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## THE IMPACT OF CONTENTS ON NATIONAL AND INTERNATIONAL UNIVERSITY WEBSITES NAVIGATION BEHAVIOUR

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### ABSTRACT

*The web offers unprecedented opportunities for worldwide access to information resources, regardless of the user's country of origin. The design of information architecture has a significant impact on people's ability to find information on a website. The present paper studies how university websites could be more informative to users. A potential method to accomplish this would be to consider for what purposes other universities use their websites. A content analysis of national and international university's websites indicates that there are significant differences in the contents / features of Indian and foreign web sites of universities.*

### KEYWORDS

Browser, HTTP, Internet, World Wide Web, Website.

### INTRODUCTION

Internet is a massive [network](#) of networks, a networking infrastructure. It connects millions of computers together globally. The World Wide Web, or simply Web, on the other hand is a way of accessing information over the medium of Internet. It is an 'information-sharing model' that is built on top of the Internet. HTTP (Hypertext Transfer Protocol) is only one of the communication protocols used on the Internet. The Web is like a huge encyclopedia of information. The Web also utilizes [browsers](#), such as Internet Explorer or Firefox, to access Web documents called Web pages that are linked to each other via [hyperlinks](#). Web documents also contain graphics, sounds, text and video.

### RELATED STUDIES

There is a growing interest in social responsibility of the corporations among academicians and practitioners. Companies now are not only expected to be responsible to their shareholders but to society in general. Universities, as the centers of knowledge generation and sharing, play a very important role in solving world's problems by ensuring a sustainable tomorrow. However, it is questionable whether world leading universities are concerned about CSR and if they do, to what extent they are committed to their social responsibilities. According to Mehran , Azadeh , Yashar and Mohammadreza in their study of 'Corporate social responsibility and universities: A study of top 10 world universities websites' find that world leading universities are committed to their social responsibility and they provide sufficient information on most of the core areas of corporate social responsibility (CSR).

The web offers unprecedented opportunities for worldwide access to information resources, regardless of the user's country of origin. However, providing information globally raises the question of whether to offer a standardized or a culturally adapted website, often connected to important investment decisions (e.g., Anett Kralisch, Bettina Berendt, Martin Eisend,2001). The results shows that users' cultural backgrounds influence their navigation patterns in terms of time, amount of accessed information, and (non)linearity of information access.

Prior studies have suggested that a good Website design which facilitates a user's Web browsing behaviour would generally lead to better user performance. Gek Woo Tan, Kwok Kee Wei in their research, examines that user Website behaviour as a way to understand Website design using a "think aloud" protocol analysis. Main theoretical contributions of their research are the illustration of the flow of cognitive processes during the Website browsing and the establishment of Website design dimensions – the meaning and content implied by Website content, its outward form, and the structure and navigation – in relation to user performance.

A university website has two kinds of audiences: internal users and external users. Internal users include current students enrolled at the university, faculty and staff. External users include prospective students, faculty and staff. Middleton (1999) recommended the content/ features for internal users such as Telephone directory, Library catalogues, News, Internal social groups / clubs activities, Timetable etc. They have also recommended the content/ features for External users such as Courses offered, Prospectus, Local city information, Mission statement, University contact, Job openings, Support and pay offered to staff and faculty, Entertainment information, Faculty contact information, Faculty research information etc. They further recommended a search features for university websites. Search feature would make it easier for users to search for specific information they are looking for. There are some features common to both internal and external users. For example, a telephone directory is useful for both internal and external users.

### RESEARCH QUESTION

In view of the foregoing discussion and considering the nature of present study, the researcher has laid down following research questions.

H<sub>0</sub> International and National universities are equal component in website designing with contents.

H<sub>1</sub> The contents in websites of both National and International universities is not much significant (same).

