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## HOMEPAGES OF INDIAN UNIVERSITIES 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 such a medium wherein one can find all kinds of information relating to his area of interest. Universities are the pillars of any society. They are the one who imparting higher Education for larger society. Websites are mirrors of the universities. Thus it should contain all sorts of information including course offered, Universities achievement, Contact addresses, etc. In keeping all this point the investigators felt that a systematic study of the homepage is required for more than one reason. Firstly, such a study would give an idea about the content, scope, coverage and depth of information provided in the homepages of Indian universities. Secondly, a study of the nature would help the prospective design of university websites regarding the kind of information that should be made available in a websites.*

**Keywords:-** Web sites, Web pages, Web pages of Indian Universities, URL's, University home page, Universities and Internet Resources, , Web site Design.

### 1. INTRODUCTION

The Internet is literally becoming a lifeline for people. Its one of the most important and complex innovations of the mankind. Physically, the Internet is a large number of computers connected to largest and complete tool for information exchange at a global level.

The number of Internet users around the world is growing constantly. The computer industry Almanac ([www.c-i-a.com](http://www.c-i-a.com)) has reported that in 2002, 490 million people around the world will have Internet access that is 79.4 per 1000 people worldwide and 118 people per 1000 by year end 2005.

Internet growth in India mirrors the trend worldwide, with the service being the fastest growing segment of the telecommunications sectors. An IMRB (Indian Market Research Bureau) study says that about 43 lakh households have already had a first hand experience on the net. These represent three fourth of the 5.7 million socio-economic class A and B households in the top 16 cities of the country-a group that can be referred to as relevant population for the Internet. ([www.imrbint.com](http://www.imrbint.com) )

### 2. NEED AND IMPORTANCE OF THE STUDY

India is vast country with more than 29 states and union territories. The government of India, ministry of human resource development and all the state government's put together has established more than 275 state and central universities. 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. Of the total number of universities in India, only 132 universities as of today, have their own websites. These websites act as a rich source of information for the aspiring students planning to pursue higher studies and to the public at large. These sites are being updated from time to time. These websites normally provide information about the administrative authorities, courses offered, faculty, and examination procedures.

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The investigator felt that a systematic study of the homepage is required for more than one reason. Firstly, such a study would give an idea about the content, scope, coverage and depth of information provided in the homepages of Indian universities. Secondly, a study of the nature would help the prospective design of university websites regarding the kind of information that should be made available in a websites. Thus, the candidate has chosen this study.

### **3. DEFINITION OF HOMEPAGE**

A homepage is the introductory page to a collection of web information. Almost every website has a homepage. Every designer has slightly different ideas about how to arrange a homepage. However, just as the title pages of books usually follow certain conventions, a homepage usually provides an overview of the website.

“A homepage is the first page a user sees when he or she logs onto a website. This page often resembles a magazine cover page or a table of contents. When a user logs on to the Internet, their ISP’s homepage often appears on the screen.”<sup>4</sup>

“A web page that is topically the main source of information about a particular person, group or concept. It is the first page presented when a user selects a particular site on the World Wide Web.”<sup>9</sup>

### **4. OBJECTIVES OF THE STUDY**

The present study has the following objectives:

1. To understand the concept of homepage.
2. To create a directory of websites of Indian universities.
3. To identify the kind of information that could be gleaned from the homepages.
4. To study and analyze the contents of homepages.

### **5. SCOPE AND LIMITATIONS**

This study is limited to the university websites in India only. The websites that were retrievable with the help of search engines only were considered. Only those websites available on the World Wide Web were considered for this study. Due to limitations in time, only those websites that were available during the two months search on the Internet was taken for this study. Researcher has taken only 132 homepages of Indian universities websites and 35 elements have taken homepage analysis. They are: Title, University logo, University photo, Background picture, Sitemap, University address, Phone number, Fax number, E-mail address, Copyright, Site developed (Designed and maintained by), Courses offered, Department, Staff/Faculty, Affiliated colleges, Distance education, Governing bodies, Administration, Vice-chancellor, Student services, Library, Research, Alumni, Established year, About university, Infrastructure, Admissions, Fees structure, Comments and suggestions (contact webmaster), feedback, Last updated, Current date, Number of visitors, Search, FAQ.

