CITATION ANALYSIS OF THE "JOURNAL OF DIGITAL INFORMATION MANAGEMENT"

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ABSTRACT

This paper presents a Citation Analysis of the Journal of Digital Information Management for the period between 2010 to 2014. The analysis covers mainly the Volume-wise Distribution of Citations, Distribution of Citations According to Bibliographic Forms, Authorship Pattern of Citations, Chronological Distribution of Citations, Author self citation. All the studies point towards the merits and weaknesses of the Journal which will be helpful for its further development. The study reveals that the average citations per article are 17.64. The study also found that journals/serial publications remain the most useful source of information 1896 (41.28%) out of a total 4593 citations.

Keywords: Citation analysis, Bibliography, Authorship pattern.

1. INTRODUCTION

The essence of Journal publishing is to report research findings and to contribute to the field of knowledge. Journals are the most current channel of dissemination of new ideas, knowledge and breakthroughs in scientific development. Academic journals play a significant role in academic scholarship (Xiao and Smith, 2006) (Chandy and William, 1994). Citations appearing in journals of particular disciplines provide an objective measure of the contributions of other knowledge systems to the development and progress of that particular discipline (Chandy and Williams, 1994). According to Gao, Yu, and Luo (2009) librarians have used several different quantitative methods to identify patrons' needs, including circulation and shelving data, the analysis of inter library loan requests, as well as citation analysis. Edward (1999) asserts that citation analysis can be used to determine a core collection of journals critical to local users and representative of the research needs of the collection. Gooden (2001) opines that citation analysis has been used by Librarians in various disciplines to eliminate costly, low used/unused journals, purchase needed materials and ascertain core journals needed for patron use, and to reveal the most active research in a particular field. Ching and Chennupati (2002) opine that citation analysis is a form of checklist approach, and basically compares a library's holdings to an authoritative list for the purpose of assessing the quality of all or part of the collection.

The current study is a citation analysis of the Journal of Digital Information Management for the period between 2010-2014.The journal of Digital Information Management (JDIM), a Bi monthly Journal of Digital Information Science and Technology, has been published since March 2003.Sponsored by the Digital Information Research Foundation, it concentrates on all aspects of digital information management, and covers digital information processing, digital content management, digital world structuring, digital libraries, metadata, information management and other related fields. An International peer-reviewed journal, it acts as a portal to the digital information world.

2. RESULS

Five volumes (Volumes 8 to 12) each containing 6 issues of Journal of Digital Information Management have been taken up for the study. The details with regard to each published article such as Volume-wise Distribution of Citations, Distribution of Citations According to Bibliographic Forms, Authorship Pattern of Citations, Chronological Distribution of Citations, Author Self citation were recorded and analyzed for making observations.

The Journal published 266 articles during the period of study i.e. from Vol.8.-12 (Year 2010-2014). The Journal publishes on an average of 17.64 citations per article. The above Table shows that the maximum number of citations per article was in the volume number 8 with 1055(21.10%) out of 4593 total citations.

Table 1. Volume-wise distribution of citations

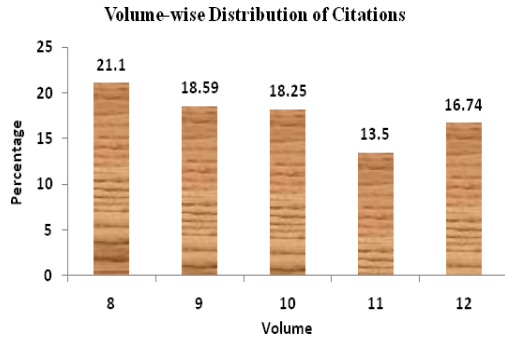| Volume Number	Number of Articles	Number of Citations	Average Citations per Article
8	50	1055	21.10
9	41	762	18.59
10	53	967	18.25
11	72	972	13.50
12	50	837	16.74
Total	266	4593	17.64

Volume-wise Distribution of Citations

Table 2. Distribution of citations according to bibliographic forms

Bibliographic Form	Number of Citations	Percentage	Ranking
Journals/Serial Publications	1896	41.28	I
Conference/Proceedings	1583	34.46	II
Web sites	404	8.80	III
Books	365	7.95	IV
Reports	196	4.27	V
Others	149	3.24	VI
Total	4593	100	

Table 2 shows the analysis of citations according to bibliographic forms of the 4593 citations, as many as 1896(41.28%) are from Journal/Serial publications, followed by Conference/Proceedings 1583(34.46%), Websites 404(8.80%), Books 365 (7.95%), Reports 196 (4.27%) and Others 149(3.24%).

