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Research Paper | Library Science

Prabandhan : Indian Journal of Management : A Citation Analysis

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ABSTRACT

The present paper is based on citations of articles that appeared in Prabandhan : Indian Journal of Management. The study covers 12 issues published between January to December 2012. Total 69 articles are published in the journal having 1389 citations collectively. The citations are analysed to find out authorship pattern, distribution of different document types and many more aspects. It is found that journals are used most frequently by the researchers. Results also reveal that maximum number of articles is contributed by single authors. So degree of collaboration between authors is just 0.39. The findings also highlight that 34.31% contributors belong to universities. Average length of the articles is 8.16 pages. Total 335 tables are appended in the articles with the average of 4.9 tables per article

KEYWORDS : Prabandhan: Indian Journal of Management, Citation analysis, Bibliometrics, Degree of Collaboration

Introduction

Bibliometric analysis is the quantitative description of literature which helps in the measurement of the patterns of all forms of recorded information and their producers. So it has got practical applications in measuring the quality of journals. Bibliometric study can be applied to any discipline to measure the growth of related literature. Citation analysis and content analysis are commonly used bibliometric methods.1 It examines different frequencies, the patterns of citations given in articles, conference papers, books and thesis. For the present study , Prabandhan : Indian Journal of Management is taken.This is a referred monthly journal. Its main objective is to disseminate knowledge. The journal enjoys pan India reach and a decernible International subscriber and readership base.2

Literature Review

Vij and Bedi (1999) in their study " Defence Science Journal : A Ten-Year Bibliometric Study" cover the issues brought out during 1989-98. The paper examines yearwise, countrywise, institution wise contribution, authorship pattern and range of citations.

Sahoo and Mohanti (2002) carried out study named " Communication pattern in the Journal "Studies in Conversation" : A Bibliometric Analysis". They analyse the journal for the period 1995-2000. The paper examines yearwise distribution of articles, authorship pattern, average references per article, time lag and geographical distribution of articles.

Shokeen and Kaushik (2004) in the study " Indian Journal of Plant Physiology: A Citation Analysis " observed authorship pattern and citation pattern of articles, covering issue no 1 to 4 of volume 7. There were 61 articles having 1149 citations.

Raut,Sahu and Ganguly (2008) conducted bibliometric study named "Strategic Management Journal : a citation study". They analysed the journal for two years 2005 and 2006.

Jan (2009) in the study "Citation analysis of Library Trends" examines the papers published during 1994 -2007. It checks 593 articles and 15662 references.

Objectives of the Study:

The objective of the present study are :

- To identify average number of references per article.
- Forms of material used by the authors.
- Nature of authorship pattern and degree of collaboration.
- Organization wise contribution of articles.
- Average length of articles.
- Number of tables and figures appended to articles.

Methodology:

To fulfil the objective of present study, the required data i.e. details of reference appended to the articles published in the Prabhandhan ; Jounal of Management, volume 5, Number 1 to 12, year 2012 were collected. The data was stored in tabular form and analysed.

Data Analysis

Average Number of References Per Article

Table 1 represents the average number of references per article month-wise. The average of references is fluctuating. Results show a positive trend in use of references by authors/ Researchers for writing their papers. No. of articles covered in a issue is also decreasing in later months.

Table 1 – Average Number of References Per Article

Month	No. of Articles	No. of References	Average Citations Per Article
January	7	190	27.14
February	7	179	25.57
March	7	140	20
April	6	102	17
May	6	180	30
June	6	77	12.83
July	5	89	17.8
August	6	59	9.83
September	5	86	17.2
October	5	55	11
November	5	74	14.8
December	4	158	39.5
Total	69	1389	20.13

Usage of Different forms of Literature:

The citations include various forms of documents like journals, books, conference proceedings, webpages and others which may include report, working paper, project, study, assessment and newspaper. Among all cited references 42.26% are journals followed by 22.75% of books and Web citations acquire 18.79% . Other category also has 13.030% of contribution.

Table 2 – Usage of Different Form of Literature

Sr. No.	Form of Document	No. of Citations	Cumulative Citations	Percentage	Cumulative Percentage
1	Journal	587	587	42.261	42.261
2	Book	316	903	22.750	65.011
3	Web Reference	261	1164	18.790	83.801
4	Conf. Proceeding	26	1190	1.872	85.673
5	Thesis	18	1208	1.296	86.969
6	Others	181	1389	13.031	100

Authorship Pattern

The authorship pattern has been studied with 69 articles. Table 3 and 4 depict the details about the different patterns of authorship collaboration. It identifies the distribution of articles according to the number of contributors. It is seen that 42 articles (60.869 %) have been contributed by single authors which is followed by 20 articles, contributed by two authors and remaining 7 are written by three authors. So it is clear that solo research is preferred as compared to collaborative research.

