Citation Patterns in Prabandhan: Indian Journal of Management (2010-2021): A Bibliometric Analysis

Bhagyalakshmi P T, Yamuna P B
M. Lib. I. Sc., Asst. Professor
Department of Library and Information Science
SB College, Changanacherry

Abstract- This bibliometric analysis delves into the scholarly landscape of Prabandhan: Indian Journal of Management during the period from 2010 to 2021, employing rigorous methodologies and the Biblioshiny tool to unearth critical insights. The study encompasses various facets, commencing with the exploration of publication trends, unveiling patterns of growth and fluctuations over the years. A keyword analysis sheds light on prominent research themes, while citation patterns elucidate the journal's evolving impact. The identification of top-cited articles and prolific organizations enriches the analysis. This comprehensive approach not only uncovers the journal's scholarly contributions but also underscores its role in shaping the field of management studies. The study's findings provide a valuable perspective on the evolution of Prabandhan: Indian Journal of Management, offering insights that extend beyond its pages and into the broader landscape of academic research.

Keywords: Bibliometric analysis, Prabandhan: Indian Journal of Management, publication trends, author productivity, citation pattern, most prolific authors.

Introduction
The exponential growth of information is not only evident across various disciplines but is also accompanied by diverse citation patterns. Literature within specific fields is not only scattered across numerous periodicals, countries, and languages but also exhibits unique citation behaviors. The multiplicity of journals, limited financial resources, and escalating user demands have spurred librarians to develop information resources and services tailored to the specific citation patterns and requirements of their user communities. Consequently, a comprehensive understanding of the characteristics of subject literature, including its citation patterns, becomes vital for planning and designing effective information systems. This understanding, including the analysis of citation dynamics, is a fundamental component of 'Bibliometrics,' a burgeoning field in Library and Information Science. Bibliometrics not only helps assess the structure and characteristics of literature but also provides insights into the interconnected web of citations that underpins the development of knowledge within specific fields.

"Prabandhan: Indian Journal of Management" holds a prominent position as a double-blind peer-reviewed refereed monthly journal, serving as a platform for the publication of research papers across a wide spectrum of management areas. These areas encompass Human Resource Management, Organizational Behavior and Organizational Management, International Business, Knowledge Management, and more. Given its significance in the field of management, conducting a bibliometric analysis of this journal is not only relevant but also imperative. The present study, covering the period from 2010 to 2021, places a particular focus on exploring the citation patterns within 'Prabandhan: Indian Journal of Management.' Through this analysis, it offers significant insights into the journal's influence and its role in shaping the landscape of management research.

Literature Review
Kumar et al. (2023) conducted a comprehensive bibliometric analysis of the Journal of International Management (JIM) spanning a 25-year period since its inception in 1995. Utilizing data from Scopus and Web of Science, they employed various methodologies, including visualization with VOS viewer software and co-citation analysis, bibliographic coupling, and author keyword co-occurrence. Their findings revealed a consistent growth trajectory for JIM in terms of publications and citations, reflecting the journal's increasing influence. Furthermore, the study highlighted the expansion of the collaboration network among authors and a shift in the geographical focus towards a more global perspective. Notably, the analysis identified conventional international management themes, such as market entry modes and cross-cultural management, alongside emerging topics like digital firms and global sourcing, offering a valuable snapshot of the evolving research landscape in the field.

Ho and Gatto (2021) conducted a detailed bibliometric analysis spanning four decades of Ambio, a prominent journal in environmental science and policy. Their research aimed to scrutinize Ambio's publication patterns within the Science Citation Index Expanded (SCI-EXPANDED) database, focusing on environmental sciences and environmental engineering. They introduced technical innovations, assessed publication indicators for countries, institutes, and authors, and evaluated the contributions of journal impact factors to highly cited papers. The study revealed Sweden's dominance in publication indicators, challenged the conventional use of journal impact factors for performance evaluation, and introduced procedural enhancements to enhance the analysis of Ambio's publication trends.

Nayak et al. (2021) conducted a bibliometric analysis of the ASLIB Journal of Information Management for the period from 2014 to 2021. Their study aimed to explore the papers published within this journal during that timeframe, examining various bibliometric aspects. They used the Scopus database for data extraction and the VOSviewer software for visualization. The study identified 311 papers with 2534 citations, revealing trends such as the highest number of papers in 2020 and the peak in citations.
in 2015. Collaboration was evident among 827 authors from 51 countries, with an average citation per document of 8.15, showcasing the journal's commitment to high-quality research in library and information science. The ASLIB Journal of Information Management also demonstrated its scholarly impact with a Citescore of 3.3, SJR of 0.558, and SNIP of 1.132 according to Scopus, emphasizing its contribution to the evolving landscape of information and data management.

