Bibliometric Analysis of Journal of Knowledge Management Practice, 2008-2012

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ABSTRACT: The present study Bibliometric analysis of Journal of Knowledge Management Practice covers the 180 articles of 21 volumes in 5 years from 2008-2012. The investigators attempted to reveal the year wise distribution of articles, authorship pattern of articles, citation pattern, country wise distribution of articles, average number of citation per articles and length of papers etc. Results showed that, in the year 2011, highest 42(23.3%) articles were published out of 180 articles in 5 years. Single author contribution has predominant with 42.7%. Average numbers of citations per article are 19. In geographical distribution of articles, USA has contributed highest 34 articles with 18.8% and highest 69.4% articles are published with page range of 11-20.

KEY WORDS- Bibliometric analysis, authorship pattern, citation pattern.

1. INTRODUCTION

Bibliometric studies are used to identify the pattern of publications, authorship, citations and journal coverage with the hope to give an insight in to the dynamics of the field under consideration (Warraich,2011). This study utilizes quantitative analysis and statistics to describe year wise distribution of articles, patterns of authors, average length of article, average number of citations per article and so on. So, since the last 50 years, globally it is being recognized as the thrust area of research in the field of Library and Information Science. In the year 1969, Allan Pritchard first described the term bibliometrics as the application of mathematics and statistical methods to books and other media.

The source journal, ‘Journal of Knowledge Management Practice’ (formerly Journal of Systematic Knowledge Management) is a quarterly peer-reviewed journal, being published
by TLA Inc., Canada since 1998 (http://www.tlainc.com/boutjkm.htm). It started by TLA with ‘Open Library’ concept and still maintaining it. This journal is devoted to collecting serious research about knowledge management and its practical applications. The core areas of publication of this journal are knowledge management, intellectual capital, intangible access, human resource assets and other related topics.

2. LITERATURE REVIEW

The investigators have reviewed so many research papers and articles to have a clear understanding of bibliometric study and to find out some possible ways to carry out the present study smoothly in a qualitative way. Hazarika(2003) in his study “Bibliometric Analysis of Indian Forester: 1991-2000” revealed that, in a single year contribution highest 156 articles have been contributed in 1996 at a rate of 11.13%. Institutions under the Indian Council of Forestry Research and Education (ICFRE) have contributed highest 487(34.74%) articles among the participating organizations. Jena (2006) revealed in his study “A bibliometric analysis of the journal Indian Journal of Fibre and Textile Research, 1996-2004” that regarding the bibliographical distribution of citations, journal form is predominant at 73.92%. The articles have an average length of 6.45 pages which is not a good sign for research papers. Verma (2007) revealed in his study “Analysis of contributions in Annals of Library and Information Studies” that most of the contributions of this journal are contributed by single author. Besides it, the source journal i.e. Annals of Library and Information Studies is the most cited journal in the contribution of this journal. Again Biswas (2007) stated in his study "Economic Botany: A bibliometric study" that the highest number of articles totalling 217(60.61%) has emanated from academic institutions. Bakri (2008) stated in his study a reasonable increment of articles, references per articles and lengths of articles as comparison to earlier study taken by Tiew and et. al., whereas Park (2010) revealed a new thing in her study "D-Lib magazine: Its first 13 years" that the source journal is dominated by male authors with 74% of all contributions, and 77% of authors made a single contribution to D-Lib magazine during this study.

Similarly, Khaparde (2011) stated in his study “Bibliometric Study of Electronic Journal of Academic and Special Librarianship.” that single author contributions have dominated the journal with 47.95% of contributions, and in geographical based distribution of articles India have occupied the top position with 28.41% publications. Thanuskodi (2011) in his study “Library Herald Journal: A bibliometric study” opined the same thing that 52.17%
authors want for single author contribution. Foreign author contribution to this journal is comparatively less with 10.15%. Warraich (2011) revealed an interesting thing in his study "Pakistani Journal of Library and Information Science: A bibliometric analysis" that about 53.15% of articles are research oriented, whereas 39.64% of articles were having no references. Das (2013) revealed in his study "Journal of Informetrics: A bibliometric profile" that most of the contributions in the journals are joint author collaboration. USA has produced highest portion of authors and the impact factor of the journal is highest in the year 2011 with 4.229%. Panda (2013) stated in the study "The Journal of Information Literacy: A bibliometric study" that almost all the papers (94.65%) are from academic institutions. The citations in the journal demonstrate that individual research is higher than collaborative research. Both faculty members and professionals are equally contributed to the journal. Roy (2013) revealed in his study "Journal of Documentation: A bibliometric study" that the degree of collaboration is 0.51 i.e. majority of the library and information scientists prefer to contribute their papers jointly. About 6.21% citations are self cited by the respective authors.