Table 3 – Monthly Authorship Pattern of Citing Articles

Sr. No.	Months	Single Author	Two Authors	Three Authors	Total Articles
1	January	5	2	-	7
2	February	4	3	-	7
3	March	3	3	1	7
4	April	4	2	-	6
5	May	4	2	-	6
6	June	6	-	-	6
7	July	3	1	1	5
8	August	5	1	-	6
9	September	3	-	2	5
10	October	1	2	2	5
11	November	1	3	1	5
12	December	3	1	-	4

Table 4 – Overall Authorship Pattern

Authorship Pattern	No. of Articles	Cumulative No.	%	Cumulative %
One	42	42	60.870	6.870
Two	20	62	28.985	89.855
Three	7	69	10.145	100
Total	69	69	100	100

Degree of Collaboration

To calculate degree of collaboration the formula given by K.Subramanian is applied and corresponding result is calculated.

$$DC = \frac{Nm}{Nm+Ns}$$

DC = degree of collaboration

Nm = number of multi authored papers

Ns = number of single authored papers

Table 5 calculates values on the basis of above mentioned formula and result is 0.39, which is quite low indeed.

Table 5 – Degree of Collaboration

Single Authored Papers	%	Multi Authored Papers	%	Degree of Collaboration	Total Papers
42	60.870	27	39.130	0.39	69

Organizationwise Contribution of Articles

It is also necessary to identify the organizational contribution of articles. So in the present study the institutions with which the contributors are associated are also analysed thoroughly. Table 6 shows organizationwise contributions. 27 papers are contributed by more than one authors and it is observed that contributors of single paper belong to different type of organizations. Each and every contributor is analysed individually to check his/her organization. Table shows that out of 102 contributors 35 belong to university followed by 30 to colleges and 8 to different management and technical institutes.

Table 6 – Organizationwise Contribution of Articles

Sr. No.	Type of Institution	Total Contributors	%
1	University	35	34.314
2	College	30	29.412
3	Mgt./Tech. Institute	28	27.451
4	Other	9	8.823
5	Total	102	100

Average Length of Articles

To measure the average length of articles, total number of pages covered by all articles of corresponding issue is shown in Table 7. All 69 articles cover 563 pages. So an average length of an article is 8.16 pages. Maximum lengthy articles are published in the month of December as the average of the month is higher one and another important aspect is that in December issue only 4 articles are published.

Table 7 – Average Length of Articles

Months	No. of Articles	No. of Pages	Average Pages Per Article
January	7	51	7.29
February	7	51	7.29
March	7	47	6.71
April	6	49	8.17
May	6	52	8.67
June	6	45	7.5
July	5	48	9.6
August	6	39	6.5
September	5	45	9.0
October	5	51	10.2
November	5	46	9.2
December	4	39	9.75
Total	69	563	

Table 8 – Distribution of Figures and Tables

Month	No. of Articles	No. of Figures	Avg. No. Of Figures	No. of Tables	Avg. No. of Tables
January	7	11	1.6	22	3.1
February	7	7	1	12	1.7
March	7	1	0.1	21	3
April	6	7	1.2	27	4.5
May	6	5	0.8	17	2.8
June	6	2	0.3	31	5.2
July	5	7	1.4	35	7
August	6	9	1.5	24	4
September	5	2	0.4	43	8.6
October	5	10	2	32	6.4
November	5	2	0.4	45	9
December	4	7	1.7	26	6.5
Total	69	70	1.01	335	4.85

Use of Figures and Tables in Articles

Researchers always prefer to use figures and tables in their research papers. Tables and figures enhance the readability of the content and make it easier to understand. Table 8 shows no. Of figures and tables appended to articles during the period of study. Total number of figures and tables are 70 and 335 respectively with the average of 1.01 figures per article and 4.85 tables per article. Maximum 45 tables appeared in the month of November followed by 43 in September whereas maximum 11 figures appeared in January followed by 10 in October.

Conclusion

The following conclusions can be drawn from the present study.

- It is seen that the number of published articles in the upcoming issues is decreasing.
- As average number of citation is 20.13 per article, so it is clear that the rate of literature review is high which is a good sign for research.
- It is observed that contributors preferably used journals in citations as 587 citations belong to it.
- Maximum number of articles are with single author i.e. 42 out of 69.
- Degree of collaboration is quite low so we can suggest that collaboration between authors must be increased to improve productivity resulting more research in the future.
- Organizationwise distribution of contributors shows that maximum number of contributors belong to Universities.
- Figures and tables are included in almost every article.
- The papers have an average length of 8.16 pages.

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