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Utilization of Web Services by the Faculty Members of Engineering Colleges in Namakkal District: A Study

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Abstract – **This paper is an attempt to investigate the use of various types of web based services, purpose of using web based services, frequently used search engines and web browsers, storage medium and satisfaction level of users with the internet facilities provided in the Engineering colleges.**

Keywords: **Wed Based Services, Engineering Colleges, Satisfaction Level**

I. Introduction

The rapid developments in Information and Communication Technology brought revolutionary changes in information scenario giving rise to a number of options to handle varied information sources conveniently and effortlessly as a result of which wed based services have become the most sought after modern library's reserves in satisfying varied needs of students, teachers, and researchers with minimum risk and time. Information Technology has changed the world and has become one of the important tools for retrieving information. The web based services have acquired a major portion of library collections. The value and use of information services, particularly web based services, have increased with the time. Therefore, there is necessity to make study on the different aspects of web based services and the issues relating to the use of web based services by users, more particularly by the faculty members of academic institutions. The present study is an attempt to analyse the use of web based services by the faculty members of Engineering colleges in Namakkal District.

II. Objectives of The Study

The main Objectives of the study are:

1. To identity the frequently used web browsers and search engines by the faculty member of Engineering colleges in Namakkal District;
2. To study the purpose and benefit of accessing web based services among the faculty members of Engineering colleges in Namakkal District;
3. To find out the most preferred format for downloading articles and storage medium among the faculty members of Engineering colleges in Namakkal District;
4. To determine the frequently used web based services by the faculty members of Engineering colleges in Namakkal District;
5. To determine the level of satisfaction among the faculty members of Engineering colleges in Namakkal District.

III. Methodology

Keeping in view the above objectives in mind, a structured questionnaire was prepared to collect data from the users of web based services in the Engineering colleges. Questionnaire contains various questions pertaining to the use of web based services. For this purpose a total of 1430 questionnaires were distributed among the faculty members of Engineering colleges. Out of 1430 questionnaires were distributed, 1259 valid questionnaire were collected and then data was analyzed, tabulated, interrupted and presented in form of this paper. This constitutes 88.04% of the total response.

IV. Data Analysis

Analysis of data is the ultimate step in research process. It is the link between raw data and significant results leading to conclusions. This process of analysis has to be result oriented.

The gender-wise distribution of respondents presented in table I. There have been 1259 respondents studied for the purpose. Among them the male respondents found are 974 reflecting 77.36% of total data. The female respondents are about 285 which is calculated to be 22.64%.

Table I Gender Wise Distribution of Respondents

S.No.	Gender	No. of Respondents	Percentage
1	Male	974	77.36
2	Female	285	22.64
Total		1259	100

Table II Gender Wise Distribution of Respondents of Preferred Web Browsers

Web browser	No .of Respondents				Total	%
	Male	%	Female	%		
Google Chrome	878	79.17	231	20.83	1109	88.09
Internet Explorer	931	79.37	242	20.63	1173	93.17
Mozilla fire fox	648	73.97	228	26.03	876	69.58
Netscape	557	72.06	216	27.94	773	61.40
Maxton	481	70.12	205	29.88	686	54.49
Opera	454	69.63	198	30.37	652	51.79
Safari	402	68.60	184	31.40	586	46.54
Silver light	373	67.82	177	32.18	550	43.69

Note: The percentage exceeded 100% because of multiple choice options.

Table II explains the gender wise distribution of respondents preferred web browser for browsing web based services. It is seen from the table that 878(79.17%) male and 231(20.83%) female respondents prefer 'Google chrome' web browser for browsing web based services, 931(79.37%) male and 242(20.63%) female respondents prefer 'Internet Explorer' web browser, 648(73.97%) male and 228(26.03%) female respondents prefer 'Mozilla Firefox' web browser, 557(72.06%) male and 216(27.94%) female respondents prefer 'Netscape' web browser, 481(70.12%) male and 205(29.88%) female respondents prefer 'Maxton' web browser, 454(69.63%) male and 198 (30.37%) female respondents prefer 'Opera' web browser, 402(68.60%) male and 184(31.40%) female respondents prefer 'safari' web browser and 373(67.82%) male and 177(32.18%) female respondents prefer 'Silver light' web browser for browsing web based services.