Table 3 shows the authorship pattern of citations as appended to the References Section of 266 research articles of Journal of Digital Information Management, the source journal. The Table indicates that out of the total of 4593 citations, 1727 (37.60%) are three-authored, followed by four-authored contributions totaling 1339 (29.15%), and two –authored contributions totaling 671 (14.61%), five or six authors contributed the

remaining articles. However, there are 73 (1.59%) citations with incomplete details on the authorship.
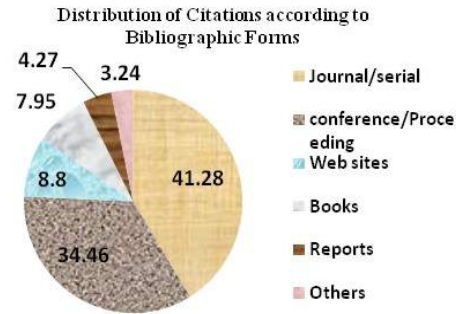

Distribution of Citations according to Bibliographic Forms

Table 3. Authorship Pattern of Citations

Number of Authors	Number of Citations	Percentage	Ranking
One	294	6.40	V
Two	671	14.61	III
Three	1727	37.60	I
Four	1339	29.15	II
Five	351	7.64	IV
Six	138	3.01	VI
Incomplete	73	1.59	VII
Total	4593	100	

Authorship Pattern of Citations
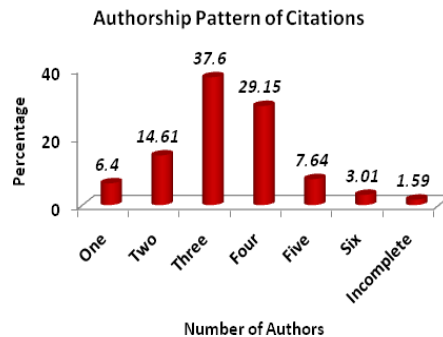
Table 4. Chronological Distribution of Citations

Span of Period	Number of Citations	Percentage	Rank
1930-1939	3	0.07	IX
1940-1949	4	0.09	VIII
1950-1959	4	0.09	VIII
1960-1969	13	0.28	VII
1970-1979	44	0.96	VI
1980-1989	146	3.18	IV
1990-1999	518	11.28	III
2000-2009	2744	59.74	I
2010-2014	1035	22.53	II
Unknown period	82	1.78	V
Total	4593	100	

Table 4 gives the chronological distribution of citations. The result indicates that the period 2000-2009 received the most citations, 2744 (59.74%) of the total citations in terms of chronological distribution of citations. It is noticed, however, that of the 4593 citations counted, 82 (1.78 %) citations had incomplete data pertaining to the year of publication.
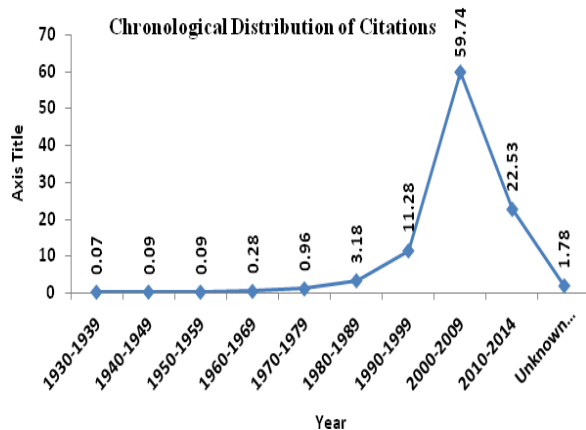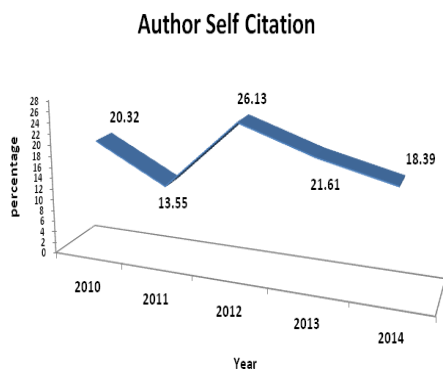

Table 5. Author Self citation

Year	Number of Author Self citation	Percentage
2010	63	20.32
2011	42	13.55
2012	81	26.13
2013	67	21.61
2014	57	18.39
Total	310	100

Self-citation occurs when an author cites any of his articles written singly or jointly with others. In this study we found 310 author self citations that amount to 6.75% of total citations. The above Table shows the year wise author self citations during the year 2012, maximum number of author self citations 81(26.13%).

CONCLUSION

Citation Analysis reveals that between 2010-2014 every issue of Journal of Digital Information Management published an average citation per article 17.64. The study reveals that journals/serial publications remain the most useful source of information 1896 (41.28%) out of a total 4593 citations. The authorship pattern of citations reveals very clearly that scientists are moving towards collaborative research, as the majority of citations 1727 (37.60%) are three-authored. The chronological distribution of citations indicates that scientists are quite up-to-date as references cited are fairly recent with 2744 (59.74%) published between 2000-2009. During this study we found 310 author self citations that amount to 6.75% of total citations.

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