A Bibliometric Study of Asian Journal of Information Science and Technology (AJIST)

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Abstract - The paper presents a bibliometric study of the journal titled "Asian Journal of Information Science and Technology" for the period from 2011 to 2021. The analysis covers mainly the distribution of the articles, issue-wise distribution of article, authorship pattern, the geographical distribution of contributions, page lengths of the article in the AJIST Journal. The Asian Journal of Information Science and Technology Journal data is downloaded from the Asian Journal of Information Science and Technology journal website. The analysis showed that 316 papers were published in the journal of AJIST from 2011 to 2021. The maximum was 84 (26.58 %) articles published in 2019 and the minimum 13 (4.11 %) articles were published in 2015. Out of the total number of 316 contributions, only 62 (19.620%) were contributed by single authors, while the highest contribution by two authors, was 199 (62.974%) contributions.
Keywords: Bibliometrics, Asian Journal of Information Science and Technology and AJIST, Authorship Pattern

I. INTRODUCTION

Bibliometrics was first used by Alan Pritchard in a paper published in 1969, titled "Statistical Bibliography or Bibliometrics?" He defined the term as "the application of mathematics and statistical methods to books and other media of communication". Bibliometric methods are often used in the field of library and information science, where statistical methods are used to analyze books, articles, and other publications. In bibliometrics, you can determine which journal to publish in by calculating the journal impact factors. Analyzing the output and influence of authors and researchers helps with promotion and tenure, as well as money and grants.

II. SOURCE JOURNAL

Asian Journal of Information Science and Technology (AJIST) is a refereed Multidisciplinary International Journal on Library and Information Science publishing in India. This Journal encompasses all branches of Library and Information Sciences and its sub-disciplines like Library Management; Information Systems & Services, Information Processing & Retrieval; Information Sources & Services; Community Information System, Scientometrics & Informatics, IR Theory, Knowledge Organization; Information processing & retrieval, Classification, Preservation & Conservation, Information Management, Library classification, Information sources, Systems and Services, Computer Application in Library; Digital Library; Information Systems; Bibliographic Control, etc.

III. REVIEW OF LITERATURE

Vijaya Kumar Midatanapally (2018) evaluated the Library Management journal through a bibliometric analysis. Within this study, bibliometric analysis of articles of Library Management journal from the year 2008-2017 has been carried out. The journal has published 476 articles during the period of study and most of the contributors are single authors. B. Vimala. (2018), evaluated the Asian journal of information science and technology through a bibliometric analysis. Within this study, bibliometric analysis of articles of AJIST from the year 2011-2017 has been carried out. The journal has published 151 articles during the period of study and most of the contributors are two authors with 58.3%.

Dr. Lujina P. (2018) evaluated the international Journal of Library and Information Science through a bibliometric analysis. Within this study, bibliometric analysis of articles of IJLIS from the year 2012-2017 has been carried out. The journal has published 161 articles during the period of study and most of the contributors are two authors with 47.83%. P. Gomathi. (2014) evaluated the SRELS Journal of Information Management through a bibliometric analysis. Within this study, bibliometric analysis of articles of SRELS Journal of Information Management from the year 2013 has been carried out. The journal has published 70 articles during the period of study and most of the contributors are two authors with 33 (47.14%).

IV. OBECTIVES OF THE STUDY

The present study intends to analyze the publication trends in Asian Journal of Information Science and Technology during the period 2011 to 2021. The key objectives of the study are

1. To analysis the year-wise articles published in the Asian Journal of Information Science and Technology (2011-2021).
2. To study the Issue-wise distribution of articles.
3. To study the Total no of contributors.
4. To study the authorship pattern of the contributors.

5. Authorship Pattern Single/ joint.
6. To study the geographical distribution of authors
7. Country wise Distribution of Authors.
8. Geographical Distribution of Contributors (Indian States).
9. To study the Lengths of articles.
10. Distribution of Year wise References.

V. RESERACH METHODLOGY

For this study, data is collected from the Asian Journal of Information Science and Technology, published during the year 2011 to 2021 have been taken up for evaluation. The details with regard to each published article, such as number of articles in each issue of the journal, number of authors, place of authors, number of references, number of pages, etc. were recorded and analyzed for making observations. The data were collected and arranged in the Excel sheet, and then tabulated for further interpretation.

VI. DATA ANALYSIS

Table I show the distribution of articles that appeared in the source journal during 2011-2021. Here it is shown that a total of 316 articles were published in 25 issues of 11 volumes. The maximum articles, i.e., 84 (26.58%) were published in 2019, followed by 55 articles (17.40%) in 2018. The lowest number of articles published was 13 (4.11%) in the year 2015.