### **6. METHODOLOGY**

The investigator identified 4 major search engines, namely:

- Google
- AltaVista

- Vivisimo
- Yahoo, to search and retrieve university websites in India from the WWW.

The university name and their URL's were entered into a database. These university names entered in the database were sorted to eliminate duplicate entries. Then, each university website was visited to gather information according to the objectives stated above. Finally, this information was tabulated and analyzed.

## 7. CHRONOLOGICAL GROWTH OF UNIVERSITIES IN INDIA

Table-1 : Chronological Growth of Universities in India

Period of establishment	Decade-wise addition of universities	Cumulative growth of universities	% of increase in universities in the growth of
Before 1900	4	4	1.44
1901 – 1910	-	4	0
1911 – 1920	5	9	1.81
1921 – 1930	7	16	2.53
1931 – 1940	1	17	0.36
1941 – 1950	11	28	3.97
1951 – 1960	23	51	8.30
1961 – 1970	43	94	15.52
1971 – 1980	30	124	10.83
1981 – 1990	46	170	16.61
1991 – 2000	89	259	32.13
2001-2003	18	277	6.50
Total	<b>277</b>	<b>277</b>	<b>100.00</b>

Source: 1.Association of Indian Universities, Universities Handbook, 30<sup>th</sup> Ed. New Delhi, AIU, 2004.

The above table indicates that, there were only 4 universities at the beginning of the 20<sup>th</sup> Century. Until 1940 there was not much growth. It is only after independence that much progress has been made in the opening of the new universities in the country. The years after 1960 saw a remarkable growth in the number of universities. The above table reveals that 1960's and 1970's are the two decades notable for a phenomenal increase in the growth of universities.

At present there are 277 university-level institutions in India(including 60 deemed universities). Of these, 119 are traditional universities(including 32 institutions for specialized studies in disciplines) while the others are professional /technical institutions. 39 institutions provide education in agriculture (including forestry, diary, fisheries and veterinary science), 16 in health sciences, 38 in engineering and technology, 4 in information technology, 4 in law, 1 in journalism and 10 are open universities.

## 8. INFORMATION TO BE INCLUDED IN UNIVERSITY WEBSITES

Information included in web pages is quite varied. There is no consistency of what is included and how it is presented. The provision of adding multimedia has of course made it possible to host attractive pages including images and Video clippings. However, a university homepage should give relevant Information without excessively taxing the end user by inclusion of large amounts of textual material and

unnecessary multimedia components. While planning a university websites, certain criteria should be worked out especially such as:

- What is the information to be furnished?
- How it should be presented?

Based on the study of a few university websites on the in Internet, the following are some of the information items to be included in the university website.

1. **About university:** A brief information on the parent organization.
2. **Departments:** What are the information services and services units that cater to the user and the concerned contact persons.
3. **Staff/Faculty:** Site need not include the names of the staff. However the staff details may give an idea to the user regarding the size of the university and its various activities.
4. **FAQ:** Frequently asked questions about the university will be quite useful to the new users.
5. **Contact:** Contact persons and their addresses including mail addresses.
6. **Search facility:** If the user is looking for specific information that is not reflected in the contents page of the website, an additional search facility will be of great help.
7. **Link to library page:** It is essential that a university web page should have a link to the libraries web page.
8. **Site map:** Sitemap with links to all the sections of website should be provided. The site map is useful for easy navigation through the university web page.
9. **Feedback:** Feedback from the users in the form of suggestions should be integral part of the web page development, especially in the initial stages it helps in correcting the design as the suggestions are the views and reactions of the end-users. HTML allows the end-users interactively to enter their comments on the site.
10. **News:** If there are any events and activities, these should have place in the web page. It can be include various activities of the university.

