# A SCIENTOMETRIC ANALYSIS OF ELECTRONIC JOURNAL OF KNOWLEDGE MANAGEMENT(EJKM)

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**Abstract**: - *This paper used to analyses and find the output pattern of the international open access online journal "Electronic Journal of Knowledge Management (EJKM)" during the period from 2014 to 2021. This study examine the number of articles, authorship pattern, form of publication, area-wise distribution of contributions, length of abstract, prolific contributors, page length per articles several other characteristics. This study examined that total 163 articles were published in this period with 390 contributors. This study finds that a few important areas of research such as knowledge sharing, intellectual capital, innovation, knowledge transfer in knowledge management.*

**Keywords:** **Scientometric, Bibliometrics, EJKM, Geographical Distribution, Citation Analysis, Bibliographic Analysis.**

## 1. Introduction:

Scientist Vassily V. Nalimov coined the term 'scientometrics' in the 1960s. This term is used to describe the study of science: growth, development, structure, inter-relationships and productivity. Scientometrics as a method of quantitative techniques to scientific communication which aims to measuring the impact of science on our society, comparing the research output and its impact at national as well as international levels. These cover of impact articles, institutes and journals etc. This analysis is try to find out the publication characteristics of the journal using many indicators. This study reports the scientometric analysis based on Electronic Journals of Knowledge Management (EJKM) research output data during 2014 to 2021.

## 2. Scope of the Journal:

The Journal "Electronic Journals of Knowledge Management (EJKM)" is an scholarly Journal Published by Academic Conferences International Limited

Curtis Farm, Kidmore End, RG4 9AY, UNITED KINGDOM. This Journal journey was started in 2003. It is open access e-journal that publishes articles and research papers that contribute to the growth and development of both theory and practice in all the field of Knowledge Management. This Journal covers all areas of

research in field of knowledge management and intellectual capital.

## 3. METHODOLOGY:

The study has been done on at "Electronic Journals of Knowledge Management (EJKM)" journal during the period from (2014 - 2021). In this study, 163 articles were published. All source the data are collected from https://academic-publishing.org/index.php/ejkm/issue/archive. All these data are collected, stored, examined, analysed in excel and tabulated in various point of view for this study.

## 4. Objectives of the study are as follows:

- ➢ To make an examine of articles published in "Electronic Journals of Knowledge Management (EJKM)" during the period 2014 to 2021;
- ➢ To find out the number of contributions published during the period;
- ➢ To identify the authorship pattern of publication;
- ➢ To study geographical distribution of articles;
- ➢ To study frequency of keywords of the articles;
- ➢ To identify the length of articles;
- ➢ To find out the length of titles of articles;
- ➢ To study the number and forms of documents cited;

- ➢ To study the number of occurrence of keywords and frequency of rank list of keywords ;
- ➢ To know the lengths of the abstracts;
- ➢ To study the most prolific contributors;
- ➢ To study the institute-wise distribution of papers;
- ➢

## 5. Review of literature:

**Sahoo, Jyotshna., Meher, Ghanashyam. and Mohanty, Basudev.**(2017) examined the growth and development of bibliometric study in the Electronic Journal of Knowledge Management during 2003-2013. They analyses 11 Volumes, 32 issues and 313 articles for their study. Results degree of collaboration is found to be 0.70. The geographical distribution reveals that the contribution byUK is highest position.

**Maheswari, S. and Pandian, Murugesa.** (2015) analysed the scientometric study of "Webology" journal. The study covers mainly the number of articles, form of documents cited, etc during 2004-2013 a total number of 114 papers were published in this journal. the number of articles, authorship pattern, subject wise distribution of articles, number of references per articles, forms of documents cited, year wise distribution of cited journals etc. The average number of publications published per year was 11.4. highest numbering of papers 16 was published in the year 2008. 58 articles were contributed by Single Authors and the remaining 56 articles were contributed by Multi Authors.

**Dutt, Bharvi. and Kumar, Suresh (2021)** examined the Li-ion battery research in India as reflected through Web of Science Core Collection (WoS) data of 32 years (1989-2020). 28 institutions produced 1% or more of the total output and 71.5% of the output were in journals with impact factor >=2. The output was scattered among 1346 institutions.

