standard Deviation and their Rank for Experience have been calculated and the same has been shown in Table 5.

Table 5: Frequency of using Web Technologies in your Library

Sl. No.	Demographic Details	Below 6 Months	6-12 Months	12-24 Months	24-60 Months	More than 60 Months	Sig.
Type of Institutions							
1	Engg. &Tech	25(4.5)	35(6.29)	25(4.5)	21(3.78)	104(18.71)	Chi.Square: 6.880 df :4, Sig.: 0.142
2	Arts& Science	45(8.09)	62(11.15)	24(4.32)	53(9.53)	162(29.14)	

Gender							
3	Male	51(9.17)	62(11.15)	37(6.65)	56(10.07)	189(33.99)	Chi.Square: 3.753 df :4, Sig.: 0.440
4	Female	19(3.42)	35(6.29)	12(2.16)	18(3.24)	77(13.85)	
Age Group							
5	Below 30	2(0.36)	7(1.26)	4(0.72)	6(1.08)	20(3.6)	Chi.Square: 9.277, df :12, Sig.: 0.640
6	31-40	32(5.76)	44(7.91)	20(3.6)	25(4.5)	99(17.81)	
7	41-50	29(5.22)	28(5.04)	17(3.06)	29(5.22)	95(17.09)	
8	Above 50	7(1.26)	18(3.24)	8(1.44)	14(2.52)	52(9.35)	
Years of Experiences							
9	Less than 5 Years	8(1.44)	16(2.88)	6(1.08)	11(1.98)	43(7.73)	Chi.Square: 8.901, df :12, Sig.: 0.711
10	6-10 Years	24(4.32)	41(7.37)	19(3.42)	25(4.5)	95(17.09)	
11	11-15 Years	21(3.78)	20(3.6)	16(2.88)	18(3.24)	57(10.25)	
12	Above 15Years	17(3.06)	20(3.6)	8(1.44)	20(3.6)	71(12.77)	
	Total	70(12.59)	97(17.45)	49(8.81)	74(13.31)	266(47.84)	

(Figures in Parentheses denote percentages)

It is indicated in table 5 towards the frequency using web technologies in their libraries by the library professionals has been analysed with the type of Institutions. Among the library professionals from 'Engineering & Technology' institutions 25(4.5%) of them using 'Below 6 Months', 35(6.29%) of them '6-12 Months', 25(4.5%) of them '12-24 Months', 21(3.78%) of them '24-60 Months' and 104(18.71%) of them 'More than 60 Months'. Further, Chi square test has been administered and table value is 5.991 for 5% level of significance. The calculated value for all the values were less than the table value which indicated the variables are insignificant

In the Gender wise analysis frquenxy of using web technologies among the library professionals in their library has been analysed. Among the library professionals from 'Male' professionals 51(9.17%) of them are using 'Below 6 Months', 62(11.15%) of them '6-12 Months', 37(6.65%) of them '12-24 Months', 56(10.07%) of them '24-60 Months' and 189(33.99%) of them 'More than 60 Months'. Followed by 19(3.42%) 'Female' library professionals are using 'Below 6 Months', 35(6.29%) of them '6-12 Months', 12(2.16%) of them '12-24 Months', 18(3.24%) of them '24-60 Months' and 77(13.85%) of them 'More than 60 Months'. Further, Chi square test has been administered and table value is 5.991 for 5% level of significance. The calculated value for all the values were less than the table value which indicated the variables are insignificant

In the age group wise analysis of using web technologies among the library professionals in their library has been analysed.. Among the library professionals from age group of '31-40 years' 32(5.76%) of them are using 'Below 6 Months', 44(7.91%) of them '6-12 Months', 20(3.6%) of them '12-24 Months', 25(4.5%) of them '24-60 Months' and 99(17.81%) of them 'More than 60 Months'. Further, Chi square test has been administered and table value is 12.592 for 5% level of significance. The calculated value for all the values were less than the table value which indicated the variables are insignificant

In the year of experiences wise analysis, using of web technologies among the library professionals in their library has been analysed. Among the library professionals from frequency of experiences of '6-10 years' 24(4.32%) of them are using 'Below 6 Months', 41(7.37%) of them '6-12 Months', 19(3.42%) of them '12-24 Months', 25(4.5%) of them '24-60 Months' and 95(17.09%) of them 'More than 60 Months'. Followed by 21(3.78%) professionals from the frequency of experiences of '11-15 years' are using 'Below 6 Months'. Further, Chi square test has been administered and table value is 12.592 for 5% level of significance. The calculated value for all the values were less than the table value which indicated the variables are insignificant.