### DATA PRESENTATION AND DATA ANALYSIS

The methodology used for this study is content analysis. Only universities which offered bachelors and/or masters degrees (or equivalent) were selected in order to preserve the integrity of the sample. A stratified random sampling procedure is used to draw the samples to be analyzed. 30% of the Indian university websites from each of the 4 types and 10% of the International University websites are selected randomly for analysis. Table 1 below shows the details of number of websites taken as sample of Indian university websites and Table 2 shows the details of number of websites taken as sample of International university websites.

**TABLE 1: NUMBER OF SAMPLE WEBSITES (NATIONAL UNIVERSITIES)**

Type of university	Total No.	Universities selected for the study (30%)
Central universities	39	13
Open universities	10	3
Deemed universities	130	39
State universities	95	29
<b>Total</b>	<b>274</b>	<b>83</b>

Source: Primary data

**TABLE 2: NUMBER OF SAMPLE WEBSITES (INTERNATIONAL UNIVERSITIES)**

Name of Country	No of universities	Universities selected for the study (10%)
Australia	39	4
Belgium	16	2
Canada	69	7
China	90	9
Hong Kong	8	1
Ireland	8	1
Japan	90	9
Seoul, South Korea	34	4
New Zealand	8	1
Singapore	12	1
Sweden	14	2
UK	121	12
USA	94	10
<b>Total</b>	<b>615</b>	<b>63</b>

Source: Primary data

A university website has two kinds of audience's internal users and external users. Internal users of university websites could be current students, current faculty and current staff working in university while external users could be prospective students, prospective faculty and staff, business people, alumni, visitors and local community visitors interested in news, events, etc.

**CODING:** A coding scheme is developed using the analytical framework proposed by Middleton et al.(1999) and Mateos et al.(2001). For this purpose 83 Indian and 63 international university websites are analyzed.

**UNIT OF ANALYSIS:** - Some of the content / features to be analyzed not present on or not linked from the home page. Although it is the design consideration whether to include link to something on the home page, so it is decided to use entire website contents / features as the unit of analysis for this study. Value 0 is assigned for absent and 1 is assigned for present for every content/feature.

### FINDING OF THE STUDY

Pursuant to research question  $H_0$  mentioned here in above, it is found that some contents are common in both types. Table3 shows the number of contents present in website designing with using 52 contents in national and international university websites.



**TABLE 3: THE NUMBER OF CONTENTS PRESENT IN WEBSITE DESIGNING WITH USING 52 CONTENTS IN NATIONAL & INTERNATIONAL UNIVERSITY WEBSITES**