 **Pandey, Shriram & Gupta,  Dinesh K(2021)** analysed  Eugene Garfield's 50 highly cited papers  in 32 journals.   This study revealed that the top 50 publications of Eugene Garfield gained 8441 citations of the total citations of 9121 from 254 published documents. Garfield has Total Link Strength of 35 and has received 8511 citations which comes to 93.31% of the total citations and proved his dominance over the collaborators. Ninety percent of the papers (45) published in the USA and above 92% of the citations (8419) were also received from the USA's publications. Just five papers in three journals received 4856 citations (53.23%) of the total 9121 citations.

### 6.   Analysis and Interpretation of Data:

*6.1 Authorship pattern*

*Table-1: Year-wise Authorship Pattern*

| Year | No. of Authors | | | | Total |
|---|---|---|---|---|---|
| | **1** | **2** | **3** | **4& above** | |
| 2014 | **5** | **12** | **6** | **6** | **29** |
| 2015 | **3** | **9** | **7** | **4** | **23** |
| 2016 | **9** | **3** | **7** | **3** | **22** |
| 2017 | **7** | **6** | **5** | **2** | **20** |
| 2018 | **5** | **4** | **2** | **2** | **13** |
| 2019 | **4** | **4** | **3** | **1** | **12** |
| 2020 | **2** | **7** | **7** | **4** | **20** |
| 2021 | **3** | **12** | **3** | **7** | **25** |
| **Total** | **38** | **57** | **40** | **29** | |

Table 1 shows that authorship pattern of publication. During the study, in year 2014 and 2021 maximum of12 articles were published by joint authors. 2015 & 2016 were 9 article published by joint and single author respectively, got the second position.

**6.2 Categorywise Distribution of Articles**

*Table.2 Category wise Distribution of Articles*

| Category | No.of Articles | Percentage |
|---|---|---|
| Research Paper | 134 | 82 |
| Case Study | 23 | 14 |
| Review | 5 | 3 |
| Project | 1 | 1 |
| **Total** | **163** | |

Table 2 tells that the highest number of articles can be found in research paper section with 134 articles and then the case study section got the second position with 23 articles published.

**6.3 Institution Wise Contribution**

*Table-3 Institution-Wise Contribution of Contributors*

| Institution | No. of Contributors | Percentage |
|---|---|---|
| Universities | 301 | 77 |
| Colleges | 15 | 4 |
| School | 7 | 2 |
| Association | 5 | 1 |
| Research Institutions | 22 | 6 |
| Others | 40 | 10 |
| **Total** | **390** | |

Table 3 reveals that majority of the contributors contributed by University Faculties. The 2nd position is occupied by the others institute faculties and the 3rd and the 4th position are occupied by research institutions and college members.

**6.4 Length of Articles:**

*Table-4 Length of Articles*

| Pages | Year | | | | | | | | Total | Percentage |
|---|---|---|---|---|---|---|---|---|---|---|
| | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | | |
| 6-10 | 13 | 5 | 1 | 5 | 2 | 1 | 1 | 1 | 29 | 18 |
| 11-15 | 14 | 16 | 20 | 13 | 10 | 8 | 15 | 14 | 110 | 67 |
| 16≥ | 1 | 2 | 1 | 2 | 1 | 3 | 4 | 10 | 24 | 15 |
| | | | | | | | | | 163 | |

Table 4 finds that out of 163 articles, highest numbers of articles have the length of 11-15 pages(67%)  and then 6-10 pages(18%)  have got the second position

**6.5 Geographical Distribution of Articles**

*Table-5 Geographical Distribution of Contributors at International*

*Level*

| Sl.No | Name of the Country | No. of Contributions |
|---|---|---|
| 1 | USA | 42 |
| 2 | Italy | 37 |
| 3 | Russia | 23 |
| 4 | UK | 22 |
| 5 | Finland | 19 |
| 6 | Portugal | 19 |
| 7 | Norway | 17 |
| 8 | Canada | 15 |
| 9 | Spain | 15 |
| 10 | France | 11 |
| 11 | Germany | 10 |
| 12 | Malaysia | 10 |
| 13 | Romania | 10 |
| 14 | Ireland | 9 |
| 15 | South Africa | 9 |

