# Measuring Impact Of Web Resources In Conference Proceedings: A Citation Analysis

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#### **Abstract**

The present study examination of all the conference papers published in the Convention on Automation of Libraries in Education and Research Institution (CALIBER) 2005 and 2006 was carried out. This paper analysis the different bibliographic forms, average number of citation per paper, authorship pattern, different website domains, different types of conference proceedings, geographical distribution and rank list of cited journals.

**Keywords:** Citation Analysis, Web Resources, Conference Proceedings

#### 1. Introduction

Now a days Library and Information Science professionals are frustrated both by the time it takes to find answers to reference questions using the Internet and by the lack of comparative method for quality evaluating websites. The Internet has changed the ways for accessing information on libraries and its users. The use of citing websites for the scale of citation needs proper evaluation of citation studies. All most all the conference papers and articles in peer-reviewed journals now contain citations from web resources. We can see changes in the publication and distribution of journals. Publishers are slowly shifting from print to electronic formats. This paper measures the web citations of conference proceedings papers of CALIBER 2005 and 2006 (Convention on Automation of Libraries in Education and Research Institutions).

# 2. Objectives of the study

The objectives of the present study are:

- 1. To identify the different types of bibliographic forms
- 2. To examine the average number of citations per contribution
- 3. To examine the authorship pattern of contributions
- 4. To examine the domain wise use of websites
- 5. To examine the geographical distribution of contributions
- 6. To prepare ranking list of cited journals]

### 3. Scope of the Study

The present study analyses 1885 citations from 174 conference papers published in the 3<sup>rd</sup> and 4<sup>th</sup> International Convention on Automation of Libraries in Education and Research Institutions (CALIBER),

which was held at Cochin University of Science and Technology, Kochi, February 2-4, 2005 and Gulbarga University, Gulbarga, February 2-4, 2006 have been analysed.

## 4. Methodology

There are 1885 citations in these conference proceedings. All these citations were noted down such as books, journals, conference proceedings, websites, reports, theses/dissertations etc. on slips which are cited in the conference papers. They are analysed according to the objectives as stated above. All the data has been collected, analysed and interpreted, and conclusions were drawn according to the tables.

## 5. Results and Analysis

## 5.1 Bibliographic Forms

The distribution of citations in different bibliographic forms is shown in Table 1.

**Table 1: Distribution of Citations in Different Bibliographic Forms** 

Bibliographic forms	No. of citations	Percentage
Books	352	18.67
Journals	511	27.11
Seminars/Conference Proceedings etc	202	10.72
Websites	689	36.55
Reports	64	3.40
Thesis/dissertations	18	0.95
Unidentified	49	2.60
Total	1885	100.00

It is evident from Table 1 that websites contributed to the highest number of citations accounting for 36.55 percent. Websites appear to be the most preferred source of information for authors in Library and Information Science. Journals are the second highest group accounting for 27.11 percent of total citations. Hence, journals are also most preferred source of getting information for Library and Information Science professionals. Books are the third highest group accounting for 18.67 percent of total citations. Books are also the most preferred source of information. Conference and seminar proceedings contribute to citations accounting for 10.72 percent of total citations. Reports contribute to citations accounting for 3.4 percent of total citations. Thesis/dissertations contribute to citations accounting for 0.95 percent of total citations. The remaining 2.6 percent of the total citations are unidentified.

It can be concluded from the above table that authors of papers in Library and Information Science use websites, journals, books, and conference and seminar proceedings mostly for their research.

# **5.2** Average number of Citations

The average number of citations per contribution is shown in Table 2.

**Table 2: Average number of Citations Per Contribution** 

No. of contributions	Total No. of citations	Average
174	1885	10.83

Table 2 indicates that the average number of citations per contribution is 10.83.

# **5.3** Authorship pattern of contributions

The distribution of contributions according to authorship pattern in conference proceedings is shown in Table 3.

**Table 3: Distribution of Contributions According to Number of Authors** 

No. of authors	No. of contributions	Percentage
One	51	29.31
Two	69	39.66
Three	39	22.41
More than three	15	8.62
Total	174	100.00

Analysis of authorship of the contributions reveals that contributions of two authors are more than those with one or three or more than three authors. Table 3 shows that out of the 174 contributions, 69 (39.66%) was contributed by two authors, 51 (29.31%) by one author, 39 (22.41%) by three authors, and 15 (8.62%) by more than three authors.

#### 5.4 Different Website Domains

The distribution of citations of websites in the 3<sup>rd</sup> and 4<sup>th</sup> International CALIBER proceedings papers according to the number of websites are the highest number of web citations in these groups of papers are a surprising result as presented in Table 4.