Table III Gender Wise Distribution of Respondents Preferred Search Engine

Search Engine	No .of Respondents				Total	%
	Male	%	Female	%		
AltaVista	462	77.52	134	22.48	596	47.34
Bing	472	75.76	151	24.24	623	49.48
Excite	385	74.18	134	25.82	519	41.22
Google	947	79.98	237	20.02	1184	94.04
Info seek	288	63.16	168	36.84	456	36.22
Lycos	258	62.02	158	37.98	416	33.04
Yahoo	903	79.98	226	20.02	1129	89.67
MSN	244	57.01	184	42.99	428	34.00
Hot Bot	253	60.96	162	39.04	415	32.96
Galaxy	202	57.39	150	42.61	352	27.96

Note: The percentage exceeded 100% because of multiple choice options

Table III reveals the gender wise distribution of respondents preferred search engine. It is seen from the table that 462(77.52%) male and 134(22.48%) female respondents prefer 'Alta Vista' for searching web based services, 472(75.76%) male and 151(24.24%) female respondents prefer 'Bing' 385(74.18%) male and 134(25.82%) female respondents prefer 'Excite' 947(79.98%) male and 237(20.02%) female respondents prefer 'Google' 288(63.16%) male and 168(36.84%) female respondents prefer 'Info seek' 258(62.02%) male and 158(37.98%) female respondents prefer 'Lycos' 903(79.98%) male and 226(20.02%) respondents prefer 'Yahoo' 244(57.01%) male and 184(42.99%) female respondents prefer 'MSN', 253(60.96%) male and 162(39.04%) female respondents prefer 'HotBot' and 202(57.39%) male and 150(42.61%) female respondents prefer 'Galaxy' search engine for searching web based services.

Table IV Gender Wise Distribution of Respondents Purpose of Using Web Based Services

Purpose	No .of Respondents				Total	%
	Male	%	Female	%		
Study	509	74.52	174	25.48	683	54.25
Research	694	77.54	201	22.46	895	71.09
Publishing articles/ books	481	70.84	198	29.16	679	53.93
Keeping up-to-date information	761	78.29	211	21.71	972	77.20
Finding relevant information	614	77.23	181	22.77	795	63.15
Professional development	526	73.06	194	26.94	720	57.79
Entertainment	430	71.91	168	28.09	598	47.50
Chatting	137	69.19	61	30.81	198	15.73

Note: The Percentage Exceeded 100% Because of Multiple Choice Options.
Figures In Parentheses Denote Percentage.

Table IV shows the gender wise distribution of respondent's purpose of using web based services. It is seen from the table that, 509 (74.52%) male and 174(25.48%) female respondents using web based services for their study purpose, 694 (77.54%) male and 201(22.46%) female respondents using for their research, 148 (70.84%) male and 198 (29.16%) female respondents using for publishing articles/books, 761(78.29%) male and 211(21.71%) female respondents using for keeping up-to-date information, 614 (77.23%) male and 181 (22.77%) female respondents using for finding relevant information, 526(73.06%) male and 194(26.94%) female respondents using for their professional development, 430 (71.91%) male and 168 (28.09%) female respondents using for entertainment and 137 (69.19%) male and 61 (30.81%) female respondents using web based services for chatting purpose.

Table V Gender Wise Distribution of Respondents Benefit of Use of Web Based Services

Benefit	No. of Respondents				Total	%
	Male	%	Female	%		
Time saving	783	77.45	228	22.55	1011	80.30
Better source of information	792	79.52	204	20.48	996	79.11
Access to up-to-date information	812	77.85	231	22.15	1043	82.84
Information available in various formats as for the needs	744	77.91	211	22.09	955	75.85
Improvement in the quality of professional work	728	78.62	198	21.38	926	73.55
Easily portability web based services	734	79.70	187	20.30	921	73.15
24/7 access to web based services	783	76.39	242	23.61	1025	81.41

