

THE WEB RANKING OF INDIAN INSTITUTE OF MANAGEMENT (IIM) IN INDIA ON THE BASIS OF WEB IMPACT FACTOR

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Abstract : The present era is information uprising era, where there is sea of information in every field of study. There is a need of communication medium forgetting this information. For the last 10 to 15 years, the web is playing an important role for decentralizing the information from its source. The most important reason for this is that, this system of information accessing is relatively simple and easily handled. In this study, the websites of Indian Institutes of Management (IIM) in India are examined on the webometrics prospective. The present study examined the twenty IIMs across the country through different webometrics tools and resolute that and on the basis of SWIF, the Indian Institute of Management, Lucknow (IIM-L) occupies the first place with 43.29, followed by Indian Institute of Management, Calcutta (IIM-C) with 28.18 and with 26.60 score, the Indian Institute of Management, Nagpur (IIM-N) is the third place.

Keywords: Indian Institutes of Management (IIM), Webometrics, Web Impact Factor, Domain Authority, Page Authority, Root Domain, Equity Passing Links, Internal Links, External Links, Total Links, Linking C Blocks, Simple Web Impact Factor, Internal Web Impact Factor, External Web Impact Factor.

1.0 Introduction

In the present Information Technology (IT) era, World Wide Web (WWW) is an essential tool of worldwide information in itself by which a person can access any information even if it is anywhere in the world. As the development and use of WWW, in its proximity and concept, there was a radical change in terms of its relevance. This is why things are happening now on the information content of WWW, whether it has been provides update information to their users, how many contingencies are there in the information given and what is in the scope of the enlightenment of link and reading material. After the information revolution, the information seeking behaviors are changed rapidly in every aspect of human life and this rapid change in IT also changed the role of libraries and also information management system. For this reason, the library has to monitor its services according to the user oriented as well as result oriented. The demands of digitalized platform data are increasing day by day. Libraries shifted their role from being custodians of the collected-based traditional information resources to being providers of access-based digital information resources [16].

The term webometrics was first coined by **Almind and Ingwersen** [2]. The second primary definition of webometrics is introduced by **Thelwall** [15] as “the study of web-based content with primarily quantitative methods for Social Science research goals using techniques that are not specified to one field of study, basically, the statistical measurement of different features of the web for a variety of purposes is study under the webometrics.”

2.0 About Indian Institutes of Management (IIM)

According to **Bhargava, R C et al** [4] the Indian Institutes of Management (IIMs) are a group of twenty public, autonomous institutes of management education and research in India. They primarily offer postgraduate, doctoral and executive education programmes. The establishment of IIMs was initiated by Jawaharlal Nehru, the first Prime Minister of India, based on the recommendation of the Planning Commission (now NITI Aayog).

Among them of twenty IIMs in India, the Indian Institute of Management, Calcutta was the first IIM to be set up, on 13 November, 1961 in collaboration with the MIT Sloan School of Management, the Government of West Bengal, the Ford Foundation and the Indian industry [18].

Management schools around the world maintain their web resources which communicate the users a wide range of information resources along with dedicated dynamic information interface where users can get maximum information from institution website. In worldwide almost management institutions scatter their information through website.

If things are discussed in the context of India, then IIMs have continuously update their web resources to the users, and has taken a good platform, so that users can be updated themselves from anywhere of world.

3.0 Web Impact Factor

The Web Impact Factor (WIF) provides quantitative tools for ranking, evaluating, categorizing, and comparing websites, top-level domains and sub-domains. The WIF is a form of measurement used to determine the relative standing of websites in particular fields, or a country; for instance, academic websites in a country. The higher the impact factor, the higher the perceived reputation of the website. The WIF answers the question “what impact has this website had?” A WIF is a measure of the frequency with which the “average web page” in a website has been linked at a given point in time. In general, a website with a higher impact factor may be considered to be more prestigious or of a higher quality than those websites with a lower impact factor. The WIF gives a measure of average (external or absolute) impact per page, which could be for a single university website or all websites in an entire country, for example. This has a close analogy with impact factors for journals, as, indeed, link analysis has with citation analysis generally[11]. The WIF is useful in classifying the significance of in-link (or total link) frequencies. Important point is that, it eliminates some of the bias of such counts which favour large websites over small ones, or well-known websites over less-known ones, and of older websites over newer ones. All things being equal, the larger the number of previously published web pages, the more often a website will be linked. Thus the greater the number of link pages to a website, the greater the WIF will be[11].

