

# A Bibliometric Overview of Prabandhan : Indian Journal of Management Between 2011 and 2021

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## Abstract

This study used bibliometric analysis to examine *Prabandhan : Indian Journal of Management*'s recent 10 - year publications. The study's goal was to present a comprehensive summary of the journal's major influences. This analysis covered the journal's publication and citation structure; the most cited articles; and top authors, institutions, and nations. Using VOSviewer and Gephi Software, we created a graphical mapping of bibliographic material. With this software, we performed keyword analysis and bibliographic coupling analysis. As a result of this analysis, nine major research themes emerged: (a) higher education and skills, (b) job satisfaction and employee performance, (c) stress management and women, (d) corporate social responsibility, (e) innovation and strategy, (f) emotional intelligence, (g) entrepreneurship, (h) green management, (i) technology and small & medium enterprises.

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**P**rabandhan: *Indian Journal of Management*, in short, PIJM is a platform for disseminating knowledge on various aspects of management not just for academic research but also focuses on professional management and practical applications. It has been indexed in Elsevier's Scopus since 2010 and is also indexed in UGC – CARE List of Journals (Group II). According to SCImago, PIJM's h - index is 7, which means seven articles have received at least seven citations. The SCImago Journal Rank (SJR) is 0.223, which indicates the weighted average citations received between 2017 and 2019.

Despite substantial evidence of the journal's continued quality and influence in Indian management research, there have been inadequate attempts to objectively evaluate the journal's performance. Such a void suggests a missed chance for a comprehensive assessment of the journal's contribution to management science. To our knowledge, only one other study (Zafrunnisha, 2015) has done a bibliometric examination of PIJM. We offer improvements over this study in several ways. First, we used the Scopus database to retrieve the data related to

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publications and citations; whereas, the former paper had collected data from Ulrich's International Periodicals Directory. According to Norris and Oppenheim (2007), the Scopus database offers the best coverage of publications and citations in the social sciences field. Researchers should utilize it for evaluating research impact in the social sciences. Second, the former study covered the years from 2009 – 2011. In contrast, we consider a long tenure from 2011 – 2021, which will lead to the identification of a more precise and detailed publication and citation structure. Third, we go beyond simple descriptive analysis to science mapping analysis, which comprises keyword co-occurrence analysis (Callon et al., 1983) and bibliographic coupling analysis (Kessler, 1963).

This study seeks to answer the following six research questions (RQs) related to PIJM's articles published between 2011 and 2021.

- ✦ **RQ1.** What is PIJM's publication and citation landscape between 2011 and 2021?
- ✦ **RQ2.** Who are the leading PIJM authors, institutions, and countries between 2011 and 2021?
- ✦ **RQ3.** Which research papers of PIJM are the most popular between 2011 and 2021?
- ✦ **RQ4.** What journals and countries most frequently cite PIJM?
- ✦ **RQ5.** What changes in the content have occurred in PIJM?
- ✦ **RQ6.** What are the general themes under which PIJM's articles can be classified?

We make significant contributions in several ways by answering these RQs: (a) tracing the publication and citation trends of PIJM (RQ1), (b) emphasizing the significance of PIJM in academic research (RQ2, RQ3, and RQ4), (c) unveiling the significant topics and themes of the scientific corpus of PIJM (RQ5 and RQ6). This research, as a whole, contributes to a comprehensive understanding of PIJM and its contributions to the field of management.

## Literature Review

The vast production of scientific literature has led to the development of sophisticated techniques for their assessment and evaluation. Bibliometric analysis is one such technique. Bibliometric analysis is the application of quantitative methods to discover the publication and citation structure underlying a body of literature (Pritchard, 1969). It can also be used to identify emerging trends in research articles and journal performance, conduct collaboration analysis on the author level (Fatt et al., 2010) and the country level (Fu et al., 2022) as well, and identify the conceptual and intellectual structure of the research field (Nerur et al., 2008).

There are two broad evaluative methods in the field of bibliometrics for exploring research: performance analysis and science mapping (Van Raan, 2004). Performance analysis is descriptive and is concerned with publication and citation metrics of different research constituents, such as journals, authors, universities, etc. In comparison, science mapping is utilized for unearthing the hidden networks that exist beneath the surface between different scientific actors but are not formally linked. It includes bibliographic coupling analysis (Kessler, 1963), co-citation analysis (Small, 1973), co-word analysis (Callon et al., 1983), and co-authorship analysis (Newman, 2001).

