PRODUCTIVITY OF ‘CLOUD COMPUTING’ LITERATURE DURING 2009-2017 IN INDIAN CITATION INDEX

Gajanan P. Khiste
Information Scientist,
Dr. Babasaheb Ambedkar Marathwada University,
Aurangabad, India

Abstract: Present study is targeted towards analysis of the productivity of ‘Cloud Computing’ literature during 2009-2017. By the analysis of Cloud Computing Literature the highest document credits by Institute therefore V I T University (VITU) ranks first with 20 documents to its credit and School of Information Technology and Engineering (SITE) ranks on Third with 6 documents. Ranking of Journals indicates that highest documents published in International Journal of Advanced Research in Computer Science i.e. 85 documents on Cloud Computing, followed by Indian Journal of Science and Technology published 64 documents & Indian Journal of Computer Science and Engineering published 6 documents on rank 10th. The study also discussed Cloud Computing literature chronologically, Types of documents, most cited articles on cloud computing.

Keywords: Productivity, Indian Citation Index, Cloud Computing.

1. INTRODUCTION

The term cloud computing has emerged to be the hottest buzzword in the IT sector. Cloud computing is neither a new technology, nor a revolution, nor a philosophy; rather, it is a change in business and process strategies. In the past few years, libraries have also begun to explore the possibilities available to them through cloud computing for library needs and works. This study is taken because importance of cloud computing in Information Technology field [1].

2. CLOUD COMPUTING

Cloud computing has become an important paradigm because it offers dynamic, high-capacity Computing capabilities, including access to complex applications and data archiving, without Requiring additional computing resources [2].

3. INDIAN CITATION INDEX (ICI)

ICI covered 1092 Indian Journals & it is developed by Knowledge Foundation with the help of Diva Enterprises. ICI is very useful platform for measuring productivity of Indian Journals [3].

4. OBJECTIVES OF THE STUDY

- Measure the types of documents published on Cloud Computing;
- Year wise document productivity of Cloud Computing Literature;
- Creating Ranking of journals for writing research papers on cloud computing; and
- Documents productivity by Geographical wise i.e. Country wise, State wise, Institution wise, City wise
- To know the highly cited documents/articles on Cloud Computing.

5. SCOPE & LIMITATION OF STUDY

The Analysis is based on the availability of literature on the title of ‘Cloud Computing’ in ICI during 2009 to 2017.

6. REVIEW OF RELATED LITERATURE STUDY


7. CHRONOLOGICAL ANALYSIS

All documents are arranged chronologically & presented in Table No.2

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Publication Year</th>
<th>Documents</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2009</td>
<td>3</td>
<td>0.80%</td>
</tr>
<tr>
<td>2</td>
<td>2010</td>
<td>6</td>
<td>1.61%</td>
</tr>
<tr>
<td>3</td>
<td>2011</td>
<td>28</td>
<td>7.51%</td>
</tr>
<tr>
<td>4</td>
<td>2012</td>
<td>47</td>
<td>12.60%</td>
</tr>
<tr>
<td>5</td>
<td>2013</td>
<td>54</td>
<td>14.48%</td>
</tr>
</tbody>
</table>
According to Table No.1 chronological publication productivity of cloud computing documents in the year 2016 published more number of documents i.e. 114 documents & in the year 2009 very few i.e. 3 documents published.

### 8. TOP CITED ARTICLES

Table No.2 Top 5 Cited Articles on Cloud Computing

<table>
<thead>
<tr>
<th>Title &amp; Page No.</th>
<th>Authors</th>
<th>Source Title</th>
<th>Publication Date</th>
<th>Vol.</th>
<th>Issue</th>
<th>Total Citations</th>
</tr>
</thead>
<tbody>
<tr>
<td>An analysis on efficient resource allocation mechanisms in cloud computing, 814-821</td>
<td>Shyamala K, Rani T Sunita</td>
<td>Indian Journal of Science and Technology</td>
<td>May 2015</td>
<td>8</td>
<td>9</td>
<td>23</td>
</tr>
<tr>
<td>An overview of the security concerns in enterprise cloud computing, 30-45</td>
<td>Bisong Anthony, Shawon M Rahman Syed</td>
<td>International Journal of Network Security &amp; Its Applications</td>
<td>Jan 2011</td>
<td>3</td>
<td>1</td>
<td>19</td>
</tr>
<tr>
<td>A survey on secure storage in cloud computing, 4396-4401</td>
<td>Rajathi A &amp; Saravanan N</td>
<td>Indian Journal of Science and Technology</td>
<td>Apr 2013</td>
<td>6</td>
<td>4</td>
<td>16</td>
</tr>
<tr>
<td>Analysis of cloud computing technology, 1-3</td>
<td>Kirubakaramoorthi R, Arivazhagan D, Helen D</td>
<td>Indian Journal of Science and Technology</td>
<td>Sep 2015</td>
<td>8</td>
<td>21</td>
<td>13</td>
</tr>
<tr>
<td>Study on data storage correctness methods in mobile cloud computing, 495-500</td>
<td>Kalpana V, Meena V</td>
<td>Indian Journal of Science and Technology</td>
<td>Mar 2015</td>
<td>8</td>
<td>6</td>
<td>11</td>
</tr>
</tbody>
</table>

As per above table highly cited paper/documents on Cloud Computing is entitled as “An analysis on efficient resource allocation mechanisms in cloud computing” gets 23 citations and on fifth rank of highly cited document entitled “Study on data storage correctness methods in mobile cloud computing” gets 11 citations.

### 9. TYPES OF DOCUMENTS

As per analysis of the data the maximum number of papers published under the document category of Research Article (318), whereas Review Article (51) & small number of contributions are categorized under Report (R&D) and Special Article is (1).

### 10. DOCUMENTS PUBLISHED IN JOURNALS

As per the compiled data indicates that highest documents published in International Journal of Advanced Research in Computer Science i.e. 85 documents on Cloud Computing, followed by Indian Journal of Science and Technology published 64 documents & Indian Journal of Computer Science and Engineering published 6 documents on rank 10th.

### 11. THEMATIC CLASSIFIED DOCUMENTS

As per the compiled data there are 18 different & thematic subjects are observed where ‘Cloud Computing’ literature has been published. In the subject of Computer Science and Technology published 185 documents on cloud computing & less than 10 documents published on cloud computing in 11 subjects.

### 12. TOP COLLABORATIVE INSTITUTIONS

The Researcher has given Top three Institutes which have produced maximum documents on ‘Cloud Computing’. The analysis Indicates that highest document credits by Institute therefore V I T University (VITU) ranks first with 20 documents to its credit and School of Information Technology and Engineering (SITE) ranks on Third with 6 documents.

### 13. GEOGRAPHICAL ANALYSIS BY COUNTRY

As per analysis the India (302) documents, followed by China (15) documents to its credit and United States of America published (9) documents with rank 3rd position.

### 14. GEOGRAPHICAL ANALYSIS BY STATE WISE

As per the geographical distribution of State wise published documents. Tamil Nadu tops (109) documents, followed by Maharashtra (29) documents to its credit and Punjab published 25 documents with rank 3rd position.

### 15. GEOGRAPHICAL ANALYSIS BY CITY WISE

As per the geographical distribution of City wise contribution documents. Chennai (41) documents top the list, followed by Vellore (30) documents to its credit.

### 16. RESULT

As per data retrieved, overall Cloud Computing documents are 373 and 206 times cited and h-index is 8.
17. REFERENCES