## 9. ANALYSIS AND INTERPRETATION OF DATA

The analysis and interpretation of the 132 homepages examined over the Internet is presented in this chapter. These 132 homepages represent the dynamic websites of 132 Indian universities of the total 277 universities. The data elements gathered are grouped into different types of elements such as inception, academic, facial, services, frames, and so on.

### 9.1 Facial elements of the homepages of IUW

Every website has some important anatomical element which display the facial structure of the homepage, for example name/title, university logo, university photo, background picture, and so on. Table 1 represents the break up of the general facial elements of the homepages of Indian university websites (IUW). It may be observed from table 1, almost all the universities have the 'university name/title' accounting to 131 representing 99.24 percent. Only 111 universities have 'university logos' accounts to 84.09 percent. About 76 university homepages have 'university photo' scoring 57.58 percent. Homepages having background picture account for 19 representing 14.39 percent. Of all the homepages only 23 university homepages have sitemaps representing 17.42 percent.

Table-2 Facial Elements of the Homepages of Indian Universities Websites (IUW)

Sl. No	Elements	Number of home pages (n=132)	Percentage
1	Title	131	99.24
2	Logo	111	84.09
3	University photo	76	57.58
4	Back ground picture	19	14.39
5	Sitemap	23	17.42

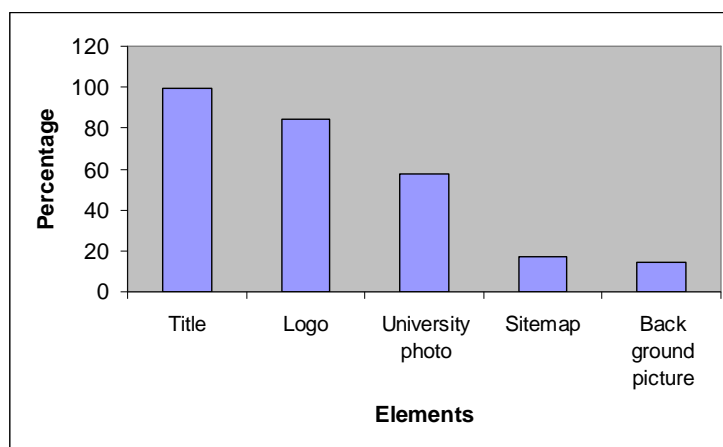


Figure.11: Facial Elements of Homepages of IUW

## 9.2 Communication elements of the homepages of IUW

Most of the websites has given communication elements like university address, phone number, fax number, E-mail address, etc. Table 2 represents the communication elements of the homepages of the IUW. It can be seen from the table 2, that about 50 university homepages have 'university address' accounts to 37.88 percent. Homepages having 'phone number' accounts for 46 representing 34.85 percent. 37 homepages have 'fax number' representing 28.03 percent and 66 homepages have E-mail address representing 50.00 percent.

Table- 3

Sl. No	Elements	Number of home pages (n=132)	Percentage
1	University address	50	37.88
2	Phone number	46	34.85
3	Fax number	37	28.03
4	E-Mail address	66	50.00