Note: The percentage exceeded 100% because of multiple choice options

Table V reveals the gender wise distribution of respondents benefit of use of web based services. It is absorbed from the table that 783(77.45%) male and 228(22.55%) female respondents benefited with time saving, 792(79.52%) male and 204(20.48%) female respondents benefited with better source of information, 812(77.85%) male and 231(22.15%) female respondents benefited with access to up-to-date information, 744(77.91%) male and

211(22.09%) female respondents benefited with information available in various formats as per the need, 728(78.62%) male and 198(21.38%) female respondents benefited with improvement in the quality of professional work, 734(79.70%) male and 187(20.30%) female respondents benefited with easily portability of web based services and 783(76.39%) male and 242(23.61%) female respondents benefited with 24/7 access to web based services.

Table VI Gender Wise Distribution of Respondents Preferred File Format

File format	No. of Respondents				Total	%
	Male	%	Female	%		
PDF	908	79.23	238	20.77	1146	91.02
HTML	642	75.89	204	24.11	846	67.20
MS-Word	884	79.78	224	20.22	1108	88.01
RTF	455	69.68	198	30.32	653	51.87
PPT	536	71.37	215	28.63	751	59.65
OCR	292	59.23	201	40.77	493	39.16
SGML	176	48.48	187	51.52	363	28.83
Post Script	226	57.65	166	42.35	392	31.14
Latex	185	54.57	154	45.43	339	26.93

Note: The percentage exceeded 100% because of multiple choice options.

Data presented in table VI reveals the gender-wise distribution of respondents preferred file format for downloading web based services. It is seen from the table that about 908(79.23%) male and 238(20.77%) female respondents prefer 'PDF' file format for downloading web based services, 642(75.89%) male and 204(24.11%) female respondents prefer 'HTML' file format, 884(79.78%) male and 224(20.22%) female respondents prefer 'MS Word' file format, 445(69.68%) male and 198(30.32%) female respondents prefer 'RTF' file format, 536(71.37%) male and 215(28.63%) female respondents prefer 'PPT' file format, 292(59.23%) male and 201(40.77%) female respondents prefer 'OCR' file format, 226(57.65%) male and 166(42.35%) female respondents prefer 'Post Script' file format and 185(54.57%) male and 154(45.43%) female respondents prefer 'Latex' file format for downloading web based services.

Table VII Gender Wise Distribution of Respondents Preferred Storage Medium

Storage medium	No .of Respondents				Total	%
	Male	%	Female	%		
Pen Drive	767	79.24	201	20.76	968	76.89
Compact Disk	613	76.43	189	23.57	802	63.70
DVD	541	75.24	178	24.76	719	57.11
Portable hard disk	508	76.28	158	23.72	666	52.90
Memory card	712	76.81	215	23.19	927	73.63
Blue Disk/Ray	327	80.15	81	19.85	408	32.41

Note: The percentage exceeded 100% because of multiple choice options

Table VII explains the gender wise distribution of respondents preferred storage medium. It is absorbed from the table that 767(79.24%) male and 201(20.76%) female respondents prefer 'Pen Drive' as a storage medium for storing virtual information, 613(76.43%) male and 189(23.57%) female respondents prefer 'Compact Disk' 541(75.24%) male and 178(24.76%) female respondents prefer 'DVD', 508(76.28%) male and 158(23.72%) female respondents prefer 'Portable hard disk', 712(76.81%) male and 215(23.19%) female respondents prefer 'Memory card' and 327(80.15%) male and 81(19.85%) female respondents prefer 'Blue Disk/ Ray' as a storage medium for storing virtual information.

The Table VIII shows the gender wise distribution of respondents use of various web based services. It is seen from the table that 953 (79.16%) male and 251(20.85%) female respondents use e-journals, 961(78.61%) male and 188(21.39%) female respondents use e-books, 637(78.74%) male and 172(21.26%) female respondents use e-conference proceedings, 534(82.28%) male and 115(17.72%) female respondents use e-tutorials, 737 (76.21%) male and 225(23.39%) female respondents use

Table VIII Gender Wise Distribution of Respondents Use of Various Web Based Services