In a broad sense, the productivity of an author, institution, and country in the research arena is considered by the total number of publications. The total number of citations is looked at to determine influence. A metric that combines them is the h-index (Hirsch, 2005), where 'h' is the number of articles with at least 'h' citations. Although initially conceived to measure the academic influence of an individual researcher, Braun et al. (2006) proposed an h-index for journals in which the methodology is the same. Still, the focal unit of analysis is the journal. Similarly, the h-index can also be calculated for an individual country. Another quite popular metric is the g-index

(Egghe, 2006), where 'g' refers to the top 'g' articles receiving at least  $g^2$  citations together. It measures the academic impact of an author. Like the h-index, the g-index can also be calculated for a journal and an individual country.

Majorly, bibliometric analysis is performed on a topic, for example, behavioral finance (Paule-Vianez et al., 2020), artificial intelligence in marketing (Mustak et al., 2021), business ethics (Liu et al., 2019), etc. However, the focal unit of analysis can also be in the form of journals. For example, Donthu et al. (2021) bibliometrically reviewed the *Psychology and Marketing* journal to highlight its scientific contributions and intellectual structure, and Baker et al. (2020) analyzed the *Review of Financial Economics* journal to understand its prominent topics and major themes.

Various studies (Alshater et al., 2021; Deegan & Shelly, 2014; Van Fleet & Bedeian, 2016) have performed bibliometric analysis on a specific journal to provide retrospectives or a look-back, primarily when that journal has achieved a checkpoint of anniversary years. Such studies have provided a constructive synthesis of scientific publications in a journal by applying modern quantitative tools to draw attention to the unique characteristics of performance and knowledge in the larger field of inquiry.

However, in the Indian context, rigorous bibliometric studies have been lacking in specific journals. Even though Zafrunnisha (2015) explored *Prabandhan : Indian Journal of Management*, the study was restricted to performance indicators and did not use the entire range of contemporary mapping tools. Since the journey of PIJM has been more than of 10 years, it merits a thorough investigation to understand its performance and invisible networks between different research actors. Bibliometric analysis has been a suitable and favorable tool for such studies (Laengle et al., 2017; Merigó et al., 2015; Merigó et al., 2018).

## Methodology

The data for the study were collected from Elsevier's Scopus database. The search query for data collection was performed in late March 2022. The search query was "Source Title = Prabandhan Indian Journal of Management," then the result was limited to the "Date Range = from 2011 to 2021". This yielded a total of 549 documents. After removing editorials, reviews, notes, and duplicates, we were left with 536 documents. Therefore, our analysis comprises of only research articles. Besides the title and author name, the final data included various fields, including abstract, affiliation, citations, and references. This study considers both performance and science mapping analysis. Numerous bibliometric indicators can represent different data types, such as the number of papers and citations (Rousseau et al., 2018). This research considers several of them to give the readers a variety of viewpoints. Other bibliometric indicators considered in the study include the number of citations per cited publication, the number of citations per year, and the number of citations per contributing author.

It is commonly known that the proportion of articles with several authors has risen over time (Schubert, 2002). Therefore, we also measured the collaboration intensity between different research contributors in this study. We used the metric collaboration index (CI) (Lawani, 1980). Simply put, it is the average number of authors per research article, calculated by dividing the number of contributing authors by the total number of publications. For carrying out descriptive analysis, primarily MS - Excel was deployed. In contrast, VOSviewer software (Van Eck & Waltman, 2010) and Gephi software (Bastian et al., 2009) were used to identify research articles and thematic structure clusters. VOSviewer is a specialized software for bibliometric studies, and Gephi is a general network analysis tool.

## Descriptive Analysis and Results

This section presents the descriptive analysis of the extracted data, containing three subsections. Although all the variables used are defined in each section alongside the analysis, a few standard variables that are present

throughout this section are the total number of publications (TP) to assess the academic contribution of different research constituents, the total number of citations (TC) to measure the academic popularity, number of contributing authors (NCA) to count the total authors associated with a research output, and collaboration index (CI) to quantify the nature of collaborating between different scientific actors.