3. OBJECTIVES OF THE STUDY

The present study has been carried out to study the following objectives;

   a) to study the year wise distribution of articles,
   b) to study the authorship pattern of the articles,
   c) to study the country wise distribution of articles,
   d) to study the citation patterns of articles, and
   e) to find out the length of articles contributed in the journal.

4. METHODOLOGY

Over the years of 2008-2012, a total number of 21 issues including 180 articles of Journal of Knowledge Management and Practice have been downloaded from the source site http://www.tlainc.com/boutjkmp.htm. The required data of all the articles pertaining to the bibliographic analysis, such as title of the articles, number of authors, address of authors, number of citations used per articles, number of pages etc., were recorded for observation and analysis. The collected data were organised and presented using MS-Excel spread sheet.

5. DATA ANALYSIS AND DISCUSSIONS

5.1 Year wise distribution of articles:
Table 01: Year wise distribution of articles

<table>
<thead>
<tr>
<th>Publications in Years</th>
<th>No. of Issue</th>
<th>January</th>
<th>March</th>
<th>June</th>
<th>September</th>
<th>December</th>
<th>Total Articles</th>
<th>% of Publication</th>
<th>Cumulative Publication</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>4</td>
<td>0</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>6</td>
<td>24</td>
<td>13.3</td>
<td>24</td>
</tr>
<tr>
<td>2009</td>
<td>4</td>
<td>0</td>
<td>13</td>
<td>9</td>
<td>6</td>
<td>9</td>
<td>37</td>
<td>20.5</td>
<td>61</td>
</tr>
<tr>
<td>2010</td>
<td>5</td>
<td>6</td>
<td>14</td>
<td>7</td>
<td>7</td>
<td>8</td>
<td>42</td>
<td>23.3</td>
<td>103</td>
</tr>
<tr>
<td>2011</td>
<td>4</td>
<td>0</td>
<td>10</td>
<td>11</td>
<td>7</td>
<td>11</td>
<td>42</td>
<td>23.3</td>
<td>145</td>
</tr>
<tr>
<td>2012</td>
<td>4</td>
<td>0</td>
<td>9</td>
<td>11</td>
<td>7</td>
<td>8</td>
<td>35</td>
<td>19.6</td>
<td>180</td>
</tr>
<tr>
<td>TOTAL</td>
<td>5</td>
<td>21</td>
<td>51</td>
<td>43</td>
<td>38</td>
<td>42</td>
<td>180</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

Table-1 depicts the year wise publication statistics of *Journal of Knowledge Management Practice*. Within this specified period of 2008-2012, a total number of 21 issues including 180 articles have been published. It is found that a special issue has come in the month of January of 2010 comprising 6 articles in its credit. The highest number of 42 articles published in the year 2011 at a rate of 23.3%. The lowest numbers of articles are published in the year 2008 having 24 articles at a rate of 13.5%. On the other hand, in the row of issues, March has ranked top having 51 articles in its credit. The average number of publication per year is 36 articles and per issue is 9(rounded off to nearest figure) articles.

![Figure:1 Year wise distribution of articles](image)

**5.2 Authorship pattern of the articles:**

Investigators have used 7 kind of authorship pattern by their collaboration of contribution to study the authorship pattern of the articles in the journal. The number of articles contributed by each category of authors have been distributed in the table-2 to make a clear understanding of authorship pattern.
It is revealed in the study that maximum no of 85 articles have been published by single contribution of authors and it is followed by 52 articles by two authors contribution. By three and four authors contribution, 29 and 11 articles have been published respectively. Lowest no of 3 articles have been published by five authors contribution.

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Name of the Country</th>
<th>No of Contributions in the year 2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>Total no of Contributions</th>
<th>% of Publication</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Australia</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>5</td>
<td>1</td>
<td>10</td>
<td>5.5</td>
</tr>
<tr>
<td>2</td>
<td>Bangladesh</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0.5</td>
</tr>
<tr>
<td>3</td>
<td>Botswana</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>1.7</td>
</tr>
</tbody>
</table>
It is revealed from the table-3 that, during this period of study about 38 country have contributed their papers in Journal of Knowledge Management Practice. The geographical distribution of the articles has been decided on the basis of the affiliation and the address of the first author. From the analysis it is observed that, United States of America (USA) has
contributed highest 34 articles. Malaysia comes to the second position contributing 29 articles and India in the third position contributing 24 articles.

