Scientometric Profile of Web 2.0 in Emerald

Ashturkar Vinit Bhanudasrao
Research Student
Department of Library and Information Science
Dr. Babasaheb Ambedkar Marathwada University
Aurangabad

Prof. Dr. Vaishali Khaparde
Head
Department of Library and Information Science
Dr. Babasaheb Ambedkar Marathwada University
Aurangabad

Abstract - The Study is based on the Scientometric analysis of 215 article on Web 2.0 published During the period of 2011-2015 in Emerald. This study will review on year-wise distribution, Author-Ship pattern of contributions, Author wise distribution, Author wise distribution, Institution-wise distribution, country-wise distribution, Email domain wise distribution, Institution domain name-wise distribution, reference of the article, Length of the title wise distribution.

Keywords: Scientometrics, Web 2.0, Authorship Pattern, Institution, Email, Reference.

Introduction

Scientometrics is the science of measuring and analyzing science. In practice, Scientometrics is often done using Bibliometrics which is a measurement of the impact of (scientific) publications.

According to Bankapur, M. B. and Kumabar, (1993) "Scientometrics is more general then Bibliometrics. It is interesting to know, that both disciplines have a large overlap. It is surprised to learn certain comments stating that both disciplines have large overlap. It is surprised to learn certain comments stating that Scientometrics, using Bibliometrics techniques is a part of Bibliometrics”.

According to Wouters (2006), a cart intension has always existed between academic Scientometrics and political / practical, Scientometrics, the letter of which has been described as a hybrid of social science and bur rerate expertise(2006).

Emerald (Data Base)

Emerald is a global publisher linking research and practice to the benefit of society. Founded in 1967, Emerald today manages a range of digital products, a portfolio of nearly 300 journals, more than 2,500 books and over 450 teaching cases.
Review of Literature

Khaparde & Pawar (2013) studied the authorship pattern and author’s collaborative research in Information Technology with a sample of 17917 articles collect form LISA during 2000 – 2009. The average number of authors per article is 1.80 In the study the degree of collaborative (C) during the overall 10 years (2000-2009) is 0.71 but the year wise degree of collaboration is almost same in all the years of mean value 0.49 According to 10 years of period , the multi-authership articles are higher and predominant on single authorship. The study found that the researches in information Technology are Keep toward team research or group research rather than solo research.

Khaparde (2013) the paper studied the Bibliometric Analysis of Research Publication of Department of Chemistry, Dr. Babasaheb Ambedkar Marathwada University, from 1975 to 2012. It analyzed of all the 774 research publications from the 144 journals. it examines year wise distribution of papers. Authorship pattern, journal in which author publish , it revealed that the number of publications has increased consistently from the year 1975 to the year 2012. 25% of the total publications have been made in 2009, 2010 and 2011. And the majority of the publications in journal of heterocyclic chemistry.

Alhamdi, Khaparde & kanekar, 2014 they attempted on bibliometric of ten volumes (57-66) in the field of journal of Documentation. It is based on the references appended to International journal of “journal of Documentation” during 2001-2010. The present study is based on 15150 references appended to 364 articles contributed by the authors in in journal of Documentation. it was found that journals citations are more in number than other citations. In Authorship pattern it was found that solo Researchers are predominant than Collaborative Researchers. The extent of Collaboration was not much popular among the journal of Documentation . The mean relative growth for articles and citation in the first five years 2001 to 2005 is reduced according to the last five years 2006 to 2010. The value of group co- efficient was only 0.46. it was seen that researchers cited latest documents. Universities are the major contributors. The study shows the UK, USA Finland, and Denmark, have the majority of cited records in journal of Documentation. Out of 364 articles there are 175 articles have pages length from 11 to 20.

Khaparde V.S 2011 Bibliometric encompasses the measurements of properties of documents, &document related process. It uses mathematical & statistical methods to analysis & measure the output of scientific publications.

Khaparde V.S 2011 Bibliometrics is an emerging trust area of research in the field of Library & Information science. Bibliometrics analysis is now considered as an active area of bibliometric research.

Khaparde V.S 2011 Today information is the most vital resources for any kind of activity. The internet has an access to valuable resources scattered in various forms in different parts of the world.
Khaparde V.S 2011 Scientometrics is to provide quantitative characterization of scientific activity. Scientometric is branch of Library & Information Science.

Fawaz Alhamdi and Vaishali Khaparde 2015 Analyzed Authorship pattern in cloud computing research in LISTA. They collect 108 articles during the year 2009 to 2013. In this study The number of contributions found to be the highest is 24 in the year of 2012. The rate of growth of publication highly decreased from the rate of 0.693 in 2010 to 0.193 in 2013 whereas the corresponding the Doubling time for different years gradually increased from 1 in 2010 to 3.95 in 2013.