### ***Publication and Citation Structure***

Our first research question (RQ1) focuses on the publication and citation structure of PIJM. Table 1 shows that the total publications (TP) and the number of contributing authors (NCA) for 2011 are the highest, 74 and 114, respectively. Also, the number of sole-authored articles (SA) dominated the academic outputs at the journal's beginning. However, increasing complexity in science requires the collaboration of diversified and specialized individuals, which is evident in the last 10 years of the journal, taking the percentage of co-authored articles (CA) from 43% in 2011 to 86% in 2021. The collaboration index (CI) is the highest in 2019, which is 1.30, which means the first author, on an average, collaborated with more than one author. In terms of academic influence and impact, the year 2016 is the most significant as the h - index in this year is 8, and the g - index is 9, indicating that eight PIJM articles published in 2016 received at least eight citations and nine PIJM articles received at least 81 (9×9) citations together.

The total citations (TC = 201) attributed to publications of the year 2016 are the highest. Also, the proportion of cited publications (PCP) is 0.92 for 2016, indicating that 92% of the publications in 2016 have been cited at least once till now. One possible reason behind the influence of 2016 may be research based on the latest technological trends, such as Tomar (2016) studied the need for social media policy in a corporation, and Bhattacharya and Mishra (2016) explored the impact of cyber connectivity on buyer behavior on e-commerce platforms. Another possible reason may be the review papers; for example, Kaur and Khanna (2016) published a review on earnings management techniques, and Bashir and Verma (2016) presented a review on business model innovation. However, total citations per cited publication (C/CP) are the highest for 2020, 5.1. This indicates that, on an average, one cited article in the year 2020 has received 5.1 citations. Finally, the metric of total citations per contributing author (C/NCA) has been the greatest for 2016, which is 1.91, which indicates an author who published a paper in 2016 received, on an average, 1.91 citations till now.

**Table 1. Annual Trend of Publications and Citations in Prabandhan: Indian Journal of Management Between 2011 and 2021**

Year	TP	CTP	NCA	CI	SA	CA	PCP	TC	C/CP	C/NCA	h	g
2011	74	74	114	0.54	39	35	0.53	68	1.74	0.60	3	4
2012	69	143	103	0.49	42	27	0.51	77	2.2	0.75	4	5
2013	57	200	98	0.72	27	30	0.56	81	2.53	0.83	4	5
2014	49	249	101	1.06	9	40	0.61	95	3.17	0.94	5	7
2015	43	292	85	0.98	15	28	0.58	76	3.04	0.89	4	6
2016	48	340	105	1.19	10	38	0.92	201	4.57	1.91	8	9
2017	46	386	104	1.26	8	38	0.85	151	3.87	1.45	6	8
2018	47	433	97	1.06	10	37	0.74	99	2.83	1.02	5	7
2019	46	479	106	1.30	9	37	0.85	109	2.79	1.03	4	7
2020	28	507	54	0.93	8	20	0.71	102	5.1	1.89	4	9
2021	29	536	65	1.24	4	25	0.31	22	2.44	0.34	3	4

### Most Productive Authors, Countries, and Institutions

We answer the RQ2 in this section about the leading authors, countries, and institutions. Table 2 provides the data regarding the most productive authors of PIJM. Overview of Table 2 shows that T. Bagga and D. Chakraborty are the most productive authors, each contributing five articles towards PIJM from 2011 to 2021. M. Das is the leading author of sole-authored articles (SA 3), while D. Chakraborty tops the list of co-authored works (CA 5). K. Tara is the most collaborative author on the list, with a CI of 2.67, which indicates that the author has collaborated, on an average, with more than two authors.

In this period, A.K. Arora received the maximum number of citations (TC 62). However, regarding academic influence and impact, D. Chakraborty has been the most influential (h-index = 4) and impactful (g - index = 5) author. His work mainly centers on the organizational workforce and the methods to improve their effectiveness.

A total of 30 countries have contributed at least one academic output to PIJM, making its global popularity evident. For brevity, we have considered only the top 10 countries. Table 3 shows that India is the highest contributor to *Prabandhan: Indian Journal of Management*, with 489 publications, and the most influential (h = 9, g = 14), with 973 total citations. On the other hand, Malaysia is the number one country in PIJM in terms of PCP, with a PCP of 0.8, meaning that 80% of the publications have been cited at least once now. Also, Malaysia is the most collaborative country, with a CI of 2.4, meaning that the first author, on an average, has co-authored an article with more than two authors.

