Assessment and Evaluation of Indian University Website and Its Library Web Pages

S. Jaishankar
Research Scholar
Department of Library and Information Science
Alagappa University, Karaikudi

S. Kishore Kumar
Deputy Librarian
Department of Library and Information Science
Alagappa University, Karaikudi

Abstract

The purpose of this paper is to state the growth scenario of Indian university websites and its library webpages. The growth scenario is stated is assed and evaluated based on different categories of universities, and state wise classification. The total of 822 universities is divided in to four groups(Central university, State University, Deemed-to-be-University, Private University) each group is separately searched in various web browsers like Google Chromeand Mozilla Firefox for the availability of Web portal home page and its subsequent library web pages. The study tries to find out the web links of home pages and library webpages of central, deemed, private and state universities, and make a web directory on universities and its libraries.

Keywords

Website, Portal, University, University Website, Library, Library Webpages

Electronic access

The journal is available at www.jalis.in

INTRODUCTION

In India the term "University" refers to an institution established or incorporated under or by a Central Act, a State Act or a Provincial Act and also includes any such type of institution as may, in consultation with the University concerned, be recognized by the University Grants Commission in harmony with the regulations made on this institutions regard under the University Grants Commission Act, 1956. In India the responsibility of Higher education is shared by both Central Government and State Governments. The Central Government providing majority of grants to the University Grants Commission and establishes the Central Universities, Institutions of National Importance. The central Government takes responsibility on declaring a status of university "Deemed-to-be-University" based on the recommendations of the University Grants Commission.

A website is a collection of webpages linked together by hyperlinks. A website acts as a promotional and marketing tool for all kinds of educational institutions. The emerging of Information and Communication Technology enables the feature of developing and maintaining the own website to all these educational Institutions. These websites developed with an aim to provide rich source of information for the aspiring students planning to pursue higher studies, the faculty members to explore the domain knowledge and to the general public also. The sites have to be updated frequently with current content. These website provide information about the library facility, library timings, membership details, library access, library services, staff details and the resources available.

REVIEW OF RELATED LITERATURE

Habibi,Shafi(et.al) (2019) evaluated the efficiency, effectiveness and satisfaction usability on medical science Iranian university central library website. Nineteen variables used under five factors were searched for the availability and based on the availability the weightage is given. Designers, experts need to improve knowledge about standards and latest technologies in web. The owners have to concentrate ho to incorporate them.Devi, Krishna and Kumar, ManojVerma (2018) evaluated the content of the 19 IIT and 29 NIT institutions library website based on the one hundred and seventy two variables in a five point rating scale, based on the availability of the variables the weightage is given and ranked

from higher to lower. The study reveals IIT Kanpur scored more and ranked first position. Azadbakht Elena, Blair John and Jones Lisa (2017) described the usability of library website of university. The undergraduate, post graduate, teaching faculty and library staff were participated in this study as a key user group. This study find outs various problems faced and affecting each key user groups. It improves the existing library website and helps to add new features in to it. ChakrabortySarthak (2017) analyzed the library websites on the effects of cultural dimensions on the quality. The analyses of content made form eighty five university libraries. The study finds out that there is a significant association between cultural dimension and website design.

SudharmaHaridasan and Mohd.Uwesh (2014) analyses 13 central university websites on content analysis and minimum criteria for library websites. The data collected on the basis of structured questionnaire, which is based on the forty two variables grouped under five factors. Mangala, Anil Hirwade (2010) evaluated the information needs of the Indian citizens through the government web portal an on line services and ranked the state and union territory portals based on their online services.

OBJECTIVES

1. To find out the universities in India and websites home pages and their respective library web pages.
2. To construct a hyper link database or a web directory on Indian university and its library.
3. To find the growth rate of different categories of universities.
4. To identify the state-wise growth of universities in India.
5. To find out the availability of websites of Indian universities and their library web pages.