5.6. Responses Getting From Library Users towards Application of Web Technologies

The Responses Getting from Library Users towards Application of Web Technologies among the Library professionals has been analysed based on the responses and it is shown in the table.6.

Table 6: Responses Getting From Library Users towards Application of Web Technologies

Sl.No.	Frequency	Respondents	Percent	Rank
1	Very Good Support	136	24.46	2
2	Good Support	61	10.97	3
3	Fair Support	54	9.71	4
4	Poor Support	41	7.37	5
5	Rare Support	264	47.48	1
	Total	**556**	**100.00**	

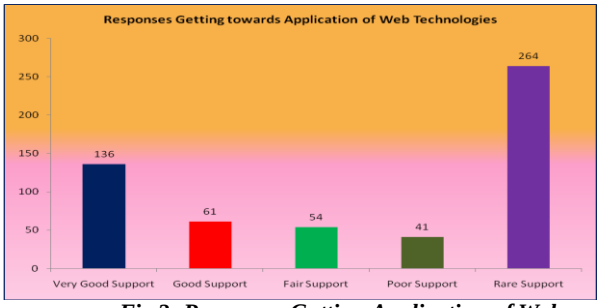


Fig.3. Responses Getting Application of Web Technologies

Table 6 indicates the frequency of Responses Getting From Library Users towards Application of Web Technologies in higher education intuitions libraries in Southern Tamil Nadu. Out 556, 136(24.46%) of the professionals are stated 'Very Good Support'. Followed by 61(10.97%) of them mentioned 'Good Support', 54(9.71%) of them stated 'Fair Support', 41(7.37%) of them 'Poor Support' and 264(47.48%) of them replied 'Rare Support'. It simply shows the more than 47% of the library professionals are stated 'Rare Support' towards Responses from Library Users towards Application of Web Technologies.

5.7. Frequency of Responses Getting From Library Users towards Application of Web Technologies

The study has been further extended with the demographic details like type of Institutions, Gender, age group and year of experiences. The variables Mean value, Standard Deviation and their Rank for Experience have been calculated and the same has been shown in Table 7.

Table 7: Frequency of Responses getting from library users towards application of Web Technologies

Sl. No.	Demographic Details	Very Good Support	Good Support	Fair Support	Poor Support	No Support	Sig.
Type of Institutions							
1	Engg. &Tech	51(9.17)	24(4.32)	17(3.06)	16(2.88)	102(18.35)	Chi.V: 1.089 df :4, Sig.: 0.896
2	Arts& Science	85(15.29)	37(6.65)	37(6.65)	25(4.5)	162(29.14)	
Gender							
3	Male	98(17.63)	43(7.73)	33(5.94)	31(5.58)	190(34.17)	Chi.V: 3.192 df :4, Sig.: 0.526
4	Female	38(6.83)	18(3.24)	21(3.78)	10(1.8)	74(13.31)	
Age Group							
5	Below 30	12(2.16)	0(0)	6(1.08)	2(0.36)	19(3.42)	Chi.V: 18.507, df :12, Sig.: 0.101
6	31-40	45(8.09)	24(4.32)	30(5.4)	16(2.88)	105(18.88)	
7	41-50	53(9.53)	24(4.32)	9(1.62)	16(2.88)	96(17.27)	
8	Above 50	26(4.68)	13(2.34)	9(1.62)	7(1.26)	44(7.91)	
Years of Experiences							
9	Less than 5 Years	19(3.42)	3(0.54)	17(3.06)	5(0.9)	40(7.19)	Chi.V: 24.903, df :12, Sig.: 0.015
10	6-10 Years	52(9.35)	22(3.96)	21(3.78)	16(2.88)	93(16.73)	
11	11-15 Years	32(5.76)	17(3.06)	6(1.08)	6(1.08)	71(12.77)	
12	Above15Years	33(5.94)	19(3.42)	10(1.8)	14(2.52)	60(10.79)	
	Total	136(24.46)	61(10.97)	54(9.71)	41(7.37)	264(47.48)	