Sr. No.	Content / Features of websites	National University		International University	
		Number of Websites (Total=83)	% Value	Number of Websites (Total=63)	% Value
1	About Us	83	100	63	100
2	University information [Email /Phone no / Map ]	83	100	63	100
3	Courses/Programs Offered [under graduate / graduate / post graduate / distance education ]	83	100	62	98.41
4	Admission information / Application[term dates]	82	98.79	63	100
5	Other information [syllabus, date sheet, revolution forms / procedure]	53	63.85	16	25.39
6	Exam Results	58	69.87	7	11.11
7	Departments / Institutes	83	100	60	95.23
8	University News	82	98.79	61	96.82
9	Facilities / Amenities and Services	61	73.49	40	63.49
10	Library Catalogues	74	89.15	53	84.12
11	Alumni Information	46	55.42	49	77.77
12	Internal social groups / Clubs activities / student union	48	57.83	41	65.07
13	Accommodation	54	65.06	50	79.36
14	Placement cell	57	68.67	38	60.31
15	Culture and Sports	61	73.49	43	68.25
16	Health service	51	61.44	49	77.77
17	Old Exam papers	06	7.22	01	1.58
18	Current stud / Future stud	14	16.86	36	57.14
19	International students	30	36.14	57	90.47
20	Student Development	25	30.12	15	23.80
21	Student Exchange	10	12.04	45	71.42
22	Funds / Awards / Polices / Scholarships	62	74.69	57	90.47
23	Apply Online	P-53,P/F-9,N-21	74.69	P-28,P/F-18,N-15,F-2	76.19
24	Faculty research / specialization	62	74.69	55	87.30
25	Faculty contact	55	66.26	34	53.96
26	Telephone Directory	20	24.09	19	30.15
27	Electronic Media	42	50.60	29	46.03
28	Search Features	40	48.19	54	85.71
29	Events	78	93.97	60	95.23
30	Date retrieved	19	22.89	18	28.57
31	Website language [English / Regional / Both]	E-68, B-15	100	E-32,B-31	100
32	Jobs	50	60.24	47	74.60
33	Parents	3	3.61	18	28.57
34	International [support / services ]	26	31.32	43	68.25
35	Video / Audio Ideas:	12	14.45	25	39.68
36	Quick Links	61	73.49	41	65.07
37	Visitors	37	44.57	14	22.22
38	Publications [University Journals / Books / Publication by Faculty]	53	63.85	24	38.09
39	Tenders / Circulars	44	53.01	09	14.28
40	Frequently Asked Questions	29	34.93	34	53.96
41	Virtual Classrooms / Virtual Tour	15	18.07	22	34.92
42	Feedback	23	27.71	20	31.74
43	Forth coming events	64	77.10	51	80.95
44	Freedom Of Information Act / Right To Information Act	F-0,R-47,N-36	56.62	F-17,R-0,N-46	26.98
45	Learning and Teaching	01	1.20	14	22.22
46	Local City / Town Information	18	21.68	31	49.20
47	Media	16	19.27	26	41.26
48	Business	07	8.43	24	38.09
49	Open Days	0	0	29	46.03
50	Developed By	H/O-7,H-17,O-28,N-31	62.65	H/O-1,H-5,O-0,N-5	9.52
51	Accreditation	33	39.75	26	41.26
52	Memorandums of understanding with other universities	42	50.60	19	30.15
	<b>Total</b>		<b>52.435</b>		<b>57.65</b>

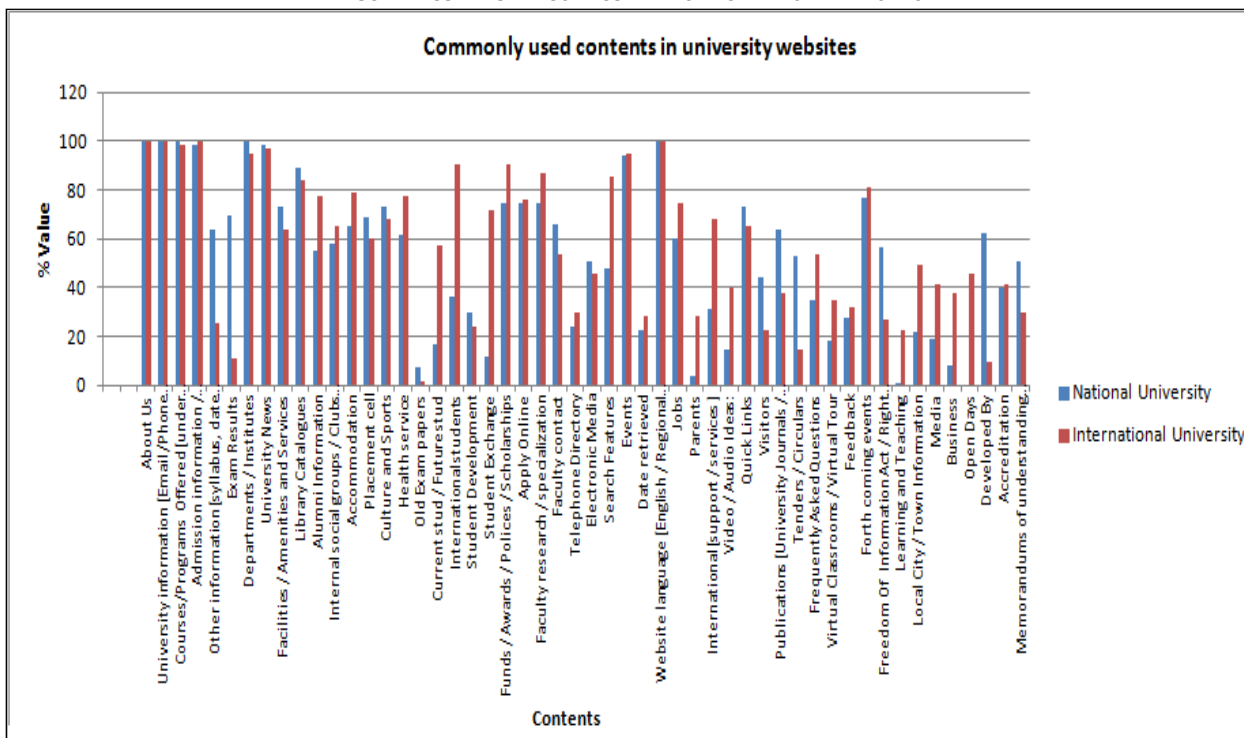
Table4 shows Chi-square test for comparison between below 50 and above 50 contents present in university websites while Figure1 shows, commonly used contents in university websites as below.

