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# User Preferences on University Websites: A Study

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## Abstract

The rapid development of information and communication technology has made it very easy to access information through various channels of communication. Website is one of the important medium wherein one can find all kinds of information relating to their area of interest. Websites of the universities reflect the activities and programmes that are carried out in the universities. The usability of these websites plays a significant role and an attempt has been made in this paper to find out the same. For the study, a structured questionnaire was used to collect the data from the research scholars who are currently doing their research in and around Chennai. Out of 95 questionnaires distributed, 76 were received back (Response rate 80%). The study analyzed the preferred domains among users, identified the various features in the websites, ascertained the reasons for the inaccessibility of the websites and also found out the opinion of the users on websites. The findings, suggestions and recommendations are discussed in the paper.

## Introduction

The advent of the ICTs has supplemented the traditional system in providing the information especially academic institutions in a variety of ways. The Universities have created their own websites to up load the information related to various activities. It facilitates the users to access to the information easily within a short span of time, across globe much faster. Hence, the websites are believed to be the transporters of

the information of a particular organization / institution. Consequently, the website will show its way to success of an organization. It enhances the users' expectation and also the reputation of the organization. There are various types of websites, like business websites, entertainment websites, etc. In that way, academic websites communicate the vision and the mission of an institution. The university websites are no longer considered as an electronic brochure, but it is the main platform for describing and communicating the university's activities and their potentiality. In order to develop an effective website, it is important to understand the users' view in regard to the use of the website. With many websites offering similar facilities, the user today has become more demanding in respect of the web access. Users prefer visiting those sites, which are easy to learn and operate and are aesthetically appealing. The usability of a website plays a significant role in determining the number of hits to a website. This paper analyses the preferences of users on University websites.

## Review of Literature

Islam and Alam (2011) discussed that private universities in Bangladesh did not have much impact on the Web and were not known at the international level. They further suggest that the university websites should facilitate all users to access the academic and scientific resources as well as up-to-date information and news. Ramesh Babu, Jeyshankar and Nageswara Rao (2010) described that academic Web sites in a country are the most important Internet communication tools. They introduce universities, their related institutes and departments, their resources and services, faculty members, student alumnae and others. Nowadays, an important factor for the success of a university is its website and web accessibility and in particular its visibility on the Web. Therefore, it is important to evaluate their presence on the Web as it is to evaluate the educational and research performance of the universities. Jeyshankar and Ramesh Babu (2009) found that majority of universities have '.ac.in' as the domain name in their website Uniform Resource Locators (URLs). Nwagwu and Agarin (2008) found that web users in the university do not link through their university portals as most of the email addresses of the web users are not linked to the university websites. Vaughan and Thelwall (2005) stated that University websites are multifaceted communication devices, and are increasingly used for a wide variety of purposes, from attracting new students to providing online education. Kirakowski, J.; Claridge, N. & Whitehand, R.(1998)<sup>6</sup> and Kirakowski (2000) evaluated the user satisfaction with usability of five websites based on a questionnaire method. The authors developed a new questionnaire (named WAMMI) for the evaluation. The questionnaire showed that the evaluation of user satisfaction contributes to the successful development of websites. Pinto, et al. (2009) conducted a study on information provided by Spanish University websites on their assessment and quality processes. They analyse and evaluate the information provided by Spanish public universities on the web about their assessment and quality processes with the aim of detecting aspects for improvement and identifying best practices in universities that could act as a benchmark for the rest of the sector. Corry, et al. (1997) conducted a usability evaluation of an existing Midwestern University website. An analysis was conducted to restructure the information contained in the current Website; a prototype was developed and tested against the existing site.

## Objectives of the Study

The major objectives of the study are

1. To analyse the preferred domains among users
2. To identify the features in the websites
3. To ascertain the reasons for inaccessibility of websites
4. To find out the opinions of users on websites.

## Hypotheses

H<sub>1</sub> : There exists significant difference among users in the preferred domains.

H<sub>2</sub> : There is a significant difference among users in the features of websites.

H<sub>3</sub> : There is no significant difference among users on inaccessibility of websites.

H<sub>4</sub>: There is no significant difference among users in the opinion on websites.

## Methodology

The study was carried out from the research scholars who are currently pursuing research in various engineering institutions located in and around Chennai. A structured questionnaire was used to collect the data for this study. The questionnaire was divided into four sections like personal information, Preference of Domains, Features in URLs, Reasons for Inaccessibility of Websites, and General Opinion on Websites. The questionnaires were administered directly to the research scholars of library and information science. The data were collected in person as well as by email from the research scholars. There were 95 questionnaires distributed and 76 questionnaires received back. The data collected through questionnaires were analyzed using SPSS.

## Data Analysis and Findings

The questionnaire was circulated among the research scholars of various engineering institutions located in and around Chennai, Tamil Nadu, and India. Out of 95 questionnaires distributed, 76 were filled-in and received and the demographic details were then calculated (given in Table 1).