(Figures in Parentheses denote percentages)

It is indicated in table 7 towards Responses Getting From Library Users towards Application of Web Technologies in their libraries by the library professionals has been analysed with the type of Institutions. Among the library professionals from 'Engineering & Technology' institutions 51(9.17%) of them responses 'Very Good Support', 24(4.32%) of them 'Good Support', 17(3.06%) of them 'Fair Support', 16(2.88%) of them 'poor Support' and 102(18.35%) of them 'No Support'. Followed by library professionals from 'Arst & Science' institutions 85(15.29%) of them responses 'Very Good Support', Further, Chi square test has been administered and table value is 5.991 for 5% level of significance. The calculated value for all the values were less than the table value which indicated the variables are insignificant

In the Gender wise analysis, regarding the Responses Getting From Library Users towards Application of Web Technologies in their libraries by the library professionals has been analysed with the Gender. Among the 'Male' library professionals 98(17.63%) of them responses 'Very Good Support', 43(7.73%) of them 'Good Support', 33(5.58%) of them 'Fair Support', 31(5.58%) of them 'poor Support' and 190(34.17%) of them 'No Support'. Followed by 'Female' library professionals, 38(6.83%) of them responses 'Very Good Support', 18(3.24%) of them 'Good Support',. Further, Chi square test has been administered and table value is 5.991 for 5% level of significance. The calculated value for all the values were less than the table value which indicated the variables are insignificant

In the age group wise analysis, regarding the Responses Getting From Library Users towards Application of Web Technologies in their libraries by the library professionals has been analysed with the Gender. Among the library professionals age group of '31-40 years' 45(8.09%) of them responses 'Very Good Support', 24(4.32%) of them 'Good Support', 30(5.4%) of them 'Fair Support', 16(2.88%) of them 'poor Support' and 105(18.88%) of them 'No Support'. Followed by age group of '41-50 years', 53(9.53%) of them responses 'Very Good Support', Further, Chi square test has been administered and table value is 12.592 for 5% level of significance. The calculated value for all the values were less than the table value which indicated the variables are insignificant

In the year of experiences wise analysis, regarding the Responses Getting From Library Users towards Application of Web Technologies in their libraries by the library professionals has been analysed with the Gender. Among the library professionals year of experiences '6-10 years' 52(9.35%) of them responses 'Very Good Support', 22243.96%) of them 'Good Support', 21(3.78%) of them 'Fair Support', 16(2.88%) of them 'poor Support' and 93(16.73%) of them 'No Support'. Followed by year of experiences of 'Above 15 years', 33(5.94%) of them responses 'Very Good Support', 19(3.42%) of them 'Good Support', 10(1.8%) of them 'Fair Support', 14(2.52%) of them 'poor Support' and 60(10.79%) of them 'No Support'. Further, Chi square test has been administered and table value is 12.592 for 5% level of significance. The calculated value for all the values higher less than the table value which indicated the variables are significant.

8.8 Usefulness of Web Technologies for Accessing Scholarly Information/for Academic and Research Purpose

The Responses Getting from Library Users towards Application of Web Technologies among the Library professionals has been analysed based on the responses and it is shown in the table.8.

Table 8: Usefulness of Web Technologies for Accessing Scholarly Information/for Academic and Research Purpose

Sl.No.	Frequency	Respondents	Percent	Rank
1	Rarely Useful	62	11.15	4
2	Slightly Useful	66	11.87	3
3	Somewhat Useful	41	7.37	5
4	Very Useful	91	16.37	2
5	Extremely Useful	296	53.24	1
	Total	**556**	**100.00**	