HYPOTHESIS

1. A majority of Indian universities hosted their websites on internet.
2. All the universities hosted their website and have pages on their library website.
3. The university websites are heterogeneous in the structure and content.

SCOPE

The scope of this study is restricted to websites of Indian universities and its library. The aim of the study is to collect the hyperlinks of homepage of Indian universities and its library web pages.

METHODOLOGY

The study is based on the availability of websites of Indian universities and their library. The university website can be accessed through the web browsers Mozilla Firefox, Google Chrome, Internet Explorer, etc. The available university hyperlinks are collected and imported to Microsoft Excel for analysis.

INDIAN UNIVERSITIES

In India the universities are categorized as Central University, State University, Private University, and Deemed-to-be University.

Central University: A university which is incorporated or established by a Central Act is called as Central University. As per the information available in the Higher Educational Institutions Details in Ministry of Human Resources Development website, a total of forty seven central universities were established in India.

State University: A university which is incorporated or established by a State Act or Provincial Act is called as State University.As per the information available in the Higher Educational Institutions Details in Ministry of Human Resources Development website, a total of 370 state universities were established in India.

Private University: A university established through a Central Act or State Act by a sponsoring body. A Society which is registered and established under the Societies Registration Act of 1860, or any other corresponding law for the time being in force in a State or a Public Trust, or a Company registered under Section 25 of the Companies Act of 1956.

Deemed-to-be-University: An Institution Deemed to be University, generally referred as Deemed University, refers to a high-performing institution, which has so declared by the Central Government under Section 3 of the University Grants Commission Act of 1956.The government of India, ministry of human resource development, University Grand Commission and all the state government's put together has established more than 370 state universities, 123 deemed universities, 47 central universities, 282 private universities and other 89 Institute of National Importance (established under the Acts of Parliament) under MHRD. All these universities are spread out in all the four directions across the sub-continent. The emergence of IT has

enabled all these universities to have their own websites.

The Higher Education sector in India has seen a steep increase in number of Universities, University level Institutions, Institute of National Importance and Colleges. The number of Universities in India has increased more than 41 times from 20 in 1950 to 822 in 2017.
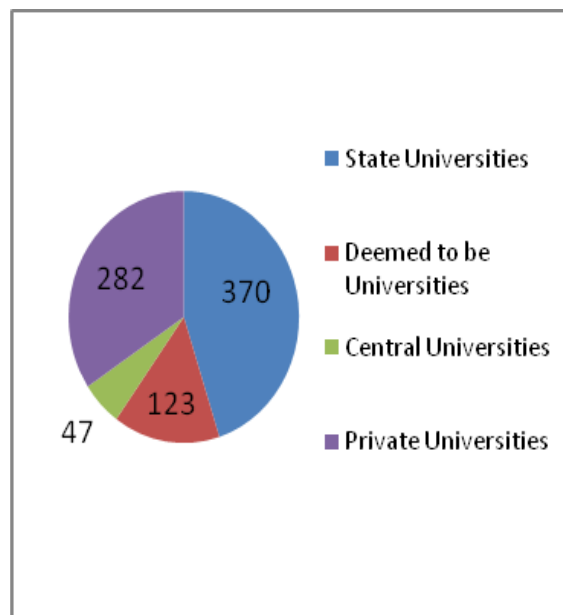

Figure 1: Categories of universities in India

Out of 822universities, 370 are State Universities that shows the highest percentage (45.01 %), 282 Private Universities in second highest percentage (34.31 %), 123 Deemed to be Universities in third place having the percentage (14.96 %), and 47 Central Universities having a lowest percentage of 5.72 %.

GROWTH OF INDIAN UNIVERSITIES

The Ministry of Human Resource Development website portal explicit the number of Universities in India has increased approximately more than 41 times from 20 in 1950 to 822 in 2017.Based on the list provided by the Ministry of Human Resource Development the universities were arranged and grouped on the basis of established year, classification, geographical locations. After 2000 the growth shows a steep upward trend.