There are three types of Web Impact Factor links

- a) Simple Web Impact Factor (SWIF)
Here:
 $SWIF=B/A$
Where
A=Total number of web pages
B=Total number of links
- b) Internal Web Impact Factor (IWIF)
Here:
 $IWIF =C/A$
Where
C=Total number of internal links
A=Total number of web pages
- c) External Web Impact Factor (EWIF)
Here:
 $EWIF= D/A$
Where
D= Total number of external links
A=Total number of web pages

4.0 Literature Review

The websites play an important responsibility for any academic institution to get information to its users. If seen in India's reference, the list of universities [21]. There are four main categories of universities, viz. Central Universities, State Universities, Deemed Universities and Private Universities, thus total 819 universities have been established in India.

In addition to the above universities, other institutions are granted the permission to autonomously award degrees, and while not called “university” by name, act as such. They usually fall under the administrative control of the Department of Higher Education, Ministry of Human Resource Development, Government of India. In official documents, they are called “autonomous bodies, “university-level institutions, or even simply ‘other central institutions [20]. Some of them are, Indian Institutes of Management (IIMs), Indian Institutes of Technology (IITs), Indian Institutes of Information Technology (IIITs), All India Institutes of Medical Sciences (AIIMS), National Institutes of Technology (NITs), National Law Universities (NLU), and so on.

Regarding literature review in higher education institutions in India, **Jalal, Biswas and Mukhopadhyaya**[6] examined 526 universities including Central Universities (23), Deemed Universities (150), State Universities (255), Institutes of National Importance (19), State Legislative (7), Open Universities (13), Private Universities (59) and according to this study, only 17 universities out of 526 (i.e. 3.2%) universities do not have own websites or the websites may be non-functional during that study.

In similar way, **Jeyashree and Ravichandran**[9] examined the web impact assessment through URL citations in higher education institutions in India and according to this study, IIM, Bangalore received the highest URL citations (496) and IIM Kashipur received the lowest URL citations (111).

Babu, Jeysankar and Rao[3] examined the 41 Central Universities in India and according to Self Link Web Impact Factor (SLWIF), Central University of Orissa occupies the first place with 14 Self Link Pages .

F.Ratha, Joshi and Naidu[13] analysis the webometrics study of IIT libraries websites and according to their study among fifteen IITs across India, the library website of IIT Delhi leads with 3709 (38.28 %). **Jalal**[7] investigated the relationship among top ten World universities, top ten Asian universities and the top ten Indian universities based on the exploratory study of web link analysis and according to this study, IISc, Bangalore being the first position to get maximum outlines (1916) followed by IIT, Bombay (918). In neighbour countries in India, **Islam**[5] examined webometrics study of 88 universities (54 private, 31 public and 3 international) in Bangladesh and according to the Self Link Web Impact Factor (SLWIF), Central Women’s University, Dhaka occupies the first place with NWP(8), SLWP (8) and SLWIF (1.00).

At State level in India, **Jeysankar and Babau** [8] examined and explored through a webometric study the websites of 45 universities in Tamil Nadu and according to this study, Annamalai University occupies the first place in terms of number of Web Pages (815), number of Self Links Pages (2000), and Self Links WIF(2.45) among Tamil Nadu Government Universities.

5.0 Objective of the Study

In this study, the primary objective is to examine the Simple WIF, Internal WIF and External WIF of the websites of IIMs in India and to find out the various link patterns among the IIMs. This study also finds out web structure in terms of Domain and Page Authority, Just-Discovered, Root Domains as well as Spam Score, Total Internal Links, Total External Links, Total Links, Followed Linking Root Domain, Total Linking Root Domain and Linking C Blocks are also examined for judging web performances among twenty IIMs in India.