**Table 4: Distribution of Citations According to Website Domain** 

Website Domain	No. of citations	Percentage
.org	196	28.45
.edu	167	24.24
.com	139	20.17
.ac	121	17.56
No URL	66	9.58
Total	689	100.00

It is clear from Table 4 that out of 174 conference papers, the highest numbers of web citations are 689. It can be seen from the table that most of the citations of websites are from organizational websites. It contributed the highest number of citations for 196 (28.45%). Educational websites are contributed to the second highest number of citations accounting for 167 (24.24%). It is also the most preferred source of getting information for the Library and Information Science professionals. Commercial websites are the third highest group accounting for 139 (20.17%) of total website citations. .ac domain websites contribute to citations accounting for 121 (17.56%) of total website citations. In many web citations URL is not mentioned. Its percentage of citations accounting for 66 (9.58%) of total website citations.

One of the most compelling results of this study is confined to the use of web sources and has a major impact on conference and seminar proceeding papers. It is clear from Table 4 that 689 web citations are cited by various authors in their papers.

#### **5.5** Different Conference and Seminar Papers

The distribution of cited papers according to the different conference/seminar papers is shown in Table 5.

Table 5: Distribution of Cited Papers According to the Conference/Seminar Papers

Conference/Seminar	No. of citations	Percentage
CALIBER	53	26.24
NACLIN	46	22.77
ILA	39	19.31
IASLIC	23	11.39
FID	11	5.44
DRTC	9	4.45
OTHERS	21	10.40
Total	202	100.00

It is evident from Table 5 that the majority of conference/seminar papers citations 53(26.24%) are from CALIBER proceedings. CALIBER proceedings papers are the most preferred source of information for the researchers and authors in Library and Information Science. NACLIN conference proceedings papers are the second highest group accounting for 46 (22.77%) of total citations. ILA proceedings are the third highest group accounting for 39 (19.31%) of the total citations. IASLIC seminar papers contribute to citations accounting for 23 (11.39%) of the total citations. FID seminar papers contributed to citations accounting for 11 (5.44%) of the total citations. DRTC seminar papers contributed to citations accounting for 9 (4.45%) of the total citations.

It can be concluded from the above table that researchers and authors in Library and Information Science used CALIBER, NACLIN, ILA, IASLIC proceedings mostly for their research articles.

## 5.6 Geographical Distribution of Contributions

The distribution of contributions in CALIBER conference proceedings according to the state wise is shown in Table 6.

**Table 6: Distribution of Contributions According to the Satewise** 

S.No	Name of the Sate	No. of contributions	Percentage
1	Karnataka	41	23.56
2	Tamil Nadu	23	13.22
3	Andhra Pradesh	20	11.49
4	Gujarat	19	10.91
5	Maharashtra	13	7.47
6	Kerala	9	5.17
7	West Bengal	9	5.17
8	Assam	4	2.30
9	Madhya Pradesh	4	2.30
10	Orrisa	3	1.72
11	Uttar Pradesh	3	1.72
12	Hariyana	2	1.72
13	Manipur	2	1.15
14	New Delhi	2	1.15
15	Punjab	2	1.15
16	Bangladesh	1	0.58
17	Chhattisgarah	1	0.58
18	Jammu	1	0.58
19	Jharkhand	1	0.58
20	Nepal	1	0.58
21	Rajasthan	1	0.58
22	Not Identified	11	6.32
	TOTAL	174	100.00

It is evident from Table 6 that out of 174 contributions, the highest number of contributions 41 (23.56%) have been contributed by Karnataka, 23 (13.22%) by Tamil Nadu, 20 (11.49%) by Andhra Pradesh, 19 (10.91%) by Gujarat, 13 (7.47%) by Maharashtra, 9 (5.17%) each by Kerala and West Bengal etc.

## **5.7** Rank List of Cited Journals

It can be seen from Table 7 that the cited journal articles are scattered in 199 different journals.

**Table 7: Rank List of Cited Journals** 

S.No	Name of the Journal	No. of Citations	%	Cumulative	%	Rank
1	Journal of Academic Librarianship	21	4.11	21	4.11	1
2	Journal of American Society of Information Science	19	3.72	40	7.83	2
3	Library Trends	17	3.33	57	11.16	3
4	University News	15	2.93	72	14.09	4
5	Journal of Documentation	14	2.74	86	16.83	5
6	Information Technology	13	2.55	99	19.38	6
7	ASLIB Information Proceedings	11	2.16	110	21.54	7
8	D-Library Magazine	9	1.76	119	23.30	8
9	DESIDOC Bulletin	9	1.76	128	25.06	8
10	College and Research Libraries	8	1.57	136	26.63	9
11	The Electronic Library	8	1.57	144	28.20	9
12	Journal of Information Science	8	1.57	152	29.77	9
13	Information Processing and Management	7	1.37	159	31.14	10
14	Bulletin of Medical Library Association	7	1.37	166	32.51	10
15	SERLS Journal of Information Management	7	1.37	173	33.88	10
16	Reference Librarian	7	1.37	180	35.25	10
17	Annual Review of Information Science and Technology	7	1.37	187	36.62	10