Communication Elements of Homepages of IUW

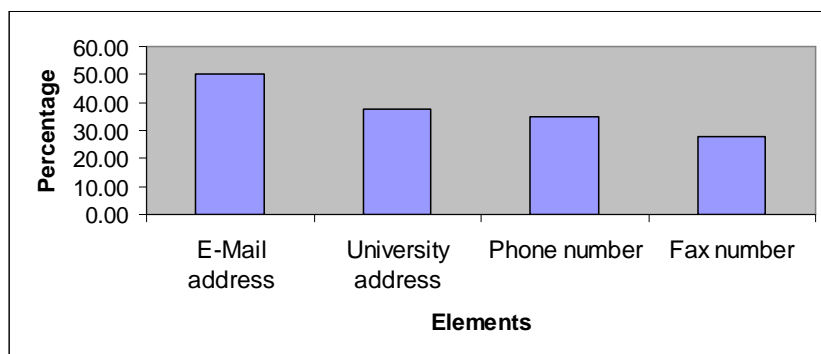


Figure.12: Communication Elements of the Homepages of IUW

### 9.3 Intellectual Property Rights elements of the homepages of IUW

Most of the universities are given IPR elements like copyright, site developed (designed and maintained by), etc at the end of the homepage. Table 3 indicates that 61 homepages have the element 'copyright' accounts to 46.21 percent and 50 homepages have the element 'site developed (designed and maintained by)' scoring 37.88percent.

Table- 4 Intellectual Property Rights Elements of the homepages of IUW

SI. No	Elements	Number of home pages (n=132)	Percentage
1	Copyright	61	46.21
2	Site developed (Designed and maintained by)	50	37.88

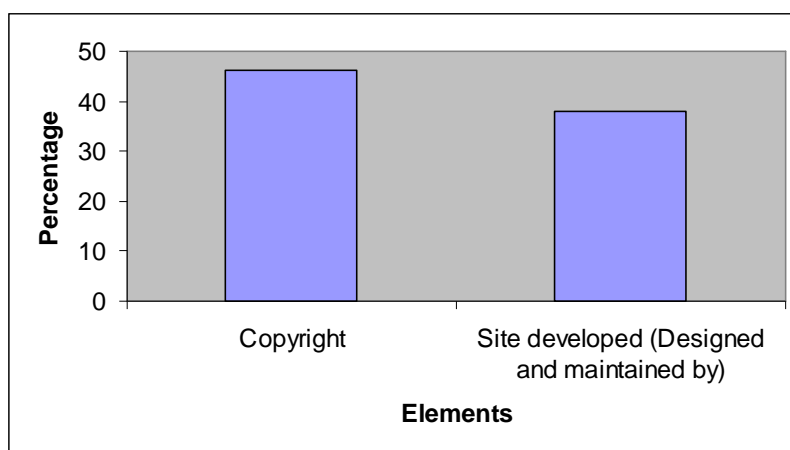


Figure.13: Intellectual Property Rights Elements of the homepages of IUW

#### 9.4 Academic elements of the homepages of IUW

Universities are comes under the category of academic institutions. So, it is essential to put their academic elements on their websites. Some of the universities are given academic elements like courses offered, department, faculty, distance education, vice-chancellor, etc on their homepages. Table 4 represents the academic elements of the homepages of the IUW. Table 4 shows that 43 homepages have the element 'courses offered' accounts to 32.33 percent and the remaining elements i.e., departments, staff/faculty, affiliated colleges, distance education, governing bodies, administration and vice-chancellor are appeared in 36, 47, 41, 22, 11, 46 and 31 homepages respectively.

Table- 5 Academic Elements of the Homepages of IUW

Sl. No	Elements	Number of home pages (n=132)	Percentage
1	Courses offered	43	32.58
2	Department	36	27.27
3	Staff/Faculty	47	35.61
4	Affiliated colleges	41	31.06
5	Distance education	22	16.67
6	Governing bodies	11	8.33
7	Administration	46	34.85
8	Vice-chancellor	31	23.48