Table 1: Growth of universities based on established year

Year	Number of Universities	Cumulative Growth of Universities
1851 to 1940	16	16
1941 to 1950	10	26
1951 to 1960	21	47
1961 to 1970	41	88
1971 to 1980	28	116
1981 to 1990	52	168
1991 to 2000	66	234
2001 to 2010	314	548
2011 to 2017	274	822

The growth of universities based on the categories:

Table 2: Growth of universities based on categories

Year of Establishment	Central University	Deemed University	Private University	State University	Total
1850 to 1860				3	3
1881 to 1890	3			3	6
1921 to 1930	1			5	6
1931 to 1940				1	1
1941 to 1950	1			9	10
1951 to 1960	1	2		18	21
1961 to 1970	1	4		36	41
1971 to 1980	3	1		24	28
1981 to 1990	4	18		30	52
1991 to 2000	8	13	2	43	66
2001 to 2010	22	81	92	119	314
2011 to 2017	3	4	188	79	274
Total	**47**	**123**	**282**	**370**	**822**

From table 2 it is found that from 2001 to 2010 there is a tremendous growth in all type of universities. Twenty two central universities, eighty one Deemed-to-be universities, ninety two private universities and hundred and nineteen state universities were newly established during this period.

Assessment and Evaluation of Indian University Website and Its Library Web Pages/S. Jaishankar & S. Kishore Kumar

Table 3 : Growth of universities based on geographical location

Year/States	ANDHRA PRADESH	ARUNACHAL PRADESH	ASSAM	BIHAR	CHANDIGARH	CHHATTISGARH	GOA	GUJARAT	HARYANA	HIMACHAL PRADESH	JAMMU & KASHMIR	JHARKHAND	KARNATAKA	KERALA	MADHYA PRADESH	MAHARASHTRA	MANIPUR	MEGHALAYA	MIZORAM	NAGALAND	NCT OF DELHI	ODISHA	PUDUCHERRY	PUNJAB	RAJASTHAN	SIKKIM	TAMILNADU	TELANGANA	TRIPURA	UTTAR PRADESH	UTTARAKHAND	WEST BENGAL	Total
1850 to 1860																1											1					1	3
1881 to 1890				1									1															1		3			6
1921 to 1930	1															1						1					1			2			6
1931 to 1940														1																			1
1941 to 1950			1	1				2				1	1		1	1						1			1								10
1951 to 1960	1		2		1			2	1		1		1		2	2						1								2	1	4	21
1961 to 1970			2	3		1		3	1	1	1		2	1	5	4					1	3		3	3		1	1		2	1	2	41
1971 to 1980	1			1				2	1	1		1	2	2		1	1	1									3	3		6	1	1	28
1981 to 1990	5					1	1	1	1	1	1	1	2	1		7					5	1	1	1	5		8	3	1	4		1	52
1991 to 2000	2		2	4				2	1		1		2	6	2	7					11	1	1	2	7	1	3	1		5	2	3	66
2001 to 2010	14	2	6	7	1	11		23	16	11	5	5	24	4	8	14		6	1	2	11	9	1	9	29	4	30	8	1	30	12	10	314
2011 to 2017	1	7	8	3		9		27	20	8	3	8	17	6	25	13	2	2	1	1	7	13			35	1	3	3	1	22	12	16	274
Total	25	9	19	21	2	23	1	62	41	22	12	18	56	17	48	55	4	9	2	4	22	24	2	27	76	6	52	21	3	74	28	37	822

WEBSITES AND LIBRARY WEBSITES OF INDIAN UNIVERSITIES

The universities searched through various web browsers like Google Chrome, Mozilla Firefox, Internet Explorer, etc. for the availability of web portal home pages and their library web pages. The table shows the availability of Homepages and Library web pages of Indian Universities as follows

Table 4: Availability of Homepages and Library Web pages of Universities in India