**TABLE 4: CHI-SQUARE TEST FOR COMPARISON OF UNIVERSITY WEBSITES**

Contents Used	National Universities	International Universities	Total
Below 50	21 (20.19%)	23 (22.11%)	44 (50%)
Above 50	31 (29.80%)	29 (27.88%)	60 (50%)
Total	52 (50%)	52 (50%)	104

Using Table4 we can conclude that more than 26 contents are used by majority of the international(27.88%) and National(29.80%) universities.

FIGURE 1: COMMONLY USED CONTENTS IN UNIVERSITY WEBSITES



Pursuant to research question H<sub>1</sub> mentioned here in above, it is found that some contents are common in both types. Table 5 shows the number of content /feature present for international and national university websites and Table 6 shows Average number of content present in university websites.

TABLE 5: THE NUMBER OF CONTENT /FEATURE ON INTERNATIONAL AND NATIONAL UNIVERSITY WEBSITES

Sr. No.	National Universities	% VALUE	International Universities	% VALUE
1	39	75	49	94.23
2	32	61.53	47	90.38
3	34	65.38	45	86.53
4	13	25.0	48	92.30
5	36	69.23	30	57.69
6	22	42.30	17	32.69
7	15	28.84	30	57.69
8	25	48.07	36	69.23
9	16	30.76	39	75.0
10	33	63.46	37	71.15
11	17	32.69	40	76.92
12	30	57.69	40	76.92
13	31	59.61	25	48.07
14	26	50.0	20	38.46
15	16	30.76	22	42.30
16	26	50.0	24	46.15
17	25	48.07	28	53.84
18	13	25.0	17	32.69
19	31	59.61	25	48.07
20	35	67.30	28	53.84
21	30	57.69	23	44.23
22	25	48.07	11	21.15
23	30	57.69	33	63.46
24	18	34.61	40	76.92
25	28	53.84	27	51.92
26	32	61.53	25	48.07
27	24	46.15	20	38.46
28	24	46.15	32	61.53
29	34	65.38	33	63.46
30	37	71.15	26	50.0
31	33	63.46	10	19.23
32	13	25.0	13	25.0
33	28	53.84	09	17.30
34	30	57.69	20	38.46
35	16	30.76	25	48.07
36	32	61.53	22	42.30
37	32	61.53	32	61.53
38	30	57.69	35	67.30
39	34	65.38	35	67.30