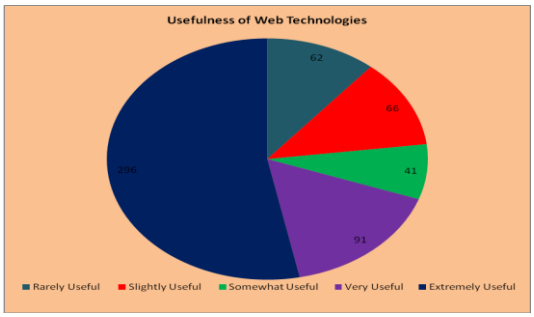


Fig.4. Usefulness of Web Technologies

Table 8 indicates the frequency of Usefulness of Web Technologies for Accessing Scholarly Information/for Academic and Research Purpose in higher educational intuitions libraries in Southern Tamil Nadu. Out 556, 62(11.15%) of the professionals are stated 'Rarely Useful'. Followed by 66(11.87%) of them mentioned 'Slightly Useful', 41(7.37%) of them stated 'Some What Useful', 91(16.37%) of them 'Very Useful' and 296(53.24%) of them replied Extremely Useful'. It simply shows the more than 53% of the library professionals are stated 'Extremely Useful' towards Usefulness of Web Technologies for Accessing Scholarly Information/for Academic and Research Purpose.

5.9.Usefulness of Web Technologies for Accessing Scholarly Information / for Academic and Research Purpose

The study has been further extended with the demographic details like type of Institutions, Gender, age group and year of experiences. The variables Mean value, Standard Deviation and their Rank for Experience have been calculated and the same has been shown in Table 9.

Table 9: Usefulness of Web Technologies for Accessing Scholarly Information / for Academic and Research Purpose

Sl. No.	Demographic Details	Rarely Useful	Slightly Useful	Somewhat Useful	Very Useful	Extremely Useful	Sig.
Type of Institutions							
1	Engg. &Tech	28(5.04)	27(4.86)	13(2.34)	39(7.01)	103(18.53)	Chi.Square: 4.374 df :4, Sig.: 0.346
2	Arts& Science	34(6.12)	39(7.01)	28(5.04)	52(9.35)	193(34.71)	
Gender							
3	Male	47(8.45)	48(8.63)	30(5.4)	67(12.05)	203(36.51)	Chi.Square: 2.032 df :4, Sig.: 0.730
4	Female	15(2.7)	18(3.24)	11(1.98)	24(4.32)	93(16.73)	
Age Group							
5	Below 30	3(0.54)	12(2.16)	0(0)	8(1.44)	16(2.88)	Chi.Square: 33.173, df :12, Sig.: 0.001
6	31-40	18(3.24)	13(2.34)	18(3.24)	37(6.65)	134(24.1)	
7	41-50	27(4.86)	26(4.68)	13(2.34)	32(5.76)	100(17.99)	
8	Above 50	14(2.52)	15(2.7)	10(1.8)	14(2.52)	46(8.27)	
Years of Experiences							
9	Less than 5 Years	8(1.44)	12(2.16)	6(1.08)	13(2.34)	45(8.09)	Chi.Square: 13.898 df :12, Sig.: 0.307
10	6-10 Years	15(2.7)	17(3.06)	14(2.52)	39(7.01)	119(21.4)	
11	11-15 Years	19(3.42)	16(2.88)	9(1.62)	21(3.78)	67(12.05)	
12	Above 15Years	20(3.6)	21(3.78)	12(2.16)	18(3.24)	65(11.69)	
	Total	62(11.15)	66(11.87)	41(7.37)	91(16.37)	296(53.24)	

(Figures in Parentheses denote percentages)

It is indicated in table 9 towards Usefulness of Web Technologies for Accessing Scholarly Information / for Academic and Research Purpose among the library professionals has been analysed with the type of Institutions. Among the library professionals from 'Engineering & Technology' institutions, 28(5.04%) of them accepted 'Rarely Useful', 27(4.86%) of them stated 'Slightly Useful', 13(2.34%) of them Some What Useful', 39(7.01%) of them 'Very Useful' and 103(18.53%) of them 'Extremely Useful'. Followed by library professionals from 'Arst & Science' institutions 34(6.12%) of them accepted 'Rarely Useful', 39(7.01%) of them stated 'Slightly Useful', 28(5.04%) of them Some What Useful', 52(9.35%) of them 'Very Useful' and 193(34.71%)

of them 'Extremely Useful'.Further, Chi square test has been administered and table value is 5.991 for 5% level of significance. The calculated value for all the values were less than the table value which indicated the variables are insignificant