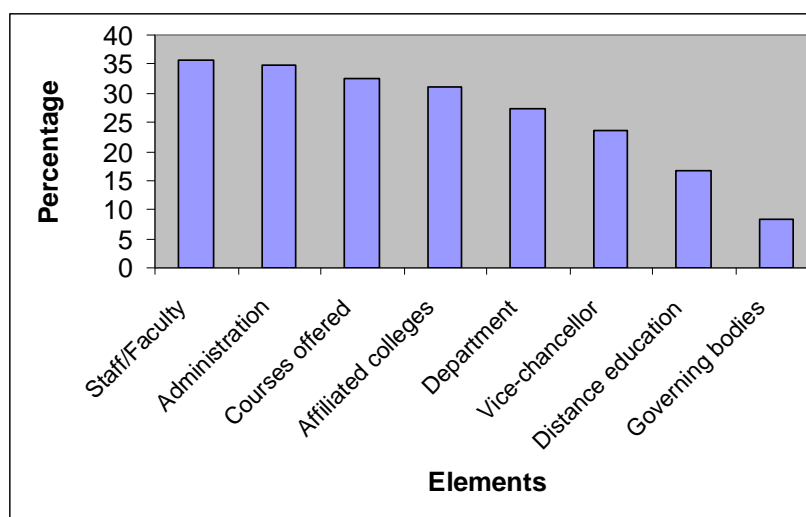


Fig.14: Academic Elements of the Homepages of IUW

#### 9.5 Service elements of the homepages of IUW

Table 5 shows the different service elements of the homepages of IUW. Among several services, major 4 service elements like student services, library, research, alumni are listed in the table. Out of 132

homepages, research service has appeared in 58 homepages that accounts to 43.94 percent. The remaining service elements i.e., library, alumni, and student services are appeared in 54, 45 and 37 homepages respectively that accounts to 40.90%, 34.09% and 28.03% respectively.

Table- 6: Service Elements of the Homepages

Sl. No	Elements	Number of home pages (n=132)	Percentage
1	Research	58	43.94
2	Library	54	40.91
3	Alumni	45	34.09
4	Student Services	37	28.03

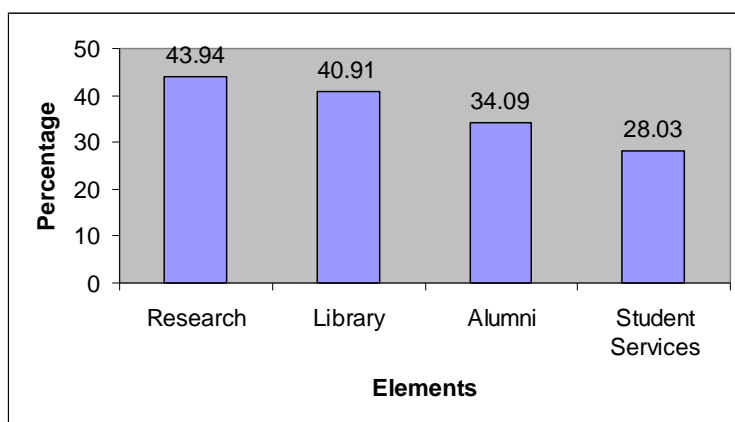


Figure.15 Service Elements of the Homepages of IUW

### 9.6 Inception elements of the homepages of IUW

Table 6 represents the breakup of general inception elements of the homepages of IUW. It may be observed from the table 6, out of 132 homepages, 82 homepages have universities information i.e., details about the universities that accounts to 62.12 percent. The remaining inception elements, established year and infrastructure are appeared in 24 and 11 homepages that accounts to 18.18% and 8.33% respectively.

Table- 7 Inception Elements of the Homepages of IUW

Sl. No	Elements	Number of home pages (n=132)	Percentage
1	About University	82	62.12
2	Established Year	24	18.18
3	Infrastructure	11	8.33