S.No	Universities in India	Total	%	Websites searched		Homepage available		Library Pages available	
				No	%	No	%	No	%
1	State Universities	370	45.01	370	100	308	83.24	184	59.74
2	Deemed to be Universities	123	14.96	123	100	118	95.93	105	88.98
3	Central Universities	47	5.72	47	100	44	93.62	40	90.91
4	Private Universities	282	34.31	282	100	195	69.15	117	60
	Total	**822**	**100**	**822**	**100**	**665**	**80.9**	**446**	**54.26**

Out of 822 universities, the total of 665 universities hosted their website in internet. Based on the home page link when the library web page is searched, nearly half of universities have library link in the home page itself remaining all having the library link under various headings.Out of 370 State Universities only 308 (83.24 %) universities have websites,within the 308 only 184 (59.74 %)universities have library webpages remaining 124 (40.26 %) universitieshave not hosted their library webpages. Out of 282 Private Universities only 195 (69.15 %) universities have websites, within the 195 only 117 (60.00

Assessment and Evaluation of Indian University Website and Its Library Web Pages/S. Jaishankar & S. Kishore Kumar

%)universities have library webpages remaining 78 (40.00 %)universitieshave not hosted their library webpages.

Out of 123 Deemed to be Universities only 118 (95.93 %) universities have websites; withinthe 118 only 105 (88.98 %)universities have library

webpages remaining 13 (11.02 %)universities have not hosted their library webpages.Out of 47 Central Universities only 44 universities have websites out of 44 only 40 (90.91 %)universities have library webpages remaining 4 (9.09 %)universities have not hosted their library webpages.

Table 5: Central University State wise home page and library webpage available

State	Central University	Home Page	%	Library age	%
Andra Pradesh	0	0	0	0	0
Arunachal Pradesh	1	1	100	1	100
Assam	2	2	100	2	100
Bihar	3	2	66.67	2	100
Chandigarh	0	0	0	0	0
Chhattisgarh	1	1	100	1	100
Delhi (NCT)	5	5	100	5	100
Goa	0	0	0	0	0
Gujarat	1	1	100	1	100
Haryana	1	1	100	1	100
Himal Pradesh	1	1	100	0	0
Jammu and Kashmir	2	2	100	2	100
Jharkhand	1	1	100	0	0
Karnataka	1	1	100	1	100
Kerala	1	1	100	1	100
Madhya Pradesh	2	2	100	2	100
Maharastra	1	1	100	1	100
Manipur	2	2	100	1	50
Meghalaya	1	1	100	1	100
Mizoram	1	1	100	1	100
Nagaland	1	1	100	1	100
Orisa	1	1	100	1	100
Pondicherry	1	1	100	1	100
Punjab	1	1	100	1	100
Rajastan	1	1	100	1	100
Sikkim	1	1	100	1	100
Tamilnadu	2	2	100	1	50
Telangana	3	3	100	3	100
Tripura	1	1	100	1	100
Uttar Pradesh	6	4	66.67	4	100
Uttarakhand	1	1	100	1	100
West Bengal	1	1	100	1	100
Total	**47**	**44**	**93.62**	**40**	**90.91**

Out of 47 central universities 44 (93.62 %) central universities hosted their web pages in internet and 40 (90.91 %) hosted their library webpages.

Table 6: Deemed University State wise home page and library webpage available

State	Deemed to be University	Home Page	%	Library Page	%
Andra Pradesh	5	5	0	3	0
Arunachal Pradesh	1	1	100	1	100
Assam	0	0	0	0	0
Bihar	1	1	100	1	100
Chandigarh	1	0	0	0	0

Assessment and Evaluation of Indian University Website and Its Library Web Pages/S. Jaishankar & S. Kishore Kumar