5.4 Citation patterns of the articles:

Table: 4 Citation pattern of the articles

<table>
<thead>
<tr>
<th>Year</th>
<th>No of Articles</th>
<th>No of Citations</th>
<th>*Average no of Citations</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>24</td>
<td>536</td>
<td>23</td>
</tr>
<tr>
<td>2009</td>
<td>37</td>
<td>502</td>
<td>14</td>
</tr>
<tr>
<td>2010</td>
<td>42</td>
<td>933</td>
<td>22</td>
</tr>
<tr>
<td>2011</td>
<td>42</td>
<td>628</td>
<td>22</td>
</tr>
<tr>
<td>2012</td>
<td>35</td>
<td>769</td>
<td>22</td>
</tr>
<tr>
<td>TOTAL</td>
<td>180</td>
<td>3368</td>
<td>19</td>
</tr>
</tbody>
</table>

*Rounded off to the nearest figure

Over the 21 issues of 180 articles in 5 years, a total of 3368 citations have been appended. The average no of citations per article is varying from year to year. In the year 2008 it is 23, whereas 14 in the year 2009, 22 in the year 2010, 15 in the year 2011 and 22 in the year 2012. The average no of citations determined for the whole articles in the whole year is 19. The average number of citations year wise is found to be correlated with the respective articles to the extent of 0.486, and is not statistically significant to establish the relationship. However, the pattern can be represented through the regression equation;

\[ y = 233.18x + 12.23, \]

where, \( y \) and \( x \) are the numbers of citations and articles year wise respectively.

Figure: 3 Citation pattern of the articles

5.5 Length of the articles:
A range of pages comprising 10 differences have been formulated by the investigators to measure the length and pages of the whole articles in 21 issues and 180 articles. Maximum 125 articles are published within the page range of 11-20. The next 28 articles are published within the page range 1-10 and 23 are published within the page range 21-30. Only 4 articles were appended with 31 & more pages.

6. FINDINGS AND RESULTS

The findings of the study are summarised as follows;

6.1 The number of articles in each volume is not consistent in the journal.

6.2 Single author articles are dominant in the journal. It constitutes alone 47.2% which is about 50% of whole contribution of the journal. It is followed by two and three author articles.

6.3 United States of America (USA) has ranked top contributing maximum 34 articles at a rate of 18.8%. Malaysia is in second position with 29 articles at 16.7% and India in the third position with 24 articles at 13.4%. A total of 38 countries over the globe are

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**Figure: 4 Length of articles**

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**Table: 5 Length of articles**

<table>
<thead>
<tr>
<th>Page</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>Total</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>01-10</td>
<td>6</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>28</td>
<td>15.5</td>
</tr>
<tr>
<td>11-20</td>
<td>15</td>
<td>27</td>
<td>29</td>
<td>29</td>
<td>25</td>
<td>125</td>
<td>69.4</td>
</tr>
<tr>
<td>21-30</td>
<td>3</td>
<td>2</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>23</td>
<td>12.7</td>
</tr>
<tr>
<td>31 &amp; more</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>4</td>
<td>2.4</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>24</td>
<td>37</td>
<td>42</td>
<td>42</td>
<td>35</td>
<td>180</td>
<td>100</td>
</tr>
</tbody>
</table>
contributing papers in this journal. Thus, the Journal of Knowledge Management and Practice is justifying the repute and coverage of international journal.

6.4 Contribution of India in such a like domain “Knowledge Management” such a like Foreign journal “Journal of Knowledge Management and Practice” is satisfactory.

6.5 Average number of citations is 19 per articles. The authors review a considerable amount of literature before writing a paper. There exist no significant correlation ship between the number of articles and number of citations year wise, however the relationships can be expressed through regression equation, \( y = 233.18x + 12.23 \), where y and x are number of citations and articles year wise respectively.

6.6 Maximum 125 articles are published within the page range of 11-20 and it is 69.4% of total contributions. So the page length is considerable for a research paper.

7. CONCLUSION

The Journal of Knowledge Management Practice is a top ranking open access journal in the field of knowledge management, intellectual capital, human resource assets etc. The geographical coverage of journal is high with 38 foreign country coverage. It is a popular journal of Indian researchers, which constitutes 13.4% publications of Indian authors. In rank and sense it has qualified to be an international journal.

REFERENCES