**Significance of the study**

Studying the citation patterns of “Prabandhan: Indian Journal of Management” for the years 2010 to 2021 through bibliometric analysis holds immense significance in the realm of academic research. Firstly, it provides a deep understanding of the journal's impact and influence within the field of management studies. By dissecting how often articles from the journal are cited and which specific articles or authors garner the most citations, researchers can gauge the journal's contribution to the broader scholarly discourse. Moreover, such an analysis aids in identifying emerging trends and hot topics within the field, helping researchers and practitioners stay current with the latest developments. Ultimately, a comprehensive bibliometric analysis of “Prabandhan: Indian Journal of Management” offers valuable insights that can inform future research directions and enhance the overall quality of scholarly contributions in the domain of management.

**Objectives**

1. To examine the year wise distribution of articles per issue.
2. To identify keyword distribution of articles.
3. To assess the year wise distribution of citations.
4. To identify the country wise distribution of articles.
5. To find the top 20 cited articles.
6. To identify the most prolific organizations.

**Scope and Limitation of the study**

The scope of this study encompasses a thorough examination of Prabandhan: Indian Journal of Management for the period spanning 2010 to 2021, utilizing bibliometric analysis techniques to uncover valuable insights into the journal's scholarly landscape. This analysis encompasses publication trends, citation patterns, author productivity, and keyword utilization, offering a comprehensive view of the journal's dynamics. While the study embraces contributions from various countries, it particularly emphasizes the Indian-centric nature of the journal. However, certain limitations must be acknowledged. These include potential data constraints, a focus on English-language articles leading to language bias, subjective elements in interpretation, a lack of contextual insights into citation patterns, and the study's applicability primarily to Prabandhan: Indian Journal of Management. Despite these limitations, the study contributes to a deeper understanding of the journal's role in the field of management studies and the application of bibliometrics in assessing scholarly landscapes.

**Methodology of the study**

The methodology employed in this study relies on a robust bibliometric approach to analyze Prabandhan: Indian Journal of Management for the years 2010 to 2021. Initial data collection involves retrieving pertinent articles from the Scopus database, ensuring the compilation of a comprehensive and reliable dataset. The Biblioshiny tool is instrumental in facilitating data extraction, transforming raw data into actionable insights. Subsequently, a multifaceted analysis unfolds, encompassing various dimensions of scholarly activity. This includes an examination of publication trends, keyword analysis to discern prevalent research themes, and citation patterns to gauge the impact of articles over time. Moreover, the identification of top-cited articles and prolific organizations adds depth to the analysis. This methodological framework, bolstered by the use of Biblioshiny, ensures a comprehensive and rigorous examination of the journal's bibliometric landscape, contributing valuable insights to the realm of management studies.

**Results and Discussion**

**Year wise distribution of articles per issue**

This section discusses the year-wise contribution of articles and the average number of articles per year published in Prabandhan: Indian Journal of Management from 2010 to 2021, as recorded in Scopus.

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Year</th>
<th>Volume</th>
<th>Issues per year</th>
<th>Articles per year</th>
<th>Average number of articles per year</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2010</td>
<td>3</td>
<td>12</td>
<td>84</td>
<td>7</td>
<td>13.59%</td>
</tr>
<tr>
<td>2</td>
<td>2011</td>
<td>4</td>
<td>12</td>
<td>74</td>
<td>6.17</td>
<td>11.97%</td>
</tr>
<tr>
<td>3</td>
<td>2012</td>
<td>5</td>
<td>12</td>
<td>69</td>
<td>5.75</td>
<td>11.16%</td>
</tr>
<tr>
<td>4</td>
<td>2013</td>
<td>6</td>
<td>12</td>
<td>57</td>
<td>4.75</td>
<td>9.22%</td>
</tr>
<tr>
<td>5</td>
<td>2014</td>
<td>7</td>
<td>12</td>
<td>49</td>
<td>4.08</td>
<td>7.93%</td>
</tr>
</tbody>
</table>
Table 4 presents 618 articles published in Prabandhan: Indian Journal of Management from 2010 to 2021 according to Scopus. The highest literature output was in 2010 with 84 articles (13.59%), while the lowest was in 2020 with 28 articles (4.53%). The cumulative average number of articles per year was approximately 4.29. The analysis reveals an inconsistent pattern in the growth of articles during the study period, with a decrease in the first set (2010-2015) and fluctuations in the second set (2016-2021).

![Annual Scientific Production](image)

Figure 1 Chart showing year wise distribution of articles

Keyword distribution

Figure 2 displays the distribution of keywords along with their respective occurrences in Prabandhan: Indian Journal of Management.

![Figure 2: Tree map of keywords](image)
occurrences and 6% of utilization. These keywords serve as key concepts in the articles, and the increasing frequency over time reflects the growing significance and attention researchers have devoted to the subject.