**Objectives of the study**

The Primary objective of this study is to understand the growth of web 2.0 and their research output globally during the period 2011-2015. specific objectives are as follows:

- To study the year-wise distribution of articles
- To study the Authorship pattern of contributions
- To study the Author Wise distribution of article
- To study the Institution wise distribution of Article
- To find out country-wise distribution of article
- To find out The reference of the article (Print as well as web).
- To identify the Length of Title Wise distribution of article

**Scope and Limitation of the Study:**

The Present study is based on the Scientometric Profile of web 2.0 in emerald. The present study is based on over all 215 articles during 2011-2015.

**Data Collection:**

Data can be numerically expressed that is quantifiable or objective (Fasibs off and Dely, 1990) the data was collected from emerald of over all 215 articles during 2011-2015.

**Data Analysis and Interpretation**

Scientometric analysis is a branch of bibliometrics. It is an important research for understanding of the subject it aims at measuring the utility of document and relationship between documents and fields.

The present study is based on the Scientometric profile of web 2.0 in emerald. The present study is based on over all 215 articles during 2011-2015.
Year-Wise Distribution of Contributions

The year wise Distributions of contributions is shown in Table No. 9.1

**Table No. 1: Year wise Distribution of Contributions**

<table>
<thead>
<tr>
<th>Sl No</th>
<th>Year</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2011</td>
<td>70</td>
<td>32.56</td>
</tr>
<tr>
<td>2</td>
<td>2012</td>
<td>65</td>
<td>30.26</td>
</tr>
<tr>
<td>3</td>
<td>2013</td>
<td>40</td>
<td>18.6</td>
</tr>
<tr>
<td>4</td>
<td>2014</td>
<td>27</td>
<td>12.56</td>
</tr>
<tr>
<td>5</td>
<td>2015</td>
<td>13</td>
<td>5.58</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>215</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

It can observed from the table -1 out of the total contributions majority of the contributions i.e. 70 contributions were contributed in 2011 were as minimum contributions i.e. 13 contributions were contributed in 2015.

**Authorship pattern**

**Table -2: Authorship pattern of contributions**

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Number of Authors</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Single</td>
<td>93</td>
<td>43.26</td>
</tr>
<tr>
<td>2</td>
<td>Two</td>
<td>65</td>
<td>30.23</td>
</tr>
<tr>
<td>3</td>
<td>Three</td>
<td>32</td>
<td>14.88</td>
</tr>
<tr>
<td>4</td>
<td>Four</td>
<td>10</td>
<td>4.65</td>
</tr>
<tr>
<td>5</td>
<td>Five</td>
<td>3</td>
<td>1.4</td>
</tr>
<tr>
<td>6</td>
<td>More Than Five</td>
<td>1</td>
<td>0.47</td>
</tr>
<tr>
<td>7</td>
<td>Not Mentioned</td>
<td>11</td>
<td>5.12</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>215</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

The distribution of Authors is given in the Table-2 shows that multi authors are predominant then single authors, and the majority of the contributions are contributed by single author.

**Author-wise distribution:**

**Table-3 Author-wise distribution of article**

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Name of Author</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Sarah Mc Nicol</td>
<td>5</td>
<td>2.33</td>
</tr>
<tr>
<td>2</td>
<td>Tanmay</td>
<td>4</td>
<td>1.86</td>
</tr>
<tr>
<td>3</td>
<td>Emmanouel Garoufallou</td>
<td>3</td>
<td>1.4</td>
</tr>
<tr>
<td>4</td>
<td>Alton Y.K. Chua</td>
<td>2</td>
<td>0.93</td>
</tr>
<tr>
<td>5</td>
<td>David D. Oberhelman</td>
<td>2</td>
<td>0.93</td>
</tr>
<tr>
<td>6</td>
<td>David Mathew</td>
<td>2</td>
<td>0.93</td>
</tr>
<tr>
<td>7</td>
<td>Donna Witek</td>
<td>2</td>
<td>0.93</td>
</tr>
<tr>
<td>8</td>
<td>Emmanuel E Baro</td>
<td>2</td>
<td>0.93</td>
</tr>
<tr>
<td>9</td>
<td>Gareth Bell</td>
<td>2</td>
<td>0.93</td>
</tr>
<tr>
<td>10</td>
<td>Gavin James Baxter</td>
<td>2</td>
<td>0.93</td>
</tr>
</tbody>
</table>
Table-3 shows that most productive author is Sarah Mc Nicol who contributed 5 papers. Followed by Tanmay De Sarkar who contributed 4 papers. Followed by Emmanouel Garouf allow with 3 papers and the rest 161 author each published one article.