Web based Services	No. of Respondents				Total	%
	Male	%	Female	%		
E-journals	953	79.15	251	20.85	1204	95.63
E-books	691	78.61	188	21.39	879	69.82
E-conference proceedings	637	78.74	172	21.26	809	64.26
E-Tutorials	534	82.28	115	17.72	649	51.55
E-Databases	737	76.61	225	23.39	962	76.41
Open source literature	687	76.76	208	23.24	895	71.09
E-reference sources	688	75.94	218	24.06	906	71.96
Students and faculty generated contents	324	62.07	198	37.93	522	41.46
E-Thesis and Dissertation	449	68.03	211	31.97	660	52.42

Note: The percentage exceeded 100% because of multiple choice options. Figures in parentheses denote percentage.

e-data bases, 687(76.76%) male and 208(23.24%) female respondents use open sources literature, 688(75.94%) male and 218(24.06%) female respondents use e-reference sources, 324(62.07%) male and 198(37.93%) female respondents use students and faculty generated contents and 449(68.03%) male and 211(31.97%) female respondents use e-thesis and dissertations.

Table Ixgender Wise Distribution of Respondents Satisfaction Level of Web Based Services

Level of Satisfaction	No. of Respondents				Total	%
	Male	%	Female	%		
Highly satisfied 1	55 1	5.91 6	1	21.4 2	16 1	7.16
Satisfied	397	40.76	128	44.91	525	41.70
Somewhat satisfied 3	90 4	0.04 7	5	26.32	465	36.93
Dissatisfied 3	2	3.29 2	1	7.37 5	3	4.21
Total	974	100	285	100	1259	100

The analysis of gender wise distribution of respondents satisfaction level of web based services presented in table IX. It is absorbed from the table that out of a total of 974 male and 285 female respondents, 155(15.91%) male and 61(21.40%) female respondents are highly satisfied, 397(40.76%) male and 128(44.91%) female respondents are satisfied, 390(40.04%) male and 75(26.32%) female respondents are somewhat satisfied and 32(3.29%) male 21(7.37%) female respondents are dissatisfied with web based services.

V. Findings

The major findings of the present study are:

1. 878(79.17%) male and 231(20.83%) female respondents prefer 'Google chrome' web browser for browsing web based services.
2. 155(15.91%) male and 61(21.40%) female respondents are highly satisfied.
3. 509 (74.52%) male and 174(25.48%) female respondents using web based services for their study purpose.
4. 908(79.23%) male and 238(20.77%) female respondents prefer 'PDF' file format for downloading web based services.
5. 783(77.45%) male and 228(22.55%) female respondents benefited with time saving.
6. 462(77.52%) male and 134(22.48%) female respondents prefer 'Alta Vista' for searching web based services.
7. 953 (79.16%) male and 251(20.85%) female respondents use e-journals.
8. 767(79.24%) male and 201(20.76%) female respondents prefer 'Pen Drive' as a storage medium for storing virtual information.

VI. Conclusion

The library environment has currently undergone drastic change in terms of collections and services. The proliferation of web based services has had a significant impact on the way the academic community uses, stores, and preserves information. The advantages of web based services have drawn attention of the library users to a great extent. Accordingly, these services have occupied a significant place in the collection and budget of almost all libraries.

References

[1] Chifwepa, V. (2003), "The use of the intranet and Internet by teaching staff of the University of Zambia", African Journal of Library, Archives & Information Science, Vol. 13 No. 2, pp. 119-132.

[2] Fitzgerald, B. and Savage, F. (2004), "Public libraries in Victoria, Australia: an overview of current ICT developments, challenges, and issues", OCLC Systems Services, Vol. 20 No. 1, pp. 24-30.

[3] Gulati, A. (2004). Use of Information and communication technology in libraries and information centre's: An Indian scenario. The Electronic Library, 22(4), pp. 335-350.

[4] Kawooya, D. (2004), "Universal access to ICT and lifelong learning: Uganda's experience", New Library World, Vol. 105 No.11,pp 423-428.

[5] Rahman, M.A., Uddin, H.and Akhter, R.(2004), "Information and communication technologies", libraries and the role of library professionals in the 21st century: with special reference to Bangladesh, Notes in Computer Science Vol.3334, pp. 608-17.