In the Gender wise analysis, regarding the Usefulness of Web Technologies for Accessing Scholarly Information / for Academic and Research Purpose among the library professionals has been analysed. Among the 'Male' library professionals 47(8.45%) of them accepted 'Rarely Useful', 48(8.63%) of them stated 'Slightly Useful', 30(5.4%) of them Some What Useful', 67(12.05%) of them 'Very Useful' and 203(36.51%) of them 'Extremely Useful'. Followed by 'Female' library professionals 15(2.7%) of them accepted 'Rarely Useful', 18(3.24%) of them stated 'Slightly Useful', 11(1.98%) of them Some What Useful', 24(4.32%) of them 'Very Useful' and 93(16.73%) of them 'Extremely Useful'.Further, Chi square test has been administered and table value is 5.991 for 5% level of significance. The calculated value for all the values were less than the table value which indicated the variables are insignificant

In the age group wise analysis, regarding the regarding the Usefulness of Web Technologies for Accessing Scholarly Information / for Academic and Research Purpose among the library professionals has been analysed. Among the library professionals in the age group of '31-40 years' 18(3.24%) of them accepted 'Rarely Useful', 13(2.34%) of them stated 'Slightly Useful', 18(3.24%) of them Some What Useful', 37(6.65%) of them 'Very Useful' and 134(24.10%) of them 'Extremely Useful'. Followed by in the age group of 'Above 50 year' library professionals 14(2.52%) of them accepted 'Rarely Useful', 15(2.7%) of them stated 'Slightly Useful', 10(1.8%) of them Some What Useful', 14(2.52%) of them 'Very Useful' and 46(8.27%) of them 'Extremely Useful'.Further, Chi square test has been administered and table value is 12.592 for 5% level of significance. The calculated value for all the values were higher than the table value which indicated the variables are significant

In the year of experiences wise analysis, regarding the regarding the Usefulness of Web Technologies for Accessing Scholarly Information / for Academic and Research Purpose among the library professionals has been analysed. Among the library professionals in the years of experiences of 'Less than 5 years' 8(1.44%) of them accepted 'Rarely Useful', 12(2.16%) of them stated 'Slightly Useful', 6(1.08%) of them Some What Useful', 13(2.34%) of them 'Very Useful' and 45(8.09%) of them 'Extremely Useful'. Followed by in the years of experiences of 'Above 15 years' library professionals 20(3.6%) of them accepted 'Rarely Useful', 21(2.16%) of them stated 'Slightly Useful', 12(2.16) of them Some What Useful', 18(3.24%) of them 'Very Useful' and 65(11.69%) of them 'Extremely Useful'Further, Chi square test has been administered and table value is 12.592 for 5% level of significance. The calculated value for all the values higher less than the table value which indicated the variables are significant.

5.10. Average Time Spent Do Library Members or Users Spend Per Day on Web Tools in the Library

The Average Time Spent Do Library Members or Users Spend Per Day on Web Tools in the Library among the Library professionals has been analysed based on the responses and it is shown in the table.10.

Table 10: Average Time Spent Do Library Members or Users Spend Per Day on Web Tools in the Library

Sl. No.	Frequency	Respondents	Percent	Rank
1	Below 15 Minutes	298	53.60	1
2	15-30 Minutes	73	13.13	3
3	30-60 Minutes	42	7.55	5
4	More than an hour	60	10.79	4
5	Rarely	83	14.93	2
	Total	556	100.00	

Table 10 indicates the frequency of Average Time Spent Do Library Members or Users Spend Per Day on Web Tools in the Library in higher educational intuitions libraries in Southern Tamil Nadu. Out 556, 298(53.60%) of the professionals are stated 'Below 15 minutes'. Followed by 73(13.137%) of them spent '15-30minutes', 42(7.55%) of them spent '30-60 minutes', 60(10..797%) of them spent 'More than a hour' and 83(14.93%) of them spent 'Rarely'. It simply shows the more than 53% of the library professionals are spent per day 'Below 15 minutes'' towards Average Time Spent Do Library Members or Users Spend Per Day on Web Tools in the Library.

Conclusion

Information and Communication Technology (ICT) has brought unprecedented changes and

transformation to academic library and information services, conventional LIS such as OPAC, user services, reference service, bibliographic services, current awareness services, document delivery, interlibrary loan, audio visual and other purposes. Similarly the web technology are very important to manage the academic libraries in current environment."Web based Library Services means library services provided using internet as medium and library website as a gateway with the help of integrate library management system." (White, 2001) has defined web based services as an information service in which users ask questions via electronic or virtual mode.

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