**Table 1. Demographic Information**

S.No	Description		No. of respondents	%	Total
1.	Age	Below 35	31	40.8%	76 100%
		Above 35	45	59.2%	
2.	Gender	Male	48	63.2%	76 100%
		Female	28	36.8%	
3.	Experience	1-10 Years	26	34.2%	76 100%
		11-20 Years	29	38.2%	
		Above 20 Years	21	27.6%	

The number of respondents in the age group below 35 was 31(40.8%) and above 35 were 45 (59.2%). In the gender side, male respondents were 48 (63.2%) as compared to female respondents who were 28 (36.8%). The total number of working experience of the respondents were calculated with the ranges 1-10 years, 11-20 years and above 20 years and there were 26 respondents in first range, 29 respondents in the second range and 21 in the third range respectively.

## Preferred Domains

The study was analyzed to find out the preferred domains among users. Four domains were identified and the same is given in Table 2.

**Table 2. Preferred Domains**

S.No	Description	NAA	LF	F	MF	Total	Mean	Std.	Rank	Chi-Square
1.	.edu	5 6.6%	2 2.6%	3 3.9%	66 86.8%	76 100%	3.71	.81348	1	155.263
2.	.com	15 19.7%	6 7.9%	16 21.1%	39 51.3%	76 100%	3.03	1.18255	4	31.263
3.	.org	8 10.5%	16 21.1%	10 13.2%	42 55.3%	76 100%	3.13	1.08741	3	38.947
4.	.ac.in	4 5.3%	10 13.2%	8 10.5%	54 71.1%	76 100%	3.47	.91613	2	86.947

**(NAA = Not at all, LF = Less Frequently, F = Frequently, MF = Most Frequently, Std. = Standard Deviation) Table Value = 7.815 df = 3**

The respondents were asked to indicate the preferred domains. It is found from Table 2 that majority of users (Mean 3.71, Rank 1) preferred .edu domain name, followed by (Mean 2.31, Rank 2) of users

preferred .ac.in. It is further found that a good number of users (Mean 2.27, Rank 3) preferred .org and a very few numbers of users (Mean 2.23, Rank 4) preferred .com domain name. The Chi-Square indicates that there exists significant difference in the preferred domains, since the calculated value is more than the table value of 7.815.

### Features in URL

The various features in URL were studied and the nine features identified were tabulated and calculated in Table 3.

**Table 3. Features in URL**

S.No	Description	Poor	Fair	Good	Very Good	Excellent	Total	Mean	Std.	Rank	Chi-Square
1.	Accessibility	7 9.2%	13 17.1%	5 6.6%	15 19.7%	36 47.4%	76 100%	3.78	1.42657	3	40.053
2.	Accuracy	5 6.6%	12 15.8%	4 5.3%	9 11.8%	46 60.5%	76 100%	4.03	1.38025	2	80.711
3.	Authority	5 6.6%	6 7.9%	2 2.6%	11 14.5%	52 68.4%	76 100%	4.30	1.24386	1	114.132
4.	Consistency	14 18.4%	22 28.9%	9 11.8%	14 18.4%	17 22.4%	76 100%	2.97	1.46035	9	5.974
5.	Ease of use	8 10.5%	19 25.0%	8 10.5%	17 22.4%	24 31.6%	76 100%	3.39	1.42435	6	13.079
6.	Permanence	10 13.2%	12 15.8%	4 5.3%	23 30.3%	27 35.5%	76 100%	3.59	1.44386	4	23.868
7.	Timeliness	11 14.5%	19 25.0%	3 3.9%	18 23.7%	25 32.9%	76 100%	3.35	1.51177	7	18.737
8.	Uniqueness	12 15.8%	23 30.3%	7 9.2%	9 11.8%	25 32.9%	76 100%	3.15	1.54102	8	17.947
9.	Usefulness	10 13.2%	14 18.4%	9 11.8%	15 19.7%	28 36.8%	76 100%	3.48	1.47416	5	15.184

**(Table Value= 9.488, df= 4)**

The respondents were asked to specify the features expected in the URLs. It is clear from Table 3 that majority of the users (Mean 4.30, Rank 1) considered Authority to be the most important feature to be found in Web sites followed by Mean 4.03, Rank 2, of users who chose Accuracy. It is also found that good number of users (Mean 3.78, Rank 3) preferred Accessibility to be found in an URL. The consistency feature in an URL was found least by the respondents (Mean 2.97, Rank 9), while timeliness (Mean 3.35, Rank 7) and Uniqueness (Mean 3.15, Rank 8) were considered below average features not so much required in URLs. The Chi-Square indicates that there is no significant difference among users in the features of websites, since the calculated value is less than the table value of 9.488.

### Reasons for Inaccessibility

The various reasons for the inaccessibility of the websites were identified and tabulated in Table 4.