Chhattisgarh	0	0	0	0	0
Delhi (NCT)	10	10	100	9	90
Goa	0	0	0	0	0
Gujarat	2	2	100	2	100
Haryana	6	6	100	6	100
Himal Pradesh	0	0	0	0	0
Jammu and Kashmir	1	0	0	0	0
Jharkhand	1	1	100	1	100
Karnataka	14	13	92.86	11	84.62
Kerala	3	2	66.67	2	100
Madhya Pradesh	1	1	100	1	100
Maharastra	21	21	100	20	95.24
Manipur	0	0	0	0	0
Meghalaya	0	0	0	0	0
Mizoram	0	0	0	0	0
Nagaland	0	0	0	0	0
Orisa	3	2	66.67	1	50
Pondicherry	1	1	100	1	100
Punjab	2	2	100	2	100
Rajastan	7	7	100	7	100
Sikkim	0	0	0	0	0
Tamilnadu	28	28	100	24	85.71
Telangana	2	2	100	2	100
Tripura	0	0	0	0	0
Uttar Pradesh	9	9	100	7	77.78
Uttarakhand	3	3	100	3	100
West Bengal	1	1	100	1	100
Total	**123**	**118**	**95.93**	**105**	**88.98**

Out of 123 Deemed-to-be universities 118 (95.93 %) universities hosted their web pages in internet and 105 (88.98 %) hosted their library webpages.

Table 7: Private University State wise home page and library webpage available

State	Private University	Home Page	%	Library Page	%
Andra Pradesh	0	0	0	0	0
Arunachal Pradesh	7	7	100	3	42.86
Assam	5	3	60	3	100
Bihar	2	0	0	0	0
Chandigarh	0	0	0	0	0
Chhattisgarh	9	7	77.78	7	100
Delhi (NCT)	0	0	0	0	0
Goa	0	0	0	0	0
Gujarat	31	18	58.06	14	77.78
Haryana	21	18	85.71	15	83.33
Himal Pradesh	17	16	94.12	15	93.75
Jammu and Kashmir	0	0	0	0	0
Jharkhand	8	3	37.50	3	100
Karnataka	14	8	57.14	7	87.50
Kerala	0	0	0	0	0
Madhya Pradesh	24	13	54.17	12	92.31
Maharastra	10	1	10	1	100

Assessment and Evaluation of Indian University Website and Its Library Web Pages/S. Jaishankar & S. Kishore Kumar

Manipur	1	0	0	0	0
Meghalaya	8	8	100	4	50
Mizoram	1	1	100	0	0
Nagaland	3	2	66.67	0	0
Orisa	4	3	75	2	66.67
Pondicherry	0	0	0	0	0
Punjab	15	9	60	4	44.44
Rajastan	45	38	84.44	12	31.58
Sikkim	5	5	100	1	20
Tamilnadu	0	0	0	0	0
Telangana	0	0	0	0	0
Tripura	1	1	100	0	0
Uttar Pradesh	29	23	79.31	11	47.83
Uttarakhand	13	10	76.92	3	30
West Bengal	9	1	11.11	0	0
Total	**282**	**195**	**69.15**	**117**	**60**

Out of 282Private universities 195 (69.15%) universities hosted their web pages in internet and 117 (60 %) hosted their library webpages.

Table 8: State University State wise home page and library webpage available

State	State University	Home Page	%	Library Page	%
Andra Pradesh	20	20	0	9	0
Arunachal Pradesh	0	0	0	0	0
Assam	12	12	100	5	41.67
Bihar	15	14	93.33	5	35.71
Chandigarh	1	0	0	0	0
Chhattisgarh	13	12	92.31	6	50
Delhi (NCT)	7	6	85.71	6	100
Goa	1	1	0	1	0
Gujarat	28	19	67.86	10	52.63
Haryana	13	11	84.62	8	72.73
Himal Pradesh	4	4	100	3	75
Jammu and Kashmir	9	7	77.78	6	85.71
Jharkhand	8	7	87.50	3	42.86
Karnataka	27	23	85.19	15	65.22
Kerala	13	11	84.62	8	72.73
Madhya Pradesh	21	14	66.67	5	35.71
Maharastra	23	20	86.96	15	75
Manipur	1	0	0	0	0
Meghalaya	0	0	0	0	0
Mizoram	0	0	0	0	0
Nagaland	0	0	0	0	0
Orisa	16	12	75	8	66.67
Pondicherry	0	0	0	0	0
Punjab	9	7	77.78	6	85.71
Rajastan	23	19	82.61	9	47.37
Sikkim	0	0	0	0	0
Tamilnadu	22	22	100	16	72.73
Telangana	16	14	87.50	9	64.29
Tripura	1	0	0	0	0