**Year wise distribution of citations**

Table 2 illustrates the year-wise citation impact of articles published in Prabandhan: Indian Journal of Management during the period from 2010 to 2021.

<table>
<thead>
<tr>
<th>Sl No.</th>
<th>Year</th>
<th>Number of articles</th>
<th>Mean total citation per article</th>
<th>Mean total citation per year</th>
<th>Citable years</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2010</td>
<td>84</td>
<td>0.98</td>
<td>0.08</td>
<td>12</td>
</tr>
<tr>
<td>2</td>
<td>2011</td>
<td>74</td>
<td>0.97</td>
<td>0.09</td>
<td>11</td>
</tr>
<tr>
<td>3</td>
<td>2012</td>
<td>69</td>
<td>1.20</td>
<td>0.12</td>
<td>10</td>
</tr>
<tr>
<td>4</td>
<td>2013</td>
<td>57</td>
<td>1.53</td>
<td>0.17</td>
<td>9</td>
</tr>
<tr>
<td>5</td>
<td>2014</td>
<td>49</td>
<td>2.10</td>
<td>0.26</td>
<td>8</td>
</tr>
<tr>
<td>6</td>
<td>2015</td>
<td>37</td>
<td>1.43</td>
<td>0.20</td>
<td>7</td>
</tr>
<tr>
<td>7</td>
<td>2016</td>
<td>48</td>
<td>4.64</td>
<td>0.77</td>
<td>6</td>
</tr>
<tr>
<td>8</td>
<td>2017</td>
<td>47</td>
<td>3.81</td>
<td>0.76</td>
<td>5</td>
</tr>
<tr>
<td>9</td>
<td>2018</td>
<td>47</td>
<td>2.81</td>
<td>0.70</td>
<td>4</td>
</tr>
<tr>
<td>10</td>
<td>2019</td>
<td>46</td>
<td>2.96</td>
<td>0.98</td>
<td>3</td>
</tr>
<tr>
<td>11</td>
<td>2020</td>
<td>28</td>
<td>5</td>
<td>2.5</td>
<td>2</td>
</tr>
<tr>
<td>12</td>
<td>2021</td>
<td>32</td>
<td>1.62</td>
<td>1.62</td>
<td>1</td>
</tr>
</tbody>
</table>

The table presents year-wise statistics for Prabandhan: Indian Journal of Management from 2010 to 2021. The number of articles published each year varied, with the highest in 2010 (84 articles) and the lowest in 2020 (28 articles). The mean total citation per article and mean total citation per year were calculated, indicating the average number of citations each article received and the average number of citations per year for the entire journal. Over the years, the mean total citation per article ranged from 0.98 in 2010 to 5 in 2020, while the mean total citation per year ranged from 0.08 in 2010 to 2.5 in 2020. The table also shows the number of citable years, representing the number of years with published articles that were eligible for citation analysis, with the highest being 12 years (2010-2021) and the lowest being just one year (2021). These statistics provide insights into the citation impact and productivity of the journal over the examined period.

Figure 3 presents a visual representation of the citation impact of "Prabandhan: Indian Journal of Management" throughout the study period from 2010 to 2021. This graph charts the average annual citations received by the journal against each respective year. Notably, the year 2010 marked the lowest point in terms of citation impact, with an average of just 0.08 citations per year. Conversely, 2020 emerged as the standout year, boasting the highest average citation impact at 2.5 citations annually, indicating a significant surge in the journal’s influence. The trend overall reveals a gradual increase in average citations per year leading up to the peak in 2020, followed by a decline in 2021. This data provides valuable insights into the journal’s citation performance, serving as a useful tool for researchers and scholars seeking to evaluate its standing within the realm of management literature.

**COUNTRY WISE PRODUCTION OF ARTICLES**

Table 3 and Figure 4 contain the country wise production of articles from Prabandhan: Indian Journal of Management during the period 2010-2021.

<table>
<thead>
<tr>
<th>Sl No.</th>
<th>Country</th>
<th>Frequency of articles</th>
<th>Percentage frequency of</th>
<th>Rank</th>
</tr>
</thead>
</table>

Figure 4 presents a visual representation of the citation impact of "Prabandhan: Indian Journal of Management" throughout the study period from 2010 to 2021. This graph charts the average annual citations received by the journal against each respective year. Notably, the year 2010 marked the lowest point in terms of citation impact, with an average of just 0.08 citations per year. Conversely, 2020 emerged as the standout year, boasting the highest average citation impact at 2.5 citations annually, indicating a significant surge in the journal’s influence. The trend overall reveals a gradual increase in average citations per year leading up to the peak in 2020, followed by a decline in 2021. This data provides valuable insights into the journal’s citation performance, serving as a useful tool for researchers and scholars seeking to evaluate its standing within the realm of management literature.
Figure 4: Country wise production of articles

Figure 4 provides a visual representation of the country-wise distribution of articles in Prabandhan: Indian Journal of Management during the period spanning from 2010 to 2021. This figure focuses on the top 20 countries with the highest number of contributions to the journal. Notably, Indian scholars stand out with a substantial total of 831 articles, securing the top position in terms of publication contributions. Following India, Australia, Malaysia, Nigeria, and Sri Lanka also make notable contributions to the journal. This observation underscores the primarily Indian-based nature of Prabandhan: Indian Journal of Management, reflecting its strong presence and influence within the Indian academic and research community while also fostering international collaboration and contributions from scholars worldwide.