**Table 4. Reasons for Inaccessibility**

S.No	Description	SD	DA	UD	A	SA	Total	Mean	Std.	Rank	Chi-Square
1.	Low bandwidth	10 13.2%	11 14.5%	26 34.2%	16 21.1%	13 17.1%	76 100%	3.14	1.25117	6	10.974
2.	Misspelled in URLs	9 11.8%	16 21.1%	13 17.1%	12 15.8%	26 34.2%	76 100%	3.39	1.44295	4	11.237
3.	http errors	2 2.6%	5 6.6%	5 6.6%	33 43.4%	31 40.8%	76 100%	4.13	.98444	2	62.421
4.	Server down	3 3.9%	5 6.6%	6 7.9%	12 15.8%	50 65.8%	76 100%	4.32	1.12414	1	102.553
5.	URL is currently inactive	5 6.6%	6 7.9%	5 6.6%	25 32.9%	35 46.1%	76 100%	4.03	1.20489	3	51.368
6.	Lengthy URLs	17 22.4%	9 11.8%	9 11.8%	21 27.6%	20 26.3%	76 100%	3.23	1.52200	5	9.000

**(SD- Strongly Disagree, DA – Disagree, UD – Undecided, A – Agree, SA – Strongly Agree)**

**(Table Value= 9.488, df= 4)**

The respondents were asked to indicate the reasons for the inaccessibility of the websites. The major reason for inaccessibility of websites was found to be server down (Mean 4.32, Rank 1), followed by Mean 4.13, Rank 2, of users considered http errors as a valid reason. A good number of users (Mean 4.03, Rank 3) thought that the URL may be currently inactive could be an important reason for the inaccessibility. Only a few respondents (Mean 3.14, Rank 6) identified low bandwidth as a vital reason for the inaccessible websites. The Chi-Square indicates that there is no significant difference among users on the inaccessibility of websites, since the calculated value is less than 9.488.

### Opinion of Websites

The users' general opinions on websites were ascertained and listed in Table 5.

**Table 5. Opinions of Websites**

S.No	Description	SD	DA	UD	A	SA	Total	Mean	Std.	Rank	Chi-Square
1.	Not reliable	8 10.5%	11 14.5%	5 6.6%	34 44.7%	18 23.7%	76 100%	3.56	1.289296	296	35.184
2.	Not authenticated	3 3.9%	9 11.8%	15 19.7%	31 40.8%	18 23.7%	76 100%	3.68	1.085794	794	29.263
3.	Not available later	11 14.5%	13 17.1%	17 22.4%	22 28.9%	13 17.1%	76 100%	3.17	1.310357	357	5.053
4.	Lack of standards to cite the URLs	7 9.2%	8 10.5%	18 23.7%	35 46.1%	8 10.5%	76 100%	3.38	1.107158	358	37.553
5.	Difficult to locate the URLs on Web	9 11.8%	4 5.3%	3 3.9%	38 50.0%	22 28.9%	76 100%	3.78	1.257683	683	57.816
6.	Web resources not constantly available at same URLs address	5 6.6%	5 6.6%	10 13.2%	32 42.1%	24 31.6%	76 100%	3.85	1.139642	642	39.132
7.	Need for some permanent identification address for every web document	5 6.6%	5 6.6%	12 15.8%	26 34.2%	28 36.8%	76 100%	3.88	1.177201	201	32.816
8.	Not always authoritative	7 9.2%	25 32.9%	9 11.8%	24 31.6%	11 14.5%	76 100%	3.09	1.266789	789	19.526
9.	Every web document will not have permanent identification address	6 7.9%	11 14.5%	8 10.5%	27 35.5%	24 31.6%	76 100%	3.68	1.277614	614	24.395

**(SD- Strongly Disagree, DA – Disagree, UD – Undecided, A – Agree, SA – Strongly Agree)  
(Table Value= 9.488, df = 4)**

The respondents were asked to indicate the general opinion about the websites and majority of the users (Mean 3.88, Rank 1) mentioned the need for some permanent identification address for every web document, followed by Mean 3.85, Rank 2 of users indicated that the web resources are not constantly available at the same URLs address. Also, moderate number of users (Mean 3.78, Rank 3) mentioned the difficulty in locating the URLs on the web. A few of the respondents (Mean 3.38, Rank 8 and Mean 3.09, Rank 9) felt that there is lack of standards to cite the URLs and also the websites are not always authoritative. The Chi-Square indicates that there is no significant difference among users in the opinion on websites, since the calculated value is less than the table value of 9.488.

### Suggestions and Recommendations

- The users mostly prefer .edu domain name because they are very much exposed to that domain name rather than .com and .org for academic institutions.
- The users prefer to URLs that are more authoritative, more accurate and easily inaccessible. The study also reveals that the consistency in URLs cannot be expected as an important feature and so also timeliness and uniqueness.
- The study also shows that low bandwidth, lengthy URL address and misspelling in URLs are not so important reasons for the inaccessibility of the websites.

## Conclusion

The users are able to collect information related to their academic activities since the academic websites provide information related to admission, department, research, etc. in their websites. The study also evaluated the preferred domains, features of the URL, Reasons for inaccessibility of websites and opinion on websites. It is important for every academic institution to upload the information pertaining to academic activities which helps the user to get the latest information. The website should be user-friendly and well-designed catering to the needs of the user community. It is further observed that the websites also facilitates to acquire information related to Research & Development activities remotely.

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