**Table 2. Most Prolific and Influential Authors of PIJM from 2011 to 2021**

TP	Author	NCA	CI	SA	CA	PCP	TC	h	g
5	T. Bagga	12	1.4	1	4	0.6	24	3	4
5	D. Chakraborty	11	1.2	0	5	1	39	4	5
4	R. Kazi	11	1.75	1	3	1	5	1	1
4	A. Sehrawat	12	2	0	4	0.25	1	1	1
4	A. Singh	13	2.25	0	4	0.75	4	1	1
4	S. Singh	13	2.25	0	4	0.5	10	2	3
3	K.B. Akhilesh	12	3	0	3	0.67	4	1	2
3	A.K. Arora	6	1	0	3	0.67	62	1	3
3	M. Das	3	0	3	0	0.33	3	1	1
3	S. Kumari	12	3	0	3	0.67	4	1	2
3	C. Muralidharan	10	2.33	0	3	0.67	8	1	2
3	H.R. Nagendra	12	3	0	3	0.67	4	1	2
3	KP Nandan Prabhu	10	2.33	0	3	1	16	2	3
3	N. Patel	8	1.67	0	3	0.67	11	2	3
3	R. Patel	8	1.67	0	3	0.67	11	2	3
3	P. Pathak	9	2	0	3	0.33	1	1	1
3	B.S. Ramaprasad	10	2.33	0	3	1	22	2	3
3	T. Sharma	8	1.67	0	3	0.33	3	1	1
3	S. Sudha	6	1	0	3	1	10	3	3
3	K. Tara	11	2.67	0	3	1	12	2	3

**Table 3. The Top Ten Countries Contributing the Most Research Output to PIJM Between 2011 and 2021**

TP	Country	NCA	CI	SA	CA	PCP	TC	h	g
489	India	934	0.91	161	328	0.65	973	9	14
5	Australia	6	0.2	4	1	0.6	5	2	2
5	Malaysia	17	2.4	0	5	0.8	20	2	4
4	Nigeria	8	1	1	3	0.5	3	1	1
3	Saudi Arabia	6	1	1	2	1	13	2	3
3	Sri Lanka	3	0	3	0	0.67	4	1	2
3	United States	7	1.33	0	3	0.67	5	2	2
2	Bahrain	3	0.5	1	1	0.5	3	1	1
2	Cameroon	6	2	0	2	1	2	1	1
2	Egypt	6	2	0	2	1	2	1	1

**Table 4. The Ten Most Affiliated Institutions with PIJM Authors Between 2011 and 2021**

Institutions	TP	NCA	CI	SA	CA	PCP	TC	h	g
Amity University	25	54	1.16	5	20	0.72	84	6	7
Lovely Professional University	14	33	1.36	2	12	0.71	39	4	5
Symbiosis International Deemed University	14	30	1.14	3	11	0.93	56	4	6
Indian Institute of Technology (Indian School of Mines), Dhanbad	12	33	1.75	0	12	0.83	38	4	5
Manipal Academy of Higher Education	10	29	1.9	0	10	0.6	33	3	5
University of Delhi	8	14	0.75	4	4	0.63	12	1	3
Christ University, Bengaluru	8	20	1.5	1	7	0.63	12	2	3
Guru Nanak Dev University	6	10	0.67	2	4	0.5	4	1	1
Nirma University, Institute of Management	6	13	1.17	1	5	0.67	14	2	3
Himachal Pradesh University	5	14	1.8	0	5	0.8	12	2	3

Inspection of Table 4 gives insights into the top 10 institutions contributing the most research articles to PIJM. Amity University is the most influential ( $h=6$ ) and impactful ( $g=7$ ) contributor to PIJM, with a TP equal to 25 and a credit of 84 TC. Punjab Technical University and Vels Institute of Science, Technology & Advanced Studies tie for first place in PCP, equal to 1, indicating that 100% of their publications have been cited at least once. Amity University is at its peak regarding the number of contributing authors (NCA). In contrast, the Manipal Academy of Higher Education is the most collaborative institution, having a CI of 1.9, which indicates that the lead author has contributed on an average with almost two authors.