Uttar Pradesh	30	24	80	19	79.17
Uttarakhand	11	9	81.82	2	22.22
West Bengal	26	20	76.92	10	50
Total	**370**	**308**	**83.24**	**184**	**59.74**

Out of 370State universities 308 (83.24%) universities hosted their web pages in internet and 184 (59.74%) hosted their library webpages.

FINDINGS

In this study it is found that out of 822 Indian universities 370 (45.01 %) were State universities, and from that 308 (83.24 %) universities have websites, and in that 184 (59.74 %) universities having library webpages; remaining 124 universities (40.26 %)have not hosted their library webpages. Out of 282 (34.31 %) Private Universities 195 (69.15 %) universities are have websites, in that 117 (60 %) universities having library webpages remaining 78 universities (40 %) have not hosted their library webpages. Out of 123 (14.96 %) Deemed to be Universities, 118 (95.93 %) universities are havewebsites, in that 105 (88.98 %) universities are having library webpages remaining 13 universities (11.02%)have not hosted their library webpages. Out of 47 (5.72 %) Central Universities 44 (93.62 %) universities are havewebsites; in that 40 (90.91 %) universities are having library webpages remaining 4 universities (9.09 %)have not hosted their library webpages.

SUGGESTIONS

The higher educational bodies have to instruct the institutions to make it mandatory to host the home page and library web pages in the internet.The information available in the internet plays a vital role in the career planning to the students, parents and career counselor. The institutions have to take necessary action to design and develop its own website by subject experts inside or by hiring from outside.

CONCLUSION

In this study an attempt has been made to find out the growth of universities and the availability of the university home pages and library web pages. It is found that though the growth of universities shows a steep increasing trend, but the growth of website is not up to the mark. The parent institution and the institution has to take necessary action to design and develop its own website by subject experts inside or by hiring from outside. The associations and other library supporting institutions can make a template design, so that the institutions not having any subject experts and having cost problems. The template may be of a .doc or .pdfformat which may be used by the institutions who is not having any library webpages, and a single page scrolling website template to the next level institutions.

REFERENCES

[1]. Azadbakht, E., Blair, J., and Jones, L. (2017). Everyone's invited: A website usability study involving multiple library stakeholders. *Information Technology and Libraries*, *36*(4), 34-45.

[2]. Chakraborty, S. (2017). Analysing the effects of cultural dimensions on the quality of library websites. *Annals of Library and Information Studies* 64(1)50-58

[3]. Habibi, S., Seyed-Akbari, L., Torab-Miandoab, A., andSamad-Soltani, T. (2019). Usability of Central Library Websites of Iranian Universities of Medical Sciences an Evaluation. *DESIDOC Journal of Library & Information Technology*, *39*(4), 162-168. https://doi.org/10.14429/djlit.39.4.14462

[4]. Haridasan, S., andUwesh, M. (2014). Content Analysis of Central University Library Websites in India: A Study. *Journal of Information Management*, *1*(2), 59-71.

[5]. Krishna Devi and Manoj Kumar Verma (2018) Content analysis based evaluation of library websites: a case study. *ALIS*.65(4)

[6]. Mangala, Anil Hirwade (2006). Websites of Indian Universities: An evaluation. 2006. Bombay: Himalaya Publishing House.

[7]. Website of UGC for list of Universities www.ugc.in.