TABLE I YEAR WISE DISTRIBUTION OF ARTICLES

Year	Vol. No.	No. of Issues	No. of Articles	Percentage
2011	1	2	23	7.279
2012	2	2	23	7.279
2013	3	2	29	9.179
2014	4	2	20	6.329
2015	5	2	13	4.113
2016	6	2	15	4.746
2017	7	2	24	7.594
2018	8	3	55	17.405
2019	9	4	84	26.582
2020	10	2	14	4.431
2021	11	2	16	5.063
Total	11	25	316	100%

Table II shows the distribution of articles (issue-wise) published in the source journal during the period 2011-2021. Here it is shown that a total of 316 articles have been published in 25 issues of 11 volumes. The maximum articles, i.e., 84 (26.58%) were published in volume number 9, followed by 55 articles (17.40%) in volume 8. The lowest number of contributions published was 13 (4.11%) in volume 5.

TABLE II ISSUE-WISE DISTRIBUTION OF ARTICLES

Year	Volume No.	No. of Issue	Number of Articles				Average Article Per Volume	
			Issue No. S1(Special Issue)	Issue No. 1	Issue No. 2	Issue No. 3		
2011	1	2		12	11		23	7.279
2012	2	2		9	14		23	7.279
2013	3	2		15	14		29	9.179
2014	4	2		11	9		20	6.329
2015	5	2		6	7		13	4.113
2016	6	2		8	7		15	4.746
2017	7	2		7	17		24	7.594
2018	8	3		15	19	21	55	17.405
2019	9	4	21	28	26	9	84	26.582
2020	10	2		7	7		14	4.431
2021	11	2		7	9		16	5.063
Total			21	125	140	30	316	100%

Table III shows the distribution of the volume-wise authorship pattern of contributions published in the source journal during the period 2011-2021. In this table, it is shown that there were 635 authors who contributed to 25 issues in 11 volumes. The maximum authors, i.e., 164 (25.82%) are found in volume number 9, followed by 108 authors (17.00%) found in volume 8. The lowest number of contributors 26 (4.094%) is recorded in volume 5.

TABLE III TOTAL NO OF CONTRIBUTORS

Year	Volume No.	No. of Issue	Number of Authors				Total Authors	Average Article Per Volume
			Issue No. 1	Issue No. 2	Issue No. 3	Issue No. S1		
2011	1	2	21	24			45	7.087
2012	2	2	21	29			50	7.878
2013	3	2	37	31			68	10.708
2014	4	2	22	19			41	6.458
2015	5	2	13	13			26	4.094
2016	6	2	15	13			28	4.409
2017	7	2	15	30			45	7.086
2018	8	3	26	39	43		108	17.007
2019	9	4	55	48	16	45	164	25.826
2020	10	2	17	14			31	4.881
2021	11	2	15	14			29	4.566
Total			257	274	59	45	635	100%

The Table IV represents the yearly and volume wise distribution of the authorship pattern. The authors were classified into five groups (i.e. single author, double author, three authors, four authors, and more than four authors). From the table, it is observed that the journal has more articles written by two authors (199) followed by a single author (62), three authors (46), and more than three authors contributed only 9 publications.

TABLE IV AUTHORSHIP PATTERN

Year	Volume No.	Number of Authors Contributed					
		Single Authors	Two Authors	Three Authors	Four Authors	Five Authors	Total
2011	15	8	10	3	2		23
2012	16	3	14	5	1		23
2013	17	2	16	10	1		29
2014	18	4	13	1	2		20
2015	19	3	8	1	1		13
2016	20	5	7	3			15
2017	21	5	17	2			24
2018	22	11	35	9			55
2019	23	17	55	11	1		84
2020	24		13			1	14
2021	25	4	11	1			16
Total		62	199(398)	46(138)	8(32)	1(5)	316(635)
%		19.620%	62.974%	14.556%	2.531%	0.316%	100%

Table V shows the contribution of the single and joint authors during the period of study. The analysis found that the maximum number of research publications published by joint authors was 573, followed by single authors who appeared 62.

TABLE V AUTHORSHIP PATTERN SINGLE/ JOINT

Sl. No.	Authors	Frequency	Percentage
1	Single	62	9.764
2	Joint	573	90.236
	Total	635	100%

Table VI shows the contribution of the India and foreign authors during the period of study. The analysis found that the maximum number of research publications published by Indian authors was 562, followed by foreign authors who appeared in73.

TABLE VI GEOGRAPHICAL DISTRIBUTION OF AUTHORS

| Year | Geographical Contribution | | Total |
	India	Foreign	
2011	42	3	45
2012	49	1	50
2013	68	-	68
2014	36	5	41
2015	21	5	26
2016	26	2	28
2017	40	5	45
2018	96	12	108
2019	148	16	164
2020	20	11	31
2021	16	13	29
Total	562	73	635
%	88.50%	11.50%	100%

Table VII represents the author's countrywide distribution. The maximum number of contributions from India is 562 (88.50%), Nigeria 51 (8.03%), Bangladesh 10 (1.57%), Sri Lanka 4 (0.63%), Kenya, Oceania, Oman, North America, South America and UAE each1 (0.16%) contributions.