### **Top Citing Sources and Most Cited Articles of PIJM Between 2011 and 2021**

In this section, we address the RQ4 about the journals and the countries that most frequently cited PIJM articles. Table 5 displays the list of journals and countries that most commonly cited the papers of PIJM between 2011 and 2021. PIJM is the most abundant source of citations ( $TC = 255$ ) for the journal itself, followed by the *Indian*



**Table 5. The Top Ten Citing Sources and Countries for PIJM Between 2011 and 2021**

Rank	Journal	TC	Country	TC
1	<i>Prabandhan : Indian Journal of Management</i>	255	India	420
2	<i>Indian Journal of Marketing</i>	22	Malaysia	29
3	<i>Indian Journal of Finance</i>	14	Saudi Arabia	25
4	<i>Polish Journal of Management Studies</i>	9	United States	21
5	<i>Sustainability Switzerland</i>	9	Italy	17
6	<i>International Journal on Emerging Technologies</i>	7	Russian Federation	14
7	<i>Asia Life Sciences</i>	5	China	13
8	<i>Benchmarking</i>	5	Indonesia	13
9	<i>International Journal of Advanced Science and Technology</i>	5	South Africa	13
10	<i>International Journal of Applied Business and Economic Research</i>	5	Spain	13

**Table 6. The Ten Most Cited PIJM Articles Between 2011 and 2021**

TC	Author	Title	Year	TC/Y
62	Arora & Srinivasan	"Impact of Pandemic Covid-19 on the Teaching-Learning Process : A Study of Higher Education Teachers"	2020	31.00
20	Smolag, Slusarczyk, & Kot	"The Role of Social Media in Management of Relational Capital in Universities"	2016	3.33
15	Pandita & Bedarkar	"Factors Affecting Employee Performance: A Conceptual Study on the Drivers of Employee Engagement"	2015	2.14
14	Srivastava & Bagga	"A Comparative Study on the Usage of HRIS in the IT/ITES, Services, and Manufacturing Sectors in the Indian Scenario"	2014	1.75
13	Biswas & Chakraborty	"Impact of Organizational Values, Compassion, and Well-Being on Industrial Disputes: An Empirical Study"	2019	4.33
13	Ramaprasad, Nandan Prabhu, Lakshminarayanan, & Pai	"Human Resource Management Practices and Organizational Commitment : A Comprehensive Review (2001-2016)"	2017	2.60
11	Bagla & Khan	"Customers' Expectations and Satisfaction with Online Food Ordering Portals"	2017	2.20
10	Bocheliuk, Panov, Fedorenko, Zhuzha, & Cherepiekhina	"Gender Particularities of Value Ideals of Chiefs"	2019	3.33
10	Kumari & Singh	"Impact of Organizational Culture on Employee Performance"	2018	2.50
10	Singh, Saufi, Tasnim, & Hussin	"The Relationship Between Employee Job Satisfaction, Perceived Customer Satisfaction, Service Quality, and Profitability in Luxury Hotels in Kuala Lumpur"	2017	2.00

*Journal of Marketing* and the *Indian Journal of Finance*. Among countries, India has the highest contribution (TC = 420), followed by Malaysia, Saudi Arabia, and the United States.

Table 6 lists the 10 most cited articles of PIJM between 2011 and 2021. Besides the title, it also contains the author's name, total citations (TC), year of publication, and average citations per year (TC/Y). It is observed that 90% of the articles on the list date from 2016 or later. This indicates that publications of the last 5 years have contributed a significant amount of influence to the journal. Also, only two papers in the list are sole-authored, which indicates that co-authored articles can perform better in attracting influence and citations. Furthermore,

going through the titles of the paper reveals that most citations are attributed to articles that discussed higher education and organizational factors, such as employee performance and engagement, employee satisfaction, etc.

### **Keyword Analysis**

In this section, we explore the changes in the content of the research (RQ5) published in PIJM between 2011 and 2021, and the exploration is done through co-word analysis (Callon et al., 1983). In most cases, co-word analysis is done using author-specified keywords. Still, because keywords aren't present in the bulk of articles (more than 100), we have utilized the Natural Language Processing (NLP) algorithm available in VOSviewer to discover prominent keywords present in the titles, which is a practice following Baker et al. (2020) and Donthu et al. (2021). Keeping the threshold of four occurrences and combining similar keywords, we extracted 74 keywords from the titles. Gephi is used to visualize the network of keywords.