6.0 Methodology

There are twenty IIMs in India and nomenclatural these are called B-Schools (Business Schools). Some of them are old, some are newly established, and some of them are from top ranks due to their placement records. Present study, data were collected during the month of 1st December, 2017 to 31st March, 2018. Google and Bing are two primary search engines were used for indentifying web addresses of these management institutions. The open site explorer (www.opensiteexplorer.org) is used for collecting raw data and for measuring power of Domain Name, Page Authority, etc through Moz (a SEO tool that provides link data for measuring, evaluating and monitoring the on-site and off-site aspects of a website’s level of search engine optimizer that predicts how well a website will rank on search engines [16].

7.0 Data Analysis and Evaluation

On the basic of above given methodology for examinations of data, the present study has been examined from the collected data. Webometric study of these IIMs has been initiated as given Table no. 1, which is show the list of all twenty IIMs along with their year of established, location, parent State, short name and websites address.

Table- 1:List of all IIMs, Establishment Year, Location, Parent State and Their Websites

Sl No.	Name	Year of Established	Location	State	Short Name	Website
1	Indian Institute of Management, Calcutta	1961	Kolkata	West Bengal	IIM-C	www.iimcal.ac.in
2	Indian Institute of Management, Ahmadabad	1961	Ahmadabad	Gujarat	IIM-A	www.iima.ac.in
3	Indian Institute of Management , Bangalore	1973	Banguluru	Karnataka	IIM-B	www.iimb.ac.in
4	Indian Institute of Management, Lucknow	1984	Lucknow	Uttar Pradesh	IIM-L	www.iiml.ac.in
5	Indian Institute of Management,	1996	Kozhikode	Kerala	IIM-K	www.iimk.ac.in

	Kozhikode					
6	Indian Institute of Management, Indore	1996	Indore	Madhya Pradesh	IIM-I	www.iimidr.ac.in
7	Indian Institute of Management, Shillong	2007	Shillong	Meghalaya	IIM-S	www.iimshillong.ac.in
8	Indian Institute of Management, Rohtak	2010	Rohtak	Haryana	IIM-R	www.iimrohtak.ac.in
9	Indian Institute of Management, Ranchi	2010	Ranchi	Jharkhand	IIM-Ranchi	www.iimranchi.ac.in
10	Indian Institute of Management, Raipur	2010	Raipur	Chhattisgarh	IIM-Raipur	www.iimraipur.ac.in
11	Indian Institute of Management, Tiruchirappalli	2011	Tiruchirappalli	Tamil Nadu	IIM-T	www.iimtrichy.ac.in
12	Indian Institute of Management, Kashipur	2011	Kashipur	Uttarakhand	IIM-Kashipur	www.iimkashipur.ac.in
13	Indian Institute of Management, Udaipur	2011	Udaipur	Rajasthan	IIM-U	www.iimu.ac.in
14	Indian Institute of Management, Nagpur	2015	Nagpur	Maharashtra	IIM-N	www.iimnagpur.ac.in
15	Indian Institute of Management, Visakhapatnam	2015	Visakhapatnam	Andhra Pradesh	IIM-V	www.iimv.ac.in
16	Indian Institute of Management, Bodh Gaya	2015	Bodh Gaya	Bihar	IIM-BG	www.iimbg.ac.in
17	Indian Institute of Management, Amritsar	2015	Amritsar	Punjab	IIM-Amritsar	www.iimamritsar.ac.in
18	Indian Institute of Management, Sambalpur	2015	Sambalpur	Odisha	IIM-Sambalpur	www.iimsambalpur.ac.in
19	Indian Institute of Management, Sirmour	2015	Sirmour	Himachal Pradesh	IIM-Sirmour	www.iimsirmour.ac.in
20	Indian Institute of Management, Jammu	2016	Jammu	Jammu & Kashmir	IIM-Jammu	http://www.iimj.ac.in/

From Table no.1, the data analysis of all twenty IIMs shows in Table no. 2, according to this, the growth figure from 2004 to 2010 (20 %) and from 2011 to 2017 (50%) significantly increased as comparison to pre 2004 era. Most importantly, the total 10 (50%) IIMs are established between 2011 and 2017.