AUTHOR’S PRODUCTION OVER TIME

Figure 5 clearly shows the topmost authors in Prabandhan: Indian Journal of Management for the study period of 2010-2021, as reflected in the Scopus database.
Figure 5 provides a visual representation of the top 20 authors’ productivity over the years in Prabandhan: Indian Journal of Management. This visualization depicts each author’s timeline, with the size of the bubbles corresponding to the number of documents they produced per year. The colour intensity of the bubble reflects the total number of citations received per year, with deeper colours indicating higher citation counts. The initial bubble on each author’s timeline represents the year when they began publishing in the field. Notably, the figure highlights Singh A as a highly productive author from India, with a significant number of recent publications. Following Singh A, authors Singh S and Kumar R also exhibit substantial productivity. Additionally, Arora A K stands out for receiving the highest number of citations per year, underlining the impact and recognition of their research contributions within the field of management studies.

**TOP 20 CITED ARTICLES**

Figure 6 shows the top 20 cited articles in Prabandhan: Indian Journal of Management in the Scopus database during 2010-2021.

Figure 6 provides insights into the most globally cited documents published in Prabandhan: Indian Journal of Management during the study period. Notably, the highest-cited article, authored by Arora A K, garnered an impressive 79 citations, attesting to its significant impact and influence within the scholarly community. In contrast, the lowest-cited article among the top 20 most cited documents, authored by Lakshminarayanan S in 2016, received a total of 9 citations. This figure serves as a valuable reference for identifying the articles that have made the most substantial contributions to the journal’s impact and recognition within the field of management studies.

**HIGHLY PROLIFIC ORGANISATIONS**

Figure 7 provides a comprehensive overview of the highly prolific organizations associated with the articles published in Prabandhan: Indian Journal of Management during the period spanning from 2010 to 2021.
The outcomes of this analysis underscore the presence of well-established collaboration networks among prominent scholars in the field, as mentioned earlier, including Singh A, Singh S, and Kumari S. Additionally, it highlights the significant role played by countries such as India in forging extensive networks of collaborations with other nations. These findings illuminate the journal's global reach and its ability to facilitate international scholarly cooperation and knowledge exchange, ultimately enriching the depth and diversity of research contributions within the field of management studies.

**Findings**

1. Between 2010 and 2021, Prabandhan: Indian Journal of Management published a total of 618 articles. The highest number of articles were published in 2010 (84), while the lowest were in 2020 (28), indicating an inconsistent growth pattern in article publications.
2. The journal featured 1,587 author's keywords, with 'Job satisfaction' (20 occurrences) being the most frequently used, followed by 'India' (18 occurrences) and 'Corporate social responsibility' (13 occurrences).
3. Yearly citation distribution analysis revealed that 2010 had the highest citations per article (12) while 2021 had the lowest (1). The year 2020 had the highest average citations per year (2.5), with 2010 having the highest average citations per article (5).
4. India was the dominant contributor to the journal, accounting for 91.42% of publications, followed by Australia, Malaysia, Nigeria, and Sri Lanka.
5. The most globally cited article in 2020, authored by Arora AK, received the highest number of citations, while an article by Lakshminarayanan S in 2016 received the lowest among the top 20 cited articles.
6. Amity University led in contributions with 25 articles, followed by Lovely Professional University with 14, and the University of Delhi with 9.
7. India emerged as both the largest contributor of articles and the home to the most prolific organization, emphasizing its significant role in the field of management studies.

**Conclusion**

In conclusion, the comprehensive bibliometric analysis of Prabandhan: Indian Journal of Management spanning from 2010 to 2021 has illuminated significant trends and characteristics within the journal's scholarly landscape. The study has unveiled fluctuations in publication patterns over the years, with a notable peak in 2010, followed by variations in citation impact and keyword utilization. While the journal attracts contributions from a global audience, it is clear that India, both as a contributor and home to prolific organizations, holds a central position in its academic ecosystem. The citation patterns of top articles underscore the impact of select research contributions. This study not only offers insights into the journal's dynamics but also contributes to the broader understanding of management studies' evolution and the role of bibliometrics in analyzing scholarly landscapes.

**REFERENCES:**