40	33	63.46	31	59.61
41	27	51.92	32	61.53
42	23	44.23	35	67.30
43	24	46.15	22	42.30
44	31	59.61	36	69.23
45	21	40.38	31	59.61
46	24	46.15	38	73.07
47	36	69.23	14	26.92
48	29	55.76	38	73.07
49	27	51.92	39	75.0
50	31	59.61	32	61.53
51	27	51.92	27	51.92
52	37	71.15	35	67.30
53	27	51.92	33	63.46
54	26	50.0	24	46.15
55	29	55.76	33	63.46
56	29	55.76	33	63.46
57	26	50.0	31	59.61
58	15	28.84	26	50.0
59	35	67.30	34	65.38
60	34	65.38	30	57.69
61	30	57.69	30	57.69
62	26	50.0	32	61.53
63	35	67.30	30	57.69
64	29	55.76		
65	20	38.46		
66	32	61.53		
67	29	55.76		
68	32	61.53		
69	27	51.92		
70	33	63.46		
71	43	82.69		
72	29	55.76		
73	24	46.15		
74	24	46.15		
75	31	59.61		
76	34	65.38		
77	37	71.15		
78	19	36.53		
79	18	34.61		
80	34	65.38		
81	35	67.30		
82	15	28.84		
83	28	53.84		

TABLE 6: AVERAGE NUMBER OF CONTENT PRESENT IN UNIVERSITY WEBSITES

	Average	Standard Deviation	Coefficient of Variation
National Universities (Total = 83)	27.71	6.70	24.19%
International Universities (Total = 63)	29.58	8.85	29.93%

It can be concluded that, on an average contents in both Indian (27.71) and International (29.58) Universities are same. The standard deviation of Indian Universities in selection of contents is less than International Universities. International universities (cv = 29.93%) have more available contents than the national universities (cv = 24.19%). Indian universities have used 53% contents while International universities used 57% contents about their information on their websites that is no significant difference between the contents of the websites.

**AMONG THE MOST USED CONTENT / FEATURES ARE**

About us, University information, Courses/Programs Offered, Admission information / Application [term dates], Departments/Institutes, University News, Facilities / Amenities and Services , Library Catalogues, Alumni Information, Internal social groups / Clubs activities / student union, Accommodation, Placement cell, Culture and Sports, Health service, Funds / Awards / Polices / Scholarships ,Apply Online, Faculty research / specialization, Faculty contact, Events, Website language, Jobs, Quick Links and Forth coming events.

**AMONG THE LEAST USED CONTENT / FEATURES ARE**

Exam results, old exam papers, student exchange, telephone directory, Parents, Video/audio ideas, Virtual Classrooms / Virtual Tour, Learning & teaching, Business, and open days.

**CONCLUSIONS**

Evidence has been found to indicate that, the researcher has summarized the entire research problem that has attempted to suggest how university websites are more informative by giving more information in limited time. Indian universities have used 53% contents while International universities used 57% contents about their information on their websites that is no significant difference between the contents of the websites. More than 26 contents are used by majority of the international (27.88%) and National (29.80%) universities. On an average contents in both Indian (27.71) and International (29.58) Universities are same. The standard deviation of Indian Universities in selection of content is less than International Universities. International universities (cv = 29.93%) have more available contents than the national universities (cv = 24.19%). Indian universities have used 53% contents while International universities used 57% contents about their information on their websites that is no significant difference between the contents of the websites.

**LIMITATIONS**

This study has certain limitations. Due to time constraint it is impossible to study contents of all universities in India and abroad. Therefore random universities have been selected from national and international levels. The research does not contain study of design or information organization of university websites. The focus of present study is only on the types of content / features present on websites. As websites are updating frequently, same status of university websites could not be available.