Table-2: Year of Establishment (between 7 years frequency), Total No. of IIMs, and Percentage

Year of Establishment	Total no. of IIMs	Percentage (%)
Before independence	0	0
Between 1948 and 1954	0	0
Between 1955 and 1961	2	10

Between 1962 and 1968	0	0
Between 1969 and 1975	1	5
Between 1976 and 1982	0	0
Between 1983 and 1989	1	5
Between 1990 and 1996	2	10
Between 1997 and 2003	0	0
Between 2004 and 2010	4	20
Between 2011 and 2017	10	50
Total	20	100

India is composed of 29 States and 7 Union territories (including a National Capital territory). The States have been grouped into six zones. Table no. 3 shows the present composition of IIMs among six States Zones in India. In Northern India, there are 5 (25%) IIMs have been established, followed by 4 (20%) in Central and Eastern Zone. Particularly in North Eastern part of India, only 1 (5%) IIM i.e. IIM-S is established in 2007.

Table-3: Territories Zones in India

States Zones	No. of IIMs	Percentage (%)
Northern	5	25
Central	4	20
Eastern	4	20
North Eastern	1	5
Western	2	10
Southern	4	20
Total	20	100

As has been said earlier, there are twenty IIM in our country. Table no. 4 shows the Domain and Page Authorities of these IIMs websites. The data collection and compilation of these IIMs is done through online tool www.opensiteexplorer.org. Domain Authority (DA) and Page Authority (PA) are score developed by Moz that predicts how well a specific page will rank on Search Engine Results Pages(SERP) and they scores range from 01 to 100, with higher scores corresponding to a greater ability to rank[12].

Table-4: Domain and Page Authorities

Serial No.	Short Name	Domain Authority	Page Authority
1	IIM-C	58(6.86%)	65(6.46%)
2	IIM-A	49(5.80%)	56(5.57%)
3	IIM-B	62(7.34%)	56(5.57%)
4	IIM-L	54(6.39%)	62(6.16%)
5	IIM-K	53(6.27%)	61(6.06%)
6	IIM-I	52(6.15%)	60(5.96%)
7	IIM-S	48(5.68%)	57(5.67%)
8	IIM-R	40(4.73%)	50(4.97%)
9	IIM-Ranchi	45(5.33%)	54(5.37%)
10	IIM-Raipur	42(4.97%)	52(5.17%)
11	IIM-T	46(5.44%)	55(5.47%)
12	IIM-Kashipur	43(5.09%)	50(4.97%)
13	IIM-U	44(5.21%)	52(5.17%)
14	IIM-N	33(3.91%)	42(4.17%)
15	IIM-V	33(3.91%)	42(4.17%)

16	IIM-BG	32(3.79%)	41(4.08%)
17	IIM-Amritsar	34(4.02%)	44(4.37%)
18	IIM-Sambalpur	34(4.02%)	45(4.47%)
19	IIM-Sirmaur	31(3.67%)	42(4.17%)
20	IIM-Jammu	12(1.42%)	20(1.99%)
	Total	845	1006

According to Table no. 4, the IIM-B has occupies highest DA rank with 62(7.34%), followed by IIM-C with 58(6.86%). As for as the rank of PA is concerned, the IIM-C score highest rank with 65(6.46%), followed by IIM-L with 62(6.16%).

Table no. 5 demonstrates the Just-Discovered (JD) links, Root Domains (RD), and Spam Score (SC) of the IIMs websites. The JD links reports helps us to indentify recently created URLs and web links, the RD determine the number of unique root domains (e.g. *.example.com) containing at least one linking page to particular URL [14].

The indexing of SC is developed by Moz that attempts to figure out how ‘spammy’ websites are, and subsequently, how trustworthy a website is (or is not). Sites are graded on a scale of 0 to 17, with 0 being the best (most trustworthy) and 17 being the worst (least trustworthy) regarding of SC of a website, IIM-I is getting (9/60) of JD, followed by IIM-B with (4/60), IIM-C occupies highest RD with (439) and according to the same table, the highest SC is (4) between 0 scale to 17, and there are three IIMs viz. IIM-Kashipur, IIM-U and IIM-BG who scored that figure(4 in the case of SC) and most trustworthy websites(0 in the case of SC) as per given Moz scale are IIM-B, IIM-S, IIM-Ranchi , IIM-T , IIM-N, IIM-Sirmaur and IIM-Jammu.