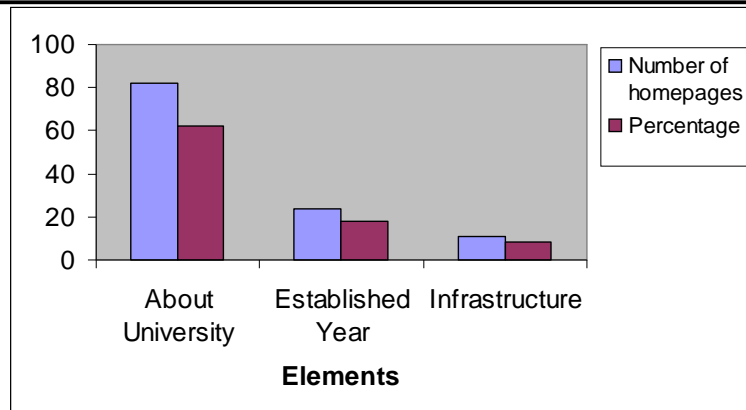


Figure.16: Inception Elements of the Homepages of IUW

### 9.7 Admission related elements of the homepages of IUW

Admission is one of the important aspect in university education. Table 7 shows the breakup of admission elements of homepages of IUW. Table 7 shows the information about the admission elements like admissions and fees structure. The element 'admissions' have appeared in 80 homepages of IUW that accounts to 60.61 percent and the element 'fees structure' have appeared in 13 homepages that accounts to 9.85 percent.

Table- 8 : Admission Related Elements of the Homepages of IUW

Sl. No	Elements	Number of home pages (n=132)	Percentage
1	Admissions	80	60.61
2	Fees structure	13	9.85

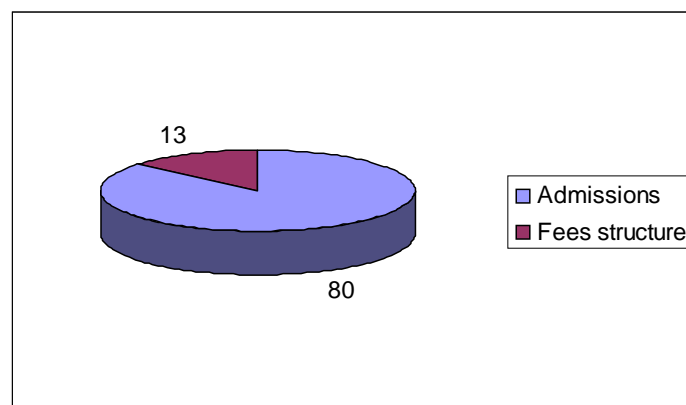


Figure.17: Admission Related Elements of the Homepages of IUW

### 9.10 Feedback elements of the homepages of the IUW

Some of the university homepages have put their feedback elements like comments and suggestions and feedback, etc.

Table 8 represents the feedback elements of the homepages of the IUW. Table 8 represents that 35 homepages have the element 'comments and suggestions (contact webmaster)' and it accounts to 26.52 percent. Whereas, 20 of the homepages have the element 'feedback' and they constitute 15.15 percent.

Table- 9 : Feedback Elements of the Homepages of the IUW

Sl. No	Elements	Number of home pages (n=132)	Percentage
1	Comments and Suggestions ) (Contact Webmmaster	35	26.52
2	Feedback	20	15.15