TABLE VII COUNTRY WISE DISTRIBUTION OF AUTHORS

Sl. No.	Countries	Total Number of Authors	Percentage
1	India	562	88.50
2	Nigeria	51	8.03
3	Bangladesh	10	1.57
4	Sri Lanka	4	0.63
5	Thailand	2	0.31
6	Kenya	1	0.16
7	Oceania	1	0.16
8	Oman	1	0.16
9	North America	1	0.16
10	South America	1	0.16
11	UAE	1	0.16
	Total	635	100%

Table VIII shows that among the 562 contributions from Indian authors, Tamil Nadu state contributed a maximum of 57.79% (367), followed by Karnataka with 13.38% (85) and west Bengal with 4.25% (27). On the other side, Puducherry & Rajasthan possess the least contribution with 1 (0.15%) contribution each.

TABLE VIII GEOGRAPHICAL DISTRIBUTION OF CONTRIBUTORS (INDIAN STATES)

Sl. No.	Name of State	Total Number of Authors	Percentage
1	Tamil Nadu	367	57.79
2	Karnataka	85	13.38
3	West Bengal	27	4.25
4	Kerala	18	2.83
5	Uttar Pradesh	15	2.33
6	Andhra Pradesh	14	2.3
7.	Punjab	6	0.94
8	Telangana	5	0.78
9	Jammu & Kashmir	4	0.64
10	Maharashtra	4	0.64
11	Haryana	3	0.47
12	Himachal Pradesh	2	0.31
13	Meghalaya	2	0.31
14	Mizoram	2	0.31
15	New Delhi	2	0.31
16	Odisha	2	0.31
17	Uttarkhand	2	0.31
18	Puducherry	1	0.15
19	Rajasthan	1	0.15
20	Other Countries States	73	11.49
	Total	635	100%

Table IX express the length of articles which got published is uttered in number of pages. The study demonstrates that the maximum numbers of articles published during the study were having the length of 1 – 5 pages with 171 articles (54.11%). It was also found that 138 articles (43.68%) were published having the length of 6 -10 pages and 7 articles (2.21%) were published in the length of 11-15 pages.

TABLE IX LENGTHS OF ARTICLES

Sl. No	Size of Publication in Pages	No. of Publications	Percentage
1	One - Five	171	54.11
2	Six - Ten	138	43.68
3	Eleven - Fifteen	7	2.21
	Total	316	100%

Table X provides the Reference distribution pattern published in Asian Journal information Science and Technology (AJIST). The table reveals that a total of 3508 references were cited from 316 articles during the period of study, in which Vol. 9 (2019) has recorded highest number of 846 references with an average of (24.11%), followed by Vol. 8 (2018) with second highest 651 references with average (18.55%) and Vol. 1 (2011) has recorded lowest number 123 references with Average (3.50%).

TABLE X DISTRIBUTION OF YEAR WISE REFERENCES

Year	Vol.	Issue	References	Percentage
2011	1	Issue 1 & 2	123	3.50
2012	2	Issue 1 & 2	182	5.18
2013	3	Issue 1 & 2	227	6.47
2014	4	Issue 1 & 2	257	7.34
2015	5	Issue 1 & 2	145	4.13
2016	6	Issue 1 & 2	285	8.12
2017	7	Issue 1 & 2	278	7.96
2018	8	Issue 1 & 2, 3	651	18.55
2019	9	Issue 1 & 2, 3 & Special Issue 1	846	24.11
2020	10	Issue 1 & 2	265	7.55
2021	11	Issue 1 & 2	249	7.09
Total		25	3508	100%

VII. FINDINGS AND CONCLUSION

The Asian Journal of Information Science & Technology published 316 articles during the period of study, showing that there was a steady growth in contributions published from 2011 through 2021. The maximum number of contributions (84) was found to be published in the year 2019, while the minimum (13) was in the year 2015. The analysis indicated that the maximum number of research publications published by two authors was 199 (62.97%).

The study further finds that most of the contributions are from India 562 (88.50%). Among the contributions of geographical distribution, Tamil Nadu has topped the list of contributors. Out of 316 papers, 171 (54.11%) had between 1 and 5 pages. Only seven papers (2.21%) were between 11 and 15 pages in length. According to the study, 316 articles contained a total of 3508 references. The year 2019 recorded the highest number of references with 846, while 2011 has recorded the lowest number with 123 references. Additionally, more than two articles failed to provide accurate sources of information.

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