Table-5: Just-Discovered Links, Root Domain and Spam Score

Serial No.	Short Name	Just-Discovered	Root Domain	Spam Score
1	IIM-C	0/60	439	3/17
2	IIM-A	0/60	82	3/17
3	IIM-B	4/60	44	0/17
4	IIM-L	1/60	349	1/17
5	IIM-K	0/60	268	1/17
6	IIM-I	9/60	298	3/17
7	IIM-S	0/60	148	0/17
8	IIM-R	0/60	99	2/17
9	IIM-Ranchi	0/60	99	0/17
10	IIM-Raipur	0/60	90	2/17
11	IIM-T	0/60	84	0/17
12	IIM-Kashipur	0/60	79	4/17
13	IIM-U	0/60	105	4/17
14	IIM-N	2/60	15	0/17
15	IIM-V	0/60	22	2/17
16	IIM-BG	0/60	14	4/17
17	IIM-Amritsar	0/60	14	1/17

18	IIM-Sambalpur	0/60	24	2/17
19	IIM-Sirmaur	0/60	10	0/17
20	IIM-Jammu	0/60	02	0/17

Table no. 6 illustrates the ranking of all twenty IIMs websites on the basis of Internal Equity Passing Links (IEPL), External Equity Passing Links (EEPL) and Total Equity Passing Links (TEPL). The equity-passing-links are the links which pass value from one page (say X) to the other page (say Y) and there are two types of equity-passing-links, one is IEPL and second is EEPL and total TEPL is the total amount of equity-passing-links. Accordingly, the IIM-L got highest scored with 16013(61.12%), subsequently IIM-R scored second position with 6031(23.02%) in terms of IEPL. In the results of EEPL, IIM-C retained top position after getting 2864(9.69%) score, followed by IIM-I with score 2669(9.03%). If we talk about the TEPL's data analysis of given table, the IIM-L is the highest level score 18537(33.24%), followed by IIM-R with score 8560(15.35%).

Table- 6: Internal Equity Passing Links, External Equity Passing Links, and Total Equity Passing Links

Serial No.	Short Name	Internal Equity Passing Links	External Equity Passing Links	Total Equity Passing Links
1	IIM-C	195(0.74%)	2864(9.69%)	3059(5.49%)
2	IIM-A	1412(5.39%)	564(1.91%)	1976(3.54%)
3	IIM-B	5(0.02%)	56(0.19%)	61(0.11%)
4	IIM-L	16013(61.12%)	2524(8.54%)	18537(33.24%)
5	IIM-K	763(2.91%)	2103(7.11%)	2866(5.14%)
6	IIM-I	936(3.57%)	2669(9.03%)	3605(6.46%)
7	IIM-S	84(0.32%)	2220(7.51%)	2304(4.13%)
8	IIM-R	6031(23.02%)	2529(8.55%)	8560(15.35%)
9	IIM-Ranchi	3(0.01%)	2024(6.85%)	2027(3.63%)
10	IIM-Raipur	228(0.87%)	2000(6.76%)	2228(4.00%)
11	IIM-T	1(0.00%)	2065(6.98%)	2066(3.70%)
12	IIM-Kashipur	33(0.13%)	1713(5.79%)	1746(3.13%)
13	IIM-U	326(1.24%)	1814(6.14%)	2140(3.84%)
14	IIM-N	1(0.00%)	926(3.13%)	927(1.66%)
15	IIM-V	125(0.48%)	84(0.28%)	209(0.37%)
16	IIM-BG	21(0.08%)	26(0.09%)	47(0.08%)
17	IIM-Amritsar	0(0.00%)	83(0.28%)	83(0.15%)
18	IIM-Sambalpur	20(0.08%)	1880(6.36%)	1900(3.41%)
19	IIM-Sirmaur	0(0.00%)	1423(4.81%)	1423(2.55%)
20	IIM-Jammu	1(0.00%)	0(0.00)	1(0.00%)
	Total	26198	29567	55765