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**REFERENCES**

1. Anett Kralisch, Bettina Berendt, Martin Eisend, The Impact of Culture on Website Navigation Behavior, <http://citeseerx.ist.psu.edu/viewdoc/>
2. Ewa Callahan, Cultural Similarities and Differences in the Design of University Websites, <http://jcmc.indiana.edu/vol11/issue1/callahan.html>, (22/06/2009;7:39 pm)
3. Gek Woo Tan, Kwok Kee Wei, An empirical study of Web browsing behaviour: Towards an effective Website design, *Electronic Commerce Research and Applications*, Volume 5, Issue 4, Winter 2006, Pages 261-271, 2006
4. Mehran Nejati, Azadeh Shafaei, Yashar Salamazadeh, Mohammadreza Daraei, Corporate social responsibility and universities: A study of top 10 world universities' websites, *African Journal of Business Management* Vol. 5(2), pp. 440-447, 18 January, 2011
5. Rajat Chadha, Wake-up call for Indian university administrators?: A study of Indian university websites, *University News* December 1<sup>st</sup>, 2008, vol.46, no 48.

**INTERNET WEBSITES**

6. [http://en.wikipedia.org/wiki/List\\_of\\_colleges\\_and\\_universities\\_in\\_Seoul](http://en.wikipedia.org/wiki/List_of_colleges_and_universities_in_Seoul), (5/04/2010;2:32pm)
7. [http://en.wikipedia.org/wiki/List\\_of\\_higher\\_education\\_institutions\\_in\\_Hong\\_Kong](http://en.wikipedia.org/wiki/List_of_higher_education_institutions_in_Hong_Kong), (3/04/2010;3:50pm)
8. [http://en.wikipedia.org/wiki/List\\_of\\_universities\\_and\\_colleges\\_in\\_Singapore](http://en.wikipedia.org/wiki/List_of_universities_and_colleges_in_Singapore), (7/04/2010;3:15pm)
9. [http://en.wikipedia.org/wiki/List\\_of\\_universities\\_in\\_Japan](http://en.wikipedia.org/wiki/List_of_universities_in_Japan), (8/04/2010;2:33pm)
10. [http://en.wikipedia.org/wiki/List\\_of\\_universities\\_in\\_New\\_Zealand](http://en.wikipedia.org/wiki/List_of_universities_in_New_Zealand), (3/04/2010;5:40pm)
11. [http://en.wikipedia.org/wiki/List\\_of\\_universities\\_in\\_Sweden](http://en.wikipedia.org/wiki/List_of_universities_in_Sweden), (7/04/2010;4:54pm)
12. [http://en.wikipedia.org/wiki/List\\_of\\_universities\\_in\\_the\\_Republic\\_of\\_Ireland#Universities](http://en.wikipedia.org/wiki/List_of_universities_in_the_Republic_of_Ireland#Universities), (3/04/2010;2:02pm)
13. <http://www.australian-universities.com/list/>, (2/04/2010;1:59pm)
14. [http://www.education.nic.in/dist\\_inst.asp#Open](http://www.education.nic.in/dist_inst.asp#Open), (05/06/2010, 4:30pm)
15. <http://www.education.nic.in/higheredu/list-deemeduniv.asp>, (23/03/2010, 3:30pm)
16. <http://www.education.nic.in/ihl/accreditedstateuniversities.pdf>, (22/03/2010; 6:42pm)
17. <http://www.education.nic.in/ihl/listcentraluniversities.pdf>, (01/04/2010;2:40pm)
18. [http://www.hoyle.com/distance/colleges\\_int\\_china.htm](http://www.hoyle.com/distance/colleges_int_china.htm), (3/04/2010;6:55pm)
19. <http://www.timeshighereducation.co.uk/world-university-rankings/2010-2011/top200.html> (18/09/2010;4:00pm)
20. <http://www.university-world.com/Canada-Universities-province.html>, (2/04/2010;4:30pm)
21. <http://www.university-world.com/europe-universities/belgium-universities.html>, (3/04/2010;5:09pm)
22. <http://www.university-world.com/Europe-Universities-state.html>, (2/04/2010;2:15pm)
23. [http://www.usastudyguide.com/usuniversities\\_uscollegeslist.htm](http://www.usastudyguide.com/usuniversities_uscollegeslist.htm), (8/04/2010;5:37pm)

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