| 16 | Austria | 8 |
|----|---------|---|
| 17 | Poland | 8 |
| 18 | Slovakia | 8 |
| 19 | Australia | 4 |
| 20 | China | 4 |
| 21 | Indonesia | 4 |
| 22 | Lithuania | 4 |
| 23 | New Zealand | 4 |
| 24 | Syria | 4 |
| 25 | Tunisia | 4 |
| 26 | Cyprus | 3 |
| 27 | Egypt | 3 |
| 28 | Greece | 3 |
| 29 | Hong Kong | 3 |
| 30 | India | 3 |
| 31 | Ohio | 3 |
| 32 | Oman | 3 |
| 33 | Scotland | 3 |
| 34 | Turkey | 3 |
| 35 | Algeria | 2 |
| 36 | Aveiro | 2 |
| 37 | Bosnia | 2 |
| 38 | Denmark | 2 |
| 39 | Estonia | 2 |
| 40 | Hungary | 2 |
| 41 | Singapore | 2 |
| 42 | Sweden | 2 |
| 43 | Switzerland | 2 |
| 44 | Uganda | 2 |
| 45 | Zimbabwe | 2 |
| 46 | Colorado | 1 |
| 47 | Congo | 1 |

| 48 | Costa Rica | 1 |
|---|---|---|
| 49 | Czech Republic | 1 |
| 50 | Dominican Republic | 1 |
| 51 | Florida | 1 |
| 52 | Iceland | 1 |
| 53 | Japan | 1 |
| 54 | Jordan | 1 |
| 55 | Kazakhstan | 1 |
| 56 | Kuwait | 1 |
| 57 | Lisboa | 1 |
| 58 | Netherlands | 1 |
| 59 | Nigeria | 1 |
| 60 | Pakistan | 1 |
| 61 | Pretoria | 1 |
| 62 | Saudi Arabia | 1 |
| 63 | Serbia | 1 |
| 64 | Tulkarm | 1 |

The table 5 indicates that most of the contributions are from USA with 42 contributors, second position got Italy with 37contributors and the rest of the contributors are from other countries.

## 6.6 Prolific Authors of this journal

*Table 6: Prolific Authors*

| Sl. No. | Rank No. | Author's Name | No. of Publications |
|---|---|---|---|
| 1 | 1 | Ettore Bolisani | 5 |
| 2 | 2 | Eduardo Tomé | 4 |
| 3 | 2 | Enrico Scarso | 4 |
| 4 | 3 | Evgeny Blagov | 3 |
| 5 | 3 | Maurizio Massaro | 3 |
| 6 | 3 | Palmira Lopez-Fresno | 3 |
| 7 | 3 | Roland Bardy | 3 |
| 8 | 3 | Taina Savolainen | 3 |

| 9 | 4 | Alexander Kaiser | 2 |
|---|---|---|---|
| 10 | 4 | Anastasiia Pleshkova | 2 |
| 11 | 4 | Andrey S. Mikhaylov | 2 |
| 12 | 4 | Anna A. Mikhaylova | 2 |
| 13 | 4 | Arthur Rubens | 2 |
| 14 | 4 | Denise A. D. Bedford | 2 |
| 15 | 4 | Dmitry V. Hvaley | 2 |
| 16 | 4 | Eddie Obeng | 2 |
| 17 | 4 | Florian Kragulj | 2 |
| 18 | 4 | Francesca Dal Mas | 2 |
| 19 | 4 | Helen N. Rothberg | 2 |
| 20 | 4 | Helen Rothberg | 2 |
| 21 | 4 | Ilja Frissen | 2 |
| 22 | 4 | John Lewis | 2 |
| 23 | 4 | M. Max Evans | 2 |
| 24 | 4 | Marco Bettoni | 2 |
| 25 | 4 | Maria José Sousa | 2 |
| 26 | 4 | Maria Serena Chiucchi | 2 |
| 27 | 4 | Meliha Handzic | 2 |
| 28 | 4 | Scott Erickson | 2 |
| 29 | 4 | Thomas Grisold | 2 |
| 30 | 4 | Tone Vold | 2 |
| 31 | 4 | Victoria Konovalenko Slettli | 2 |
| 32 | 4 | Wioleta Kucharska | 2 |

Table 6 reveals that Ettore Bolisani placed the hight rank with 5 numbers of articles followed by Eduardo Tomé and Enrico Scarso Will placed 2nd position 4 numbers of articles each. Five authors namely, Evgeny Blagov, Maurizio Massaro, Palmira Lopez-Fresno, Roland Bardy and Taina Savolainen Aurélie have got the 3rd rank each with 3 numbers of articles.