Table no. 7 shows the ranking of IIMs websites on the basis of Total Internal Links(TIL), Total External Links(TEL), Total Links(TL), Followed Linking Root Domain(FLRD), Total Linking Root Domain(TLRD) and Linking C Blocks (LCB). An Internal Link is a type of hyperlink on a webpage to another page or resource, such as an image or document, on the same website or domain [19]. External Links are hyperlinks

that point at (target) any document other than the domain the link exists on (source)[17]. In other words, we can say that an External Links are any link that goes to a different domain. For example, en.wikipedia.org is considered External Link to www.ugc.ac.in. The TL are the total number of TIL and TEL. The number of domains at least one followed link to any page on the root domain is called FLRD. The TLRD determine the number of web pages that links to domain including the FLRD. The LCB refers to the part of the IP address that's different. The same class C address means something has the same third octet in the database. For example, here, the first three IPs are the same class C, and fourth address is not. (a) 192.168.1.1 , (b) 192.168.1.2, (c) 192.168.1.3 and (d) 192.168.100.4. The reason behind that, it's a hint to Google (or any search engine) that the sites are all related to each other and on the same server, and in fourth example, the links may not be very natural since there is possibility that the some person set up it [10]. Therefore, the TIL of IIM-C is 81805(75.20%)and it occupies the first place, followed by IIM-L with 16946 (15.58%). In terms of TEL, the IIM-K occupies the first place with 3203 (10.06%), followed by IIM-C with 3030 (9.52%). The TL of IIM-C is 84835 (60.33%) and it occupies the first place, followed by IIM-L with 19609(13.94%). The FLRD of IIM-C is 388(20.08%) and it occupies the first place, followed by IIM-L with 302 (15.63%). The TLRD of IIM-C with 439(20.23%) is the highest place among twenty IIMs, followed by IIM-L with 349(15.75%). The LCB of IIM-C with 335(18.11%) has the highest place, followed by IIM-L with 262(14.46%).

Table-7: Total Internal Links, Total External Links, Total Links, Followed Linking Root Domain, Total Linking Root Domain and Linking C Blocks

Serial No.	Short Name	Total Internal Links	Total External Links	Total Links	Followed Linking Root Domain	Total Linking Root Domain	Linking C Blocks
1	IIM-C	81805 (75.20%)	3030 (9.52%)	84835 (60.33%)	388 (20.23%)	439 (19.21%)	335 (18.11%)
2	IIM-A	1458 (1.34%)	708 (2.22%)	2166 (1.54%)	65 (3.39%)	82 (3.59%)	71 (3.84%)
3	IIM-B	5 (0.00%)	68 (0.21%)	73 (0.05%)	33 (1.72%)	44 (1.93%)	41 (2.22%)
4	IIM-L	16946 (15.58%)	2663 (8.37%)	19609 (13.94%)	302 (15.75%)	349 (15.27%)	262 (14.46%)
5	IIM-K	763 (0.70%)	3203 (10.06%)	3966 (2.82%)	228 (11.89%)	268 (11.73%)	212 (11.46%)
6	IIM-I	936 (0.86%)	2778 (8.73%)	3714 (2.64%)	247 (12.88%)	298 (13.04%)	236 (12.76%)
7	IIM-S	84 (0.08%)	2278 (7.16%)	2362 (1.68%)	115 (6.00%)	148 (6.48%)	126 (6.81%)
8	IIM-R	6031 (5.54%)	2568 (8.07%)	8599 (6.12%)	81 (4.22%)	99 (4.33%)	83 (4.49%)
9	IIM-Ranchi	3 (0.00%)	2058 (6.47%)	2061 (1.47%)	82 (4.28%)	99 (4.33%)	84 (4.54%)
10	IIM-Raipur	228 (0.21%)	2042 (6.41%)	2270 (1.61%)	75 (3.91%)	90 (3.94%)	74 (4.00%)
11	IIM-T	1 (0.00%)	2109 (6.63%)	2110 (1.50%)	70 (3.65%)	84 (3.68%)	72 (3.89%)
12	IIM-Kashipur	33 (0.03%)	1740 (5.47%)	1773 (1.26%)	65 (3.39%)	79 (3.46%)	65 (3.51%)
13	IIM-U	326 (0.30%)	1847 (5.80%)	2173 (1.55%)	88 (4.59%)	105 (4.60%)	94 (5.08%)
14	IIM-N	1 (0.00%)	930 (2.92%)	931 (0.66%)	11 (0.57%)	15 (0.66%)	15 (0.81%)
15	IIM-V	125 (0.11%)	90 (0.28%)	215 (0.15%)	16 (0.83%)	22 (0.96%)	20 (1.08%)
16	IIM-BG	21 (0.02%)	30 (0.09%)	51 (0.04%)	10 (0.52%)	14 (0.61%)	12 (0.65%)
17	IIM-	0	84	84	13	14	14