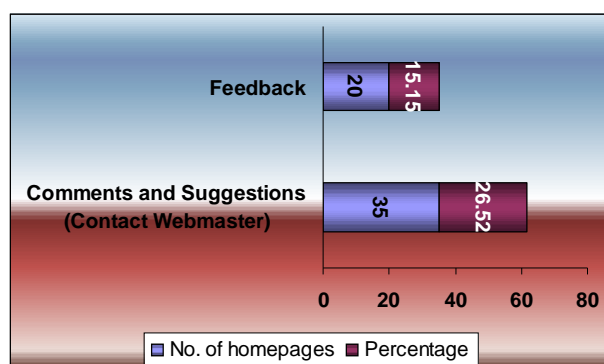


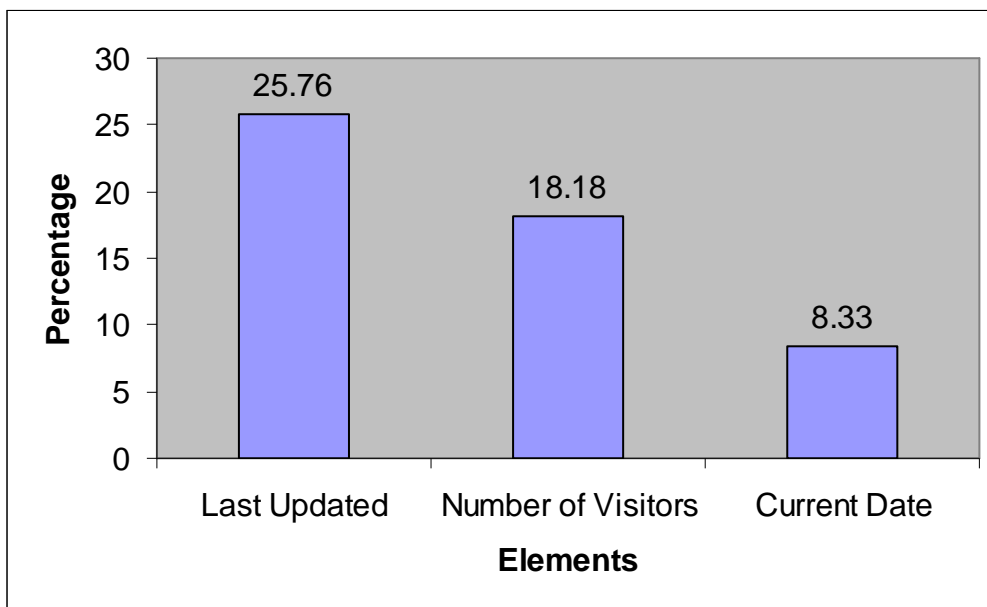
Figure.18: Feedback Elements of Homepages of the IUW

### 9.11 Dynamism of the homepages of IUW

For any website, updating the current information is necessary. Table 9 contains the up-to-date elements like last updated, current date, and number of visitors. Table 9 reveals the dynamism of the homepages of IUW. About 34 homepages have the 'last updated' information which indicates 25.76 percent. Only 11 university homepages have information about 'current date' that accounts to 8.33 percent. 24 homepages have contains the information about the 'number of visitors' accounts to 18.18 percent.

Table- 10 :Dynamism of the Homepages of IUW

Sl. No	Elements	No. Of homepages (n=132)	Percentage
1	Last Updated	34	25.76
3	Number of Visitors	11	18.18
2	Current Date	24	8.33



**Figure.19: Dynamism of the Homepages of IUW**

#### 9.12 Retrieval and search facilities on the homepages of IUW

TABLE 10 indicates the breakup of search and retrieval facilities on the homepages of IUW. Like any other homepages, IUW are also having retrieval and search facilities like search, FAQ. 47 homepages have the search facility, which accounts to 35.61 percent and the element FAQ appeared in 15 homepages representing 11.36 percent.

Table- 11 :Retrieval and Search facilities on the Homepages of IUW

Sl. No	Elements	Number of home pages (n =132)	Percentage
1	Search	47	35.61
2	FAQ	15	11.36

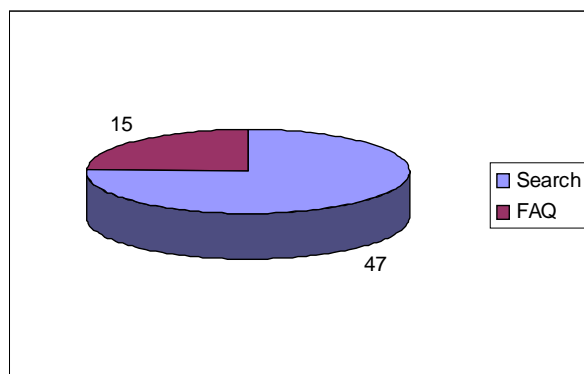


Figure.20: Retrieval and Search facilities on the Homepages of IUW

### 9.13 Number of hyperlinks used in the homepages of IUW

Almost all the websites provides hyperlinks. In the same way, universities homepages also provide hyperlinks. The table shows the frequency of hyperlinks on the homepages of IUW. Large number of homepages (48) provides the hyperlinks between 10 to 20. 20 to 30 hyperlinks provided by 38 homepages. 16 homepages are having links between 30 to 40 and only 8 homepages have more than 50 hyperlinks.