Table 7 lists the top 25 keywords in the PIJM between 2011 and 2021. It also has total occurrences (TOC), average publication year (APY), degree centrality (DC), and Eigenvector centrality (EC). The number of links a

**Table 7. Top 25 Keywords in PIJM from 2011 to 2021**

<b>Keywords</b>	<b>TOC</b>	<b>APY</b>	<b>DC</b>	<b>EC</b>
India	68	2016	43	1.00
Impact	50	2016	30	0.78
Case Study	46	2015	20	0.58
Empirical Study	41	2015	36	0.92
Management	31	2014	25	0.61
Analysis	30	2016	30	0.75
Perception	26	2016	24	0.66
Performance	25	2015	30	0.78
Employee	24	2016	30	0.77
Organization	24	2015	31	0.82
Student	24	2017	22	0.60
Role	21	2015	25	0.66
Approach	19	2016	13	0.39
Effect	19	2017	22	0.64
Factor	18	2015	23	0.64
Job Satisfaction	18	2014	24	0.66
Relationship	18	2016	22	0.60
Evaluation	14	2015	15	0.35
Perspective	14	2016	19	0.52
Bank	12	2015	12	0.39
Company	12	2015	10	0.32
Review	12	2016	8	0.20
Satisfaction	12	2017	15	0.39
Corporate Social Responsibility	11	2014	8	0.24
Effectiveness	11	2015	10	0.29



keyword has to all other keywords in the network is indicated by DC. For example, a keyword with a DC of 10 is connected to 10 other keywords. In contrast, the importance of the keyword in the network responsible for transferring information to different highly connected keywords is reflected in the EC score (Wasserman & Faust, 1994). The idea behind EC is that a node connected to other highly connected nodes will transmit much network information.

“India” has the highest number of occurrences in the list (TOC = 68) with APY of 2016. It shows that the PIJM is an abundant source of research focused on the Indian perspective. Moreover, with DC equal to 43 and EC equivalent to 1.00, it seems to be an essential keyword in the research articles, and it is more probable that many studies will be done about India in the future. Following India, “Empirical Study,” “Organization,” “Performance,” and “Employee” are the most influential terms, which indicates most academic output in PIJM is related to these subjects.

Table 8 presents all the extracted keywords classified in different clusters. Seventy-four keywords are categorized into six distinct clusters. Although there is subjectivity in naming clusters based on keywords, the construction of clusters is based on objective analysis. Clusters 3 and 4 are the biggest, where each cluster contains 17 keywords. Cluster 3 focuses on corporate governance and strategy, and Cluster 4 revolves around CSR and organizational factors. Cluster 1 is the smallest, having only eight keywords and linked to evaluative studies. Other detailed information about the remaining clusters is listed in Table 8.

Figure 1 displays the graphical map of the network of keywords. In this network, a node represents keywords, and the lines between them (edges) demonstrate their co-occurrence. The size of the node indicates their frequency of occurrence. Therefore, the larger the node's size, the greater its number of occurrences. The thickness of the edges between keywords represents the strength of the relationship. So, the thicker the edge between two keywords, the more they co-occur.

**Table 8. Topical Clusters Formed by Keywords of PIJM Between 2011 and 2021**

Cluster-ID	Terms	Main Theme
0	Analysis, approach, management education, opportunity, overview, perception, Punjab, quality, respect, stakeholder	Techniques
1	Application, Assam, case study, challenge, evaluation, management, special reference, sustainability	Evaluative Studies
2	Chennai, company, dimension, emotional intelligence, employee, information technology, Kerala, life balance, occupational stress, relationship, turnover intention, woman, work	Stress Management
3	Adoption, bank, comparative study, corporate governance, effectiveness, empirical study, factor, influence, need, organization, performance, perspective, reference, SMEs, state, strategy, training	Corporate Governance and Strategy
4	Corporate social responsibility, Delhi, effect, employee engagement, employee performance, evidence, higher education, impact, India, job satisfaction, organizational citizenship behavior, organizational commitment, organizational culture, predictor, review, satisfaction, value	CSR and Organizational Factors
5	Andhra Pradesh, consequence, education, entrepreneurship, role, status, stress, student, Tamil Nadu	Education and Entrepreneurship