	Amritsar	(0.00%)	(0.26%)	(0.06%)	(0.68%)	(0.61%)	(0.76%)
18	IIM-Sambalpur	20 (0.02%)	1884 (5.92%)	1904 (1.35%)	20 (1.04%)	24 (1.05%)	22 (1.19%)
19	IIM-Sirmaur	0.00 (0%)	1425 (4.48%)	1425 (1.01%)	8 (0.42%)	10 (0.44%)	10 (0.54%)
20	IIM-Jammu	1 (0.00%)	297 (0.93%)	298 (0.21%)	1 (0.05%)	2 (0.09%)	2 (0.11%)
	Total	108787	31832	140619	1918	2285	1850

In table no. 8, the three Web Impact Factors viz. Simple Web Impact Factor (SWIF), Internal Web Impact Factor(IWIF) and External Web Impact Factor(EWIF) is computed through sitemap tool in Google search engine and on the basis of SWIF, the Indian Institute of Management, Lucknow (IIM-L) occupies the first place with 43.29, followed by Indian Institute of Management, Calcutta (IIM-C) with 28.18 and with 26.60 score, the Indian Institute of Management, Nagpur (IIM-N) is the third place.

Table 7: Simple Web Impact Factor, Internal Web Impact Factor and External Web Impact Factor

Short Name	SWIF	IWIF	EWIF	Rank
IIM-L	43.29	37.41	5.88	1
IIM-C	28.18	27.18	1.01	2
IIM-N	26.60	0.03	26.57	3
IIM-Sambalpur	14.53	0.15	14.38	4
IIM-R	10.32	7.24	3.08	5
IIM-S	7.72	0.27	7.44	5
IIM-BG	3.92	1.62	2.31	7
IIM-Sirmaur	3.88	0.00	3.88	8
IIM-Amritsar	3.82	0.00	3.82	9
IIM-U	2.67	0.40	2.27	10
IIM-V	2.62	1.52	1.10	11
IIM-T	2.44	0.00	2.44	12
IIM-Raipur	1.64	0.17	1.48	13
IIM-Jammu	1.45	0.00	1.45	14
IIM-Ranchi	1.28	0.00	1.28	15
IIM-I	1.17	0.30	0.88	16
IIM-Kashipur	1.07	0.02	1.05	17
IIM-K	0.76	0.15	0.61	18
IIM-A	0.55	0.37	0.18	19
IIM-B	0.01	0.00	0.01	20

Conclusion

In today information age, while the information is being decentralized, access to even on the small electronic gadgets and more dynamic in terms of web’s technology and it would be an extremely important tool for any

academic institution, while faculties, students, research scholars get their necessary information through websites.

The present study, underlining different webometric tools to this utility, found a fact finding that what is the basic web-structure of these IIMs?

The web link of any IIM can be a common in terms of its content that reflect the web content, but in practice, web links are technically a systematic arrangement through hyperlinks and that technical view of hyperlinks reflect the total quality of a website. The In and Out bound of a website determined the technical aspect, data link standard, data transfer mechanisms and so that in this study, we can easily find the differences of links between the Internal and External. For example, in some IIMs, the Internal Equity Passing Links (IEPL) is lowest but comparatively External Equity Passing Links (EEPL) is highest and in some cases some of these Total External Links (TEL) are much more as comparison with Total Internal Links (TIL). The present study attempted to rank IIMs websites by measuring their Simple Web Impact Factor (SWIF).