**Institution-wise distribution of article**

The distribution of article with sponsoring parental institution where from the collaborators contributed article was analyzed and interpreted in the table no 4

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Name of institution</th>
<th>Frequency</th>
<th>percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Victoria University of Wellington, New Zealand</td>
<td>5</td>
<td>2.33</td>
</tr>
<tr>
<td>2</td>
<td>University of Birmingham, Birmingham, UK</td>
<td>3</td>
<td>1.40</td>
</tr>
<tr>
<td>3</td>
<td>Department of library Science and Information Systems, Alexander Technological Educational Institute of Thessaloniki, Thessaloniki, Greece</td>
<td>3</td>
<td>1.40</td>
</tr>
<tr>
<td>4</td>
<td>Directorate of Library Service, Muhimbili University of Health and Allied Health Sciences, Dar es Salaam United Republic of Tanzania</td>
<td>3</td>
<td>1.40</td>
</tr>
<tr>
<td>5</td>
<td>Central Library, University of Calcutta, Kolkata, India</td>
<td>2</td>
<td>0.93</td>
</tr>
<tr>
<td>6</td>
<td>Centre for Learning Excellence, University of Bedfordshire, Luton, UK</td>
<td>2</td>
<td>0.93</td>
</tr>
<tr>
<td>7</td>
<td>Department of Information and Communication system Engineering University of the Aegean, Samos Greece</td>
<td>2</td>
<td>0.93</td>
</tr>
<tr>
<td>8</td>
<td>Department of information and Library Studies, Faculty of Applied and Professional Arts, Szent Istvan University, Jaszbereny, Hungary Department of Library and information Science, University of West</td>
<td>2</td>
<td>0.93</td>
</tr>
<tr>
<td>9</td>
<td>Department of Library and Information Science, University of Delhi, Delhi, India</td>
<td>2</td>
<td>0.93</td>
</tr>
<tr>
<td>10</td>
<td>Department of Library and Information Science, University varsity of Kashmir, Srinagar</td>
<td>2</td>
<td>0.93</td>
</tr>
<tr>
<td>11</td>
<td>Department of Library and Science and Information Systems, Technological Educational Institute of Athens, Athens, Greece</td>
<td>2</td>
<td>0.93</td>
</tr>
<tr>
<td>12</td>
<td>Information School, University of Sheffield, Sheffield, UK</td>
<td>2</td>
<td>0.93</td>
</tr>
<tr>
<td>13</td>
<td>North American Regional of Reference Reviews and Associate Professor at Edmon Low Library, Oklahoma State University, Stillwater, Oklahoma,</td>
<td>2</td>
<td>0.93</td>
</tr>
<tr>
<td>14</td>
<td>School of Information Management, Wuhan University, Wuhan, P. R. China</td>
<td>2</td>
<td>0.93</td>
</tr>
</tbody>
</table>
The distribution of published papers institution wise is shown in table no 9.4 which reveals that, out of 215 contributors, the highest number 5 (2.23%) contributors contributed form Victoria University of Wellington, New Zealand. Then University of Birmingham, Birmingham, UK Alexander Technological Educational Institute of Thessaloniki, Thessaloniki, respectively.