### **Clustering of PIJM Articles Based on Bibliographic Coupling**

According to Kessler (1963), academic works that cite common references discuss the same subject. Therefore, using VOSviewer, we conducted a bibliographic coupling analysis (RQ6) of PIJM articles between 2011 and 2021. It yielded 11 clusters containing 321 items representing more than 60% of the articles. The details of each cluster are summarized in Table 9. Even though naming these clusters was subjective, the titles mainly reflect the

Figure 1. Co-occurrence Network of Keywords for PIJM from 2011 to 2021

➤ **Cluster 1 : Higher Education and Skills.** The first cluster, *Higher Education*, comprises 49 publications contributed by 107 authors. The most highly cited articles include Tripathi et al. (2017), Aggarwal (2017), Dixit (2011), and Singh et al. (2018). Tripathi et al. (2017) investigated the skill gaps present in the retail sector workforce in India. Also, they highlighted the initiatives taken by different stakeholders to make youth

	TP	NCA	CI	SA	CA	PCP	TC	h	g
Cluster 1	49	107	1.18	14	35	0.59	85	5	6
Cluster 2	47	91	0.94	13	34	0.83	128	6	8
Cluster 3	44	90	1.05	10	34	0.89	129	6	8
Cluster 4	39	87	1.23	10	29	0.85	111	6	7
Cluster 5	37	76	1.05	9	28	0.76	87	5	5
Cluster 6	25	53	1.12	8	17	0.56	54	4	6
Cluster 7	21	48	1.29	2	19	0.62	52	4	6
Cluster 8	17	31	0.82	8	9	0.59	21	3	3
Cluster 9	15	32	1.13	2	13	0.80	60	4	7
Cluster 10	14	26	0.86	4	10	0.79	40	4	5
Cluster 11	13	23	0.77	6	7	0.77	25	3	4

employable in this sector. Aggarwal (2017) compared the financial costs of traditional face-to-face and e-learning approaches in higher education. Dixit (2011) thoroughly examined many variables and problems influencing technology development endeavors in the state of the Punjab tool industry. Singh et al. (2018) compared numerous value chains common in the chikankari handcraft sector of Lucknow, highlighting their key distinctions and recommending the chain that would be most advantageous to the artisans.

✦ **Clusters 2 and 3 : Job Satisfaction and Employee Performance.** The second and third clusters together comprise 91 publications contributed by 181 authors. The representative works include Pandita and Bedarkar (2015), Nageswara Rao et al. (2014), and Singh and Nigam (2021). Pandita and Bedarkar (2015) examined the concept of employee engagement and shed light on four critical factors that affect employee engagement in particular: “communication,” “work-life balance,” “leadership,” and “organizational culture.” Nageswara Rao et al. (2014) attempted to identify the elements that significantly influenced an employee's career success and connected professional success with engagement initiatives and best HR practices. Singh and Nigam (2021) explored and analyzed the perceptions of Gen Z women consumers of India in the luxury consumer product space by applying the “luxury value perception model.”

✦ **Clusters 4 and 10 : Stress Management and Women.** The total publications of this cluster are 53, written by 113 authors. Representative works include Kala et al. (2017), Chakraborty and Altekar (2021), and Maria Jesili (2012). Kala et al. (2017) concluded that improving work-life balance might be facilitated by reducing occupational stress in IT organizations. Chakraborty and Altekar (2021) highlighted the growing effects of WFH on COVID-19 and the urgent need to comprehend how it affected women. Maria Jesili (2012) examined the origins and resolution of conflicts from both the workers and the management's points of view and suggested that arbitration is the best method for resolving disagreements.

✦ **Cluster 5 : Corporate Social Responsibility.** This cluster consists of 76 authors who contributed 37 publications. Popular articles include Singh, R. (2013), which concluded that CSR programs support firms in being more socially conscious, environmentally sustainable, and commercially viable. Manimalar and Sudha (2016) established and tested a conceptual framework model of CSR that found a connection between components of CSR and their effects on customer loyalty and trust. Kumar and Sudesh (2019) evaluated how certain banks' performance is affected by corporate governance (practices) in India.

✦ **Cluster 6 : Innovation and Strategy.** This cluster includes 25 publications by 53 authors. In influential articles, Bashir and Verma (2016) presented a case study on how innovation in business models can be a significant source of value creation in organizations. Sarda et al. (2013) devised strategic moves for the Indian telecom industry after conducting a PESTEL analysis.