Table- 12 : Number of Hyperlinks used in the Homepages of IUW

Sl. No	Range of hyperlinks	Number of homepages (n = 132)	Cumulative homepages	Percentage
1	0-10	11	11	8.33
2	10-20	48	59	36.36
3	20-30	38	97	28.79
4	30-40	16	113	12.12
5	40-50	11	124	8.33
6	50-60	8	132	6.06

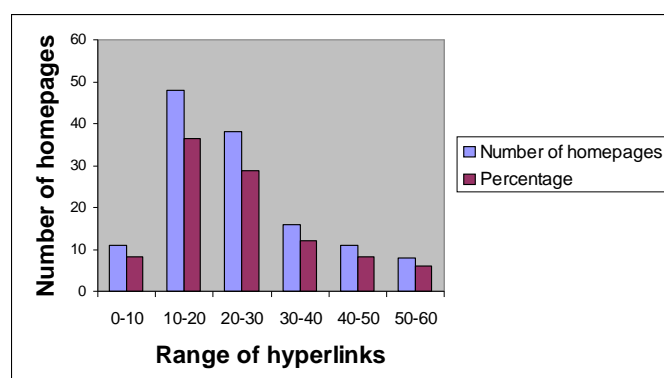


Figure.21: Number of Hyperlinks used in the Homepages of IUW

#### 9.14 Number of frames used in the homepages of IUW

The table represents that number of frames used in homepages of IUW. 76 homepages have the range of frames between 0 to 3 and 40 homepages have given the frames between 4 to 6. 10, 5 and 1 homepages provides 7-9, 10-12 and 13-15 ranges of frames respectively.

Table- 13 Number of Frames used in the Homepages of IUW

Sl. No	Range of frames	Number of homepages (n=132)	Cumulative frames	Percentage
1	0-3	76	76	57.58
2	4-6	40	116	30.30
3	7-9	10	126	7.58
4	10-12	5	131	3.79
5	13-15	1	132	0.76

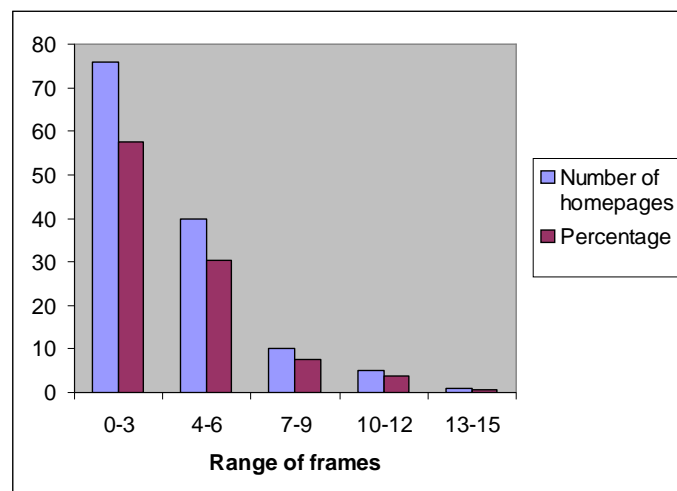


Fig.22: Number of Frames used in the Homepages of IUW

## 10. SUMMARY

In this study the investigator has collected the data about the websites of different Indian universities. At the total 132 universities having their websites. As stated earlier the investigator has concentrated only on these university homepages. Almost all the university homepages having the title element and about 84% of the homepages have given their logos and half of the universities have given their e-mail addresses.

It appears that more systematic effort is required by the universities while designing and developing their websites. As their websites are becoming more authentic source of information, a more serious effort is called for to present their information effectively.

A more detailed study not only on the homepages but also on the other subsequent pages of the universities is required. This would definitely help the universities to improve upon their existing websites.

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