**Country-wise distribution**

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Name of country</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>UK</td>
<td>35</td>
<td>16.28</td>
</tr>
<tr>
<td>2</td>
<td>USA</td>
<td>34</td>
<td>15.81</td>
</tr>
<tr>
<td>3</td>
<td>NM</td>
<td>22</td>
<td>10.23</td>
</tr>
<tr>
<td>4</td>
<td>India</td>
<td>16</td>
<td>7.44</td>
</tr>
<tr>
<td>5</td>
<td>Australia</td>
<td>10</td>
<td>4.65</td>
</tr>
<tr>
<td>6</td>
<td>Greece</td>
<td>9</td>
<td>4.19</td>
</tr>
<tr>
<td>7</td>
<td>New Zealand</td>
<td>8</td>
<td>3.72</td>
</tr>
<tr>
<td>8</td>
<td>Spain</td>
<td>7</td>
<td>3.26</td>
</tr>
<tr>
<td>9</td>
<td>China</td>
<td>6</td>
<td>2.79</td>
</tr>
<tr>
<td>10</td>
<td>Canada</td>
<td>5</td>
<td>2.33</td>
</tr>
<tr>
<td>11</td>
<td>Finland</td>
<td>5</td>
<td>2.33</td>
</tr>
<tr>
<td>12</td>
<td>Germany</td>
<td>5</td>
<td>2.33</td>
</tr>
<tr>
<td>13</td>
<td>Malaysia</td>
<td>4</td>
<td>1.86</td>
</tr>
<tr>
<td>14</td>
<td>Taiwan</td>
<td>4</td>
<td>1.86</td>
</tr>
<tr>
<td>15</td>
<td>South Africa</td>
<td>3</td>
<td>1.40</td>
</tr>
<tr>
<td>16</td>
<td>Tanzania</td>
<td>3</td>
<td>1.40</td>
</tr>
<tr>
<td>17</td>
<td>Estonia</td>
<td>2</td>
<td>0.93</td>
</tr>
<tr>
<td>18</td>
<td>Hongkong</td>
<td>2</td>
<td>0.93</td>
</tr>
<tr>
<td>19</td>
<td>Italy</td>
<td>2</td>
<td>0.93</td>
</tr>
<tr>
<td>20</td>
<td>London</td>
<td>2</td>
<td>0.93</td>
</tr>
<tr>
<td>21</td>
<td>Nigeria</td>
<td>2</td>
<td>0.93</td>
</tr>
<tr>
<td>22</td>
<td>Pakistan</td>
<td>2</td>
<td>0.93</td>
</tr>
<tr>
<td>23</td>
<td>Philippines</td>
<td>2</td>
<td>0.93</td>
</tr>
<tr>
<td>24</td>
<td>Singapore</td>
<td>2</td>
<td>0.93</td>
</tr>
<tr>
<td>24</td>
<td>One time publication</td>
<td>23</td>
<td>10.69</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>215</strong></td>
<td><strong>100.00</strong></td>
</tr>
</tbody>
</table>

The table-5 reveals that out of the total 215 contributors majority of article 35(16.28%), have been contributed by UK. 34(15.81%) contributions have been contributed by USA, 16(7.44%), contributions have been contributed by
India, 10 (6.45%) contributors have been contributed from Australia, 9 (5.08%) contributions have been contributed from Greece, followed by New Zealand, Spain, Germany, Finland respectively.

Channels of communication

Channel of communications refers to the medium used to convey information from a sender (or transmitter) to a receiver. Researchers communicated their publication through variety of communication which is shown in table-6

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Channels of Communication</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Research Paper</td>
<td>115</td>
<td>53.49</td>
</tr>
<tr>
<td>2</td>
<td>Review</td>
<td>39</td>
<td>18.14</td>
</tr>
<tr>
<td>3</td>
<td>General review</td>
<td>15</td>
<td>6.98</td>
</tr>
<tr>
<td>4</td>
<td>Case Study</td>
<td>14</td>
<td>6.51</td>
</tr>
<tr>
<td>5</td>
<td>Conceptual paper</td>
<td>11</td>
<td>5.12</td>
</tr>
<tr>
<td>6</td>
<td>Literature review</td>
<td>7</td>
<td>3.26</td>
</tr>
<tr>
<td>7</td>
<td>Viewpoint</td>
<td>6</td>
<td>2.79</td>
</tr>
<tr>
<td>8</td>
<td>Chapter Item</td>
<td>4</td>
<td>1.86</td>
</tr>
<tr>
<td>9</td>
<td>Technical paper</td>
<td>3</td>
<td>1.4</td>
</tr>
<tr>
<td>10</td>
<td>Secondary article</td>
<td>1</td>
<td>0.47</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>215</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

It can be observed from Table no. 6 that, 115 (53.49%) Research articles were published, 39 Review articles were published followed by General review 15, Case study 14, Conceptual paper 11, Literature review 7 respectively.

FINDINGS

- The highest numbers 70 (32.56%) of papers were published in 2011 contributing.
- Majority of papers were contributed by multiple authors.
- Most productive author is Sarah Mc Nicol who had contributed 5 Papers.
- The highest number 5 (2.23%) contributors are from Victoria University of Wellington, 3 from New Zealand. Then 3 from University of Birmingham, Birmingham, from UK, Alexzander Technological Educational Institute of Thessaloniki, Thessaloniki, Greece respectively.
- 25 countries carrying out research, produced 192 articles where UK is the top producing Country.
- Researchers communicated their publication through variety of communication channels 115 (53.49%) Research articles were published, 39 Review articles were published followed by General review 15, Case study 14, Conceptual paper 11, Literature review 7 respectively.

CONCLUSION:

Scientometric is relatively new subject of information. It helps to evaluate information & to handle the information in libraries and information centers by the quantitative
analyzed information. It deals with the mathematical and statistical analysis. This is an umbrella term used for many studies where quantitative method or techniques are used to investigate various of written document.

REFERENCES:

9. Manavalan, R., (1982), why author think their are highly cited. Scientomerics, 60(3), 305-316