18	Computers in Libraries	6	1.17	193	37.79	11
19	Information Today and Tomorrow	6	1.17	199	38.96	11
20	Journal of Librarianship	6	1.17	205	40.13	11
21	Online and CD-ROM Review	6	1.17	211	41.30	11
22	Lucknow Librarian	6	1.17	217	42.47	11
23	ACM Communications	5	0.98	222	43.46	12
24	IEEE Communication magazine	5	0.98	227	44.44	12
25	Nature	5	0.98	232	45.42	12
26	FID Review	5	0.98	237	46.40	12
27	Herald of library science	5	0.98	242	47.38	12
28	IASLIC Bulletin	5	0.98	247	48.36	12
29	Journal of library and information science	5	0.98	252	49.34	12
30	Library information update	4	0.78	256	50.12	13
31	Library magazine	4	0.78	260	50.90	13
32	Searcher	4	0.78	264	51.68	13
33	Computer Networks and ISDN Systems	4	0.78	268	52.46	13
34	Library journal	4	0.78	272	53.24	13
35	Library Herald	4	0.78	276	54.02	13
36	Information Technology and Libraries	4	0.78	280	54.80	13
24	ILA Bulletin	4	0.78	284	55.58	13
25	IFLA journal	4	0.78	288	56.36	13
26	Computers today	4	0.78	292	57.14	13
37	11 journals cited in 3 times	33	6.46	325	63.60	14
61	24 journals cited in 2 times	48	9.39	373	72.99	15
199	138 journals cited in 1 time	138	27.01	511	100.00	16

It is also evident from Table 7 that the ranked list that 'Journal of Academic Librarianship' 21 (4.11%) gets the first rank for being cited more number of times by the contributors in Library and Information Science followed by Journal of American Society of Information Science 19 (3.72%), Library Trends 17 (3.33%), University News 15 (2.93%), Journal of Documentation 14 (2.74%), Information Technology 13 (2.55%), ASLIB Information Proceedings 11 (2.16%).

#### 6. Conclusions

From the analysis of 1885 citations appended in the 3<sup>rd</sup> and 4<sup>th</sup> International convention on Automation of Libraries in Education and Research Institutions (CALIBER) proceedings reveals the following conclusions.

- This study confirms the importance of web citations. One of the most compelling results of this study is that web citations are relatively more popular in conference proceedings. Websites appear to be the most preferred source of information for research scholars in Library and Information Sciences. Since they contributed the highest number of citations (36.55% of total citations).
- 2. Journals also appear to be the most preferred source of information for research scholars in Library and Information Sciences, since they also contributed the second highest number of citations (27.11% of total citations).
- 3. The average number of citations per contribution is 10.83.
- 4. Most of the contributors (39.66%) are writing conference papers with the collaboration of other authors.
- 5. Most of the web citations (28.45%) are contributed mainly in organizational websites compared to other websites. While analyzing the data it is observed that many of the authors have not mentioned URL addresses (9.98%) in the citations and there is no standard for web citations. Hence, there is need to design a standard format.
- 6. Out of 1885 citations, 202 citations are conference and seminar proceedings. Out of these conference proceedings that the majority of conference/seminar paper citations 53 (26.24%) are from CALIBER proceedings.
- 7. Most of the contributions in this International Convention on Automation of Libraries in Education and Research Institutions (CALIBER) are from Karnataka 41 (23.56%), followed by Tamil Nadu 23 (13.22%), Andhra Pradesh 20 (11.49%), Gujarat 19 (10.91%), Maharashtra 13 (7.47%).
- 8. The journal citations are from 199 journals but most of the citations are from 29 titles. 'Journal of Academic Librarianship' occupied the first rank, 'Journal of American Society of Information Science' occupied the second rank, 'Library Trends' occupied the third rank, 'University News' occupied the fourth rank, and 'Journal of Documentation' occupied the fifth rank.

#### References

- **1.** GOODEN, Angela M. (2001). Citation analysis of Chemistry Doctoral Dissertations: An Ohio State University Case Study. Science and Technology Librarianship, 32, 47-52.
- **2.** DORASWAMY, M and PULLA REEDY, V. (2001). Citation analysis of Ph.D theses in Geography. University News. 43, 4-10.
- **3.** PATEL, D R. (2005). IEEE Transaction on Image Processing: a Bibliometric analysis. ILA Bulletin. 41, 26-36.
- **4.** RAJENDRAN, P, RAMESH BABU, B and GOPALAKRISHNAN, S. (2005). Bibliometric analysis of Fiber Optics Literature. Annals of Library and Information Studies. 52, 82-85.
- **5.** VERMA, Neerja. (2004). Analysis of contributions of IASLIC Bulletin. IASLIC Bulletin. 49, 93-103

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