✦ **Cluster 7 : Emotional Intelligence.** This cluster includes 21 publications by 48 authors. Mohanty and Das (2017) examined the applicability of the lessons of *Arthashastra* from the standpoint of emotional intelligence in the modern business context. Das and Sahu (2015) studied the impact of gender on postgraduate students' emotional intelligence levels.

✦ **Cluster 8 : Entrepreneurship.** Thirty-one authors contributed 17 publications in this cluster. Singh, P. (2013) looked at how crucial sociological and psychological elements fostered entrepreneurial mindsets in young girls. In comparison, Lokhande (2017) explored the possibility of an association between the disadvantaged group's demographic characteristics and entrepreneurial skills.

✦ **Cluster 9 : Green Management.** This cluster comprised of 15 publications contributed by 32 authors. The

popular articles included Tara and Singh (2014), which identified the numerous steps the Indian banking sector has taken to preserve the environment and promote sustainable social development. Mukherjee and Chandra (2018) elaborated a conceptual framework for forecasting employees' green intentions and behavior in green HRM.

✦ **Cluster 11 : Technology and SMEs.** In this cluster, there are 13 articles contributed by 23 authors. The popular articles include Tomar (2017), which aimed to understand the status of IT adoption in Indian SMEs by surveying executives of SMEs located in the state of Madhya Pradesh. Arora and Rathi (2019) extended this study and identified the drivers/determinants of digitalization adoption in manufacturing SMEs in India through empirical analysis.

## **Managerial and Theoretical Implications**

Various clusters created in the paper have different managerial ramifications. Based on Cluster 5 (CSR) papers' findings, participating in CSR initiatives increased company performance and competitive advantage because it provides easier access to financing. As businesses begin to pay attention to the environment and how it affects society, this can be advantageous to various stakeholders in an emerging market like India. In addition, papers in Clusters 2 & 3 (Job Satisfaction and Employee Performance) suggest different strategies to boost employee engagement and address skill gaps. Regarding theoretical contributions, we value the conceptual model put forward in Cluster 9 (Green Management), which explains why employees adopt green HRM practices. Additionally, research on how innovation in business models may produce significant value for organizations was given in a paper discussed in Cluster 6 (Innovation & Strategy).

## **Conclusion**

This study presents a broad summary of the most critical changes in PIJM from 2011 to 2021. This is an excellent way to get a brief overview of how the journal functions over time. We analyzed 536 articles contributed by 1,032 authors between 2011 and 2021. Almost 65% of the cited articles received 1,081 citations, averaging three citations per article. T. Bagga and D. Chakraborty are the most productive authors in this period; whereas, Amity University and Lovely Professional University are the most productive institutions. India is the most abundant source of publications and citations for the journal. However, its international audience is also considerable. Finally, with the help of VOSviewer and Gephi, we performed keyword analysis and bibliographic coupling analysis. Keyword analysis reveals that 'India' is the most frequent word and created six topical clusters. At the same time, bibliographic coupling led to the classification of articles into 11 clusters.

## **Limitations of the Study and Scope for Future Research**

Despite our best efforts to provide a comprehensive overview of PIJM, it is important to be aware of the study's limitations. First, this study used the Scopus database. Therefore, all of the database's limitations apply. However, every effort has been made to ensure that the data are correct and clean. Second, the research considers the papers published until 2021. As a result, the findings provide a snapshot of the journal's tendencies up to this point in time. On the other hand, this information is dynamic and may change. We formed topical clusters based on keyword analysis and identified thematic clusters using a bibliographic coupling. Researchers are therefore encouraged to investigate the possibility of a connection between the two and triangulate this data to produce a more sophisticated classification.

## Authors' Contribution

Kamal K. Ludhani conceived the idea and Dr. Sanjay Kumar helped with data collection. Kamal K. Ludhani and Saroja Kumar Panda helped with the formal analysis. Dr. Sanjay Kumar assisted in proofreading and drafting the final manuscript in consultation with the other two authors.

## Conflict of Interest

The authors certify that they have no affiliations with or involvement in any organization or entity with any financial interest or non-financial interest in the subject matter or materials discussed in this manuscript.

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