References

- [1] A Guide to Managing Your Websites's Spam Score. Wolfgang Digital, available at <https://www.wolfgangdigital.com/blog/managing-spam-score-guide/> (accessed December 13, 2017)
- [2] Almind T.C. & Ingwersen P. Informatic Analysis on the World Wide Web. Methodological Approaches to Webometrics. *Journal of Documentation*, 53(4), 1998, 404-26.
- [3] Babu, B.R., Jayshankar, R & Rao, P N. Websites of Central Universities in India: A Webometrics analysis. *DESIDOC Journal of Library & Information Technology*, 30(4), 2010, 22-43.
- [4] Bhargava, RC et al. Report of IIM Review Committee, 2008, available at: <https://web.archive.org/web/20101006173642/http://education.nic.in/tech/IIM-Reviewcommittee.pdf> (accessed December 4, 2017)
- [5] Islam, M. A. Webometrics study of Universities in Bangladesh. *Annals of Library and Information Studies*, (58), 2011, 307-318.
- [6] Jalal, S. K. , Biswas, S. C. & Mukhopadhyaya, P. Web impact factor and link analysis of selected Indian universities. *Annals of Library and Information Studies*, 57, 2010, 109-21
- [7] Jalal, S.K. A comparative weblink analysis among top ten Indian, Asian and World universities. *DESIDOC Journal of Library & Information Technology*, 33(2), 2013, 131-40.
- [8] Jeyshankar, R. & Babu, B. Ramesh. Websites of universities in Tamil Nadu: a webometric study. *Annals of Library and Information Studies*, 56(2), 2009, 69-79
- [9] Jeyashree, S & Ravichandran, R. Web impact assessment of identified higher education institutions in India. *Annals of Library and Information Studies*, 62 , 2015, 7-8
- [10] Linking C Blocks. Moz.com, available at <https://moz.com/community/q/linking-c-blocks> (accessed December 14, 2017)
- [11] Noruzi, Alireza. The web impact factor: A critical review. *The Electronic Library*, 24(4), 2006
- [12] Page Authority. Moz, available at <https://moz.com/learn/seo/page-authority> (accessed December 2, 2017)
- [13] Ratha, B. , Joshi, Leena & Naidu, G. Webometric study of IIT libraries websites. *DESIDOC Journal of Library & Information Technology*, 32(3), 2012, 249-54.
- [14] SEO Learning Center. Moz, available at <https://moz.com/learn/seo> (accessed December 12, 2017)
- [15] Thelwall M. Introduction to Webometrics: Quantitative Web Research for the Social Science, Morgan & Claypool, 2009.
- [16] Verma, Manoj Kumar & Brahma, Krishna. A webometric analysis of National Libraries' websites in South Asia. *Annals of Library and Information Studies*, 64 (2), 2017 ,116-24
- [17] What are External Links?. Moz, available at <https://moz.com/learn/seo/external-link> (accessed January 26, 2018)
- [18] Wikipedia contributors. Indian Institute of Management Calcutta. Wikipedia, The Free Encyclopedia, available at https://en.wikipedia.org/w/index.php?title=Indian_Institute_of_Management_Calcutta&oldid=830893498 (accessed March 19, 2018)

[19]Wikipedia contributors.Internal link. Wikipedia, The Free Encyclopedia, available at https://en.wikipedia.org/w/index.php?title=Internal_link&oldid=830402075 (accesses January 25, 2018).

[20]Wikipedia contributors. List of autonomous higher education institutes in India. Wikipedia, The Free Encyclopedia, available at https://en.wikipedia.org/w/index.php?title=List_of_autonomous_higher_education_institutes_in_India&oldid=830930064 (accessed December 10, 2017)

[21]Wikipedia contributors.List of universities in India. Wikipedia, The Free Encyclopedia, available at https://en.wikipedia.org/w/index.php?title=List_of_universities_in_India&oldid=825813871 (accessed December 9, 2017)