## 6.7 Rank List of Keywords

*Table7: Rank List of Keywords*

| Rank No. | Keyword | Frequency | | Rank No. | Keyword | Frequency |
|---|---|---|---|---|---|---|
| 1 | Knowledge management | 36 | | 7 | knowledge creation | 5 |
| 2 | knowledge sharing | 23 | | 7 | organizational learning | 5 |
| 3 | intellectual capital | 21 | | 8 | big data | 4 |
| 4 | innovation | 9 | | 8 | Literature Review | 4 |
| 5 | knowledge transfer | 7 | | 8 | open innovation | 4 |
| 5 | case study | 7 | | 8 | Value Creation | 4 |
| 6 | trust | 6 | | 8 | SME | 4 |
| 6 | higher education | 6 | | 8 | social media | 4 |
| 6 | tacit knowledge | 6 | | 8 | knowledge workers | 4 |
| 7 | communities of practice | 5 | | 8 | new product development | 4 |
| 7 | intangible assets | 5 | | 8 | social capital | 4 |
| 7 | knowledge | 5 | | | | |

Table 7 shows the 'Knowledge Management' is the top frequently occurred keyword (Rank-1) appeared 36 times. Other keywords knowledge sharing, intellectual capital and innovation placed 2$^{nd}$, 3$^{rd}$ and 4$^{th}$ position respectively.

## 6.8 Number of References in Articles

*Table 8: Number of References in Articles*

| Sl No. | No. of References | No. of Articles |
|---|---|---|
| 1 | ≤20 | 10 |
| 2 | 21- 40 | 42 |
| 3 | 41- 60 | 63 |
| 4 | 61-80 | 33 |
| 5 | 81≥ | 15 |

From table 8, it is clearly find that, maximum number of articles 63 have appeared with a range of references between 41-60, followed by 42 articles between 21-40 references and 33 articles with 61 to 80 references where only 15 articles have appeared with more than 81 references.

**6.9 Length of the Abstracts of Articles**

*Table 9: Length of the Abstracts*

| Sl No. | No. of Words | No. of Articles |
|---|---|---|
| 1 | 101- 200 | 40 |
| 2 | 201- 300 | 90 |
| 3 | 301- 400 | 24 |
| 4 | 401≥ | 9 |

In the table 9 indicates that highest numbers of abstracts 90 fall in the word range of 201-300. The 2nd position numbers of abstracts 40 is within the word range of 101-200 followed by 24 numbers of abstracts in the range 301-400 words, got position 3rd.

**6.10 Length of the Titles of Articles**

*Table 10: Length of the Titles*

| Sl No. | No. of Words | No. of Articles |
|---|---|---|
| 1 | 5- 9 | 34 |
| 2 | 10- 14 | 89 |
| 3 | 15- 19 | 34 |
| 4 | 20≥ | 6 |

Table 10 reveal that 89 articles have word range of title between 10-14 followed by 34 articles between 5-9 and 15-19 words.

**7 Findings and Conclusion**

In this study the journal EJKM covering a long time of 11 years starting from 2014 to 2021 provides important interesting features of the published articles. This journal published 163 articles with 38 single authors, 57 Joint authors and 69 more than two authors during the 2014 to 2021. In 2014 the highest productive of articles published. Majority of the articles were contributed by USA authors. Most of articles contributed by the university faculties and most of articles pages rang from 11to 15. The journal shows most productivity to research articles other

than forms of publications. Good research areas of publication are Knowledge management, knowledge sharing and intellectual capital. The journal published 163 articles during the period of Study of which 2014 was the most productive year when 29 articles published. Most number of articles (5) published by Ettore Bolisani. Most frequency keyword is knowledge management which appeared 36 times. Good number of abstract of this journal publication within 201-300 words.  Majority of articles length of title words are between 10-14(89 articles).Above all indicators of the journal EJKM indicates that quality of this journal is devoted to the field of knowledge management. It will be helpful for LIS professionals.

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