Mapping the Publication Trends of the Journal of Big Data through Bibliometric Perspectives

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Abstract: The study examines papers published in the Journal of Big Data between 2016 and 2020. Over the period, 352 articles were published in the journal. The study includes findings of year-wise distributions of articles, growth rates of publications, authors, etc. The most contributions were made in 2019 with 113, and the least was in 2016 with 26. Among 54 different countries around the world, the USA scores in 1st rank. And further, the majority of articles were contributed by three authors, with 108 articles, followed by two authors with 105 articles. Taghi M. Khoshgoftaar is the most prolific author followed by Justin Zhan and Joffrey L. Leevy. A total of 1102 authors contributed 352 articles with average productivity of 3.13%.

Keywords: Bibliometrics; Journal of Big Data; Annual Growth Rate; Authorship Pattern; Doubling Time; RGR; and Collaborative Index.

1. Introduction

The term Bibliometrics refers to statistical analyses of publications such as books, articles. It is a quantitative analysis of written communication using mathematical and statistical methods. The term Bibliometrics was coined by Alan Pritchard in his article "Statistical Bibliography or Bibliometrics?" published in 1969. The main aim of conducting bibliometric analyses is to determine the impact and productivity of an author, as well as the development and growth of specific research areas. It is a way of measuring the impact of

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scientific research on researchers, academicians, scientists, and other research institutions.

Every field of knowledge can rely upon Bibliometrics for measuring its trends of growth and development. Bibliometric analyses are highly popular for tracking citation patterns and analyzing output and the impact of scientific research. A scientific field's progress was explored through bibliometric measurements and the area is highly interdisciplinary, having implications in almost every research field.

The Journal of Big Data is an open-access journal that publishes original research articles having impact factors such as 2.501 (SNIP), 0.925 (SJR), 6.1 (CiteScore) followed by 549 Altmetric mentions. It's most cited journal among the journals on Big Data as indicated in table below:

S. No.	Journal Name	Citations
1	Journal of Big Data	2714
2	Big Data and Society	1356
3	Big Data	745
4	Big Data and Cognitive Computing	705
5	Big Data Research	668
6	Big Data Mining and Analytics	599
7	Big Earth Data	479
8	IEEE Transactions on Big Data	100

Source: (https://www.scopus.com/sources.uri)

The journal is published by the renowned publisher i.e. Springer Nature with ISSN no. 2196-1115 (electronic). The chief editors are Borko Furht and Taghi Khoshgoftaar from Florida Atlantic University, USA and the editorial board consists of the members from different parts of the world like Germany, Canada, Singapore, Italy, and so on. All articles published in the Journal are free to access without the need to register or subscribe. Articles are published related to analytics, computing, big data technologies, data capturing & its storage, and data visualization in all their forms. In 2014, this journal published its first volume. A new volume is published every year since then. There have been eight volumes published so far. This journal offers valuable information to both academics and practitioners and several databases have indexed the Journal of Big Data articles such as ESCI, Scopus, DOAJ, ProQuest, EBSCO Discover Services, etc. To guarantee long-term digital preservation, the full text of the articles is stored in digital archives and the articles published can also be accessed by SpringerOpen on SpringerLink.

Big data is an emerging concept gaining popularity in the field of LIS or Data Science that has developed the interest of scholars to work upon. The journal is

chosen to study as the journal is one of the most renowned journals in the field. The study will be a torchbearer for the scholars working upon it and definitely, it'll be helpful for the scholars working on Big Data and bibliometric measures.

2. Review of Related Literature

A literature review of related works has been conducted to gain in-depth knowledge on the same areas. For instance, *Hazarika (2021)* reviewed the articles published in the DESIDOC Journal of Library and Information Technology between 2011 and 2020 and found that across all issues of the journal, 588 articles were published. The majority of articles were published in 2012 with 70 in no., and the least was published in 2016 with 51. Authorship patterns indicate that two authors have authored the most publications (265, or 45.06%). Among the most prolific authors was Dr. B.M. Gupta from India. *Jawwad, Soroya, and Ahmad (2021)* directed a study for mapping the research trends of the Journal of Social Sciences and Humanities (JSSH). A total no. of 378 articles was retrieved out of a total of 27 volumes. Analysis of the JSSH covers the number of articles by year, the content of each article, the number of references per article, the average length of papers, etc. According to *Kumar (2020),* the Journal of Indian Library Association had published 148 articles between 2015 and 2020. Based on his review of 148 articles, he found that the year 2020 was the most active with 56 publications. The findings reveal that India contributed 99.61% followed by Iran with 0.39%. The maximum number of contributors was from Karnataka (India) with 45 authors. *Kumar et al. (2021)* conducted a bibliometric study of published literature on media literacy by Springerlink Database between 2011 and 2020. The study reveals that maximum literature was published in the year 2020 (468) while the lowest was in 2011 (158). Most of the articles (54) were published in the Sex Roles Journal. Maximum contributions were made by a single –author with 45.29% (1274 articles). Based on the geographic distribution of literature among 78 countries, the USA leads in 1st rank with 615 publications (21.86%). *Garg, Lamba, and Singh (2020)* conducted a thorough study of the DESIDOC Journal of Library and Information Technology (1992-2019). In the years 2012-2015, most articles were published. Based on the geographical distribution of articles, India placed in 1st rank with contributions of 86.1 %. The total output of 39 countries was 1698 articles. B.M Gupta from India contributed the maximum number of papers (42). Out of 1698 articles, 248 were not cited at all, the rest got citations of 15,538. *Chander, Singh, and Shukla (2018)* analyze the Library and Information Science (LIS) journals (1912-2016) published in India. There have been 196 journals published in the past 11 decades. The majority of the journals (85, 43.37%) appeared from 2000 to 2016, while the fewest (1, 0.51%) appeared from 1920 to 1909. Delhi had the highest publications with 45 (22.96%) followed by Kolkata (9.18 %) and Chennai (7.14). The Indian Citation Index covers the most LIS journals with 18 (9.18%). *Das (2016)* examined bibliometric data in the Journal of Chemical Sciences (1987-1996), in which there were 717 articles published. According to the study, the most articles were published in 1993 with 177 in no., while the fewest in 1994 with 21. The

contributions of the two authors were 272 articles (27.20%) which was the highest number of publications followed by three authors with 253 articles (25.98%). Between 1987 and 1996, the Journal of Chemical Sciences published 717 articles. Of these, 118 articles had contributed by a single author and the rest by multiple authors.

3. Scope & Objectives of the Study

The scope of this study is limited to assessing articles published in the Journal of Big Data. The present study covers five-year publications between 2016 and 2020. There are five volumes in total, published over five years with one volume per year. And to accomplish the research aim, the following objectives were formulated for the study:

1) To identify the year-wise distribution of articles published in the journal;
2) To determine the Annual Growth Rate (AGR), Compound Growth Rate (CAGR), Relative Growth Rate (RGR), and Doubling Time (DT) of the articles;
3) To evaluate the authorship pattern of articles, co-authorship pattern along with Degree of Collaboration, Collaborative Index and Collaborative Co-efficient;
4) To evaluate the Author Productivity, Citation, Altmetric and Access Pattern followed by the geographical distribution of articles; and
5) To identify the most prominent institutions and most prolific authors among different research institutions and researchers.

4. Methodology

The present study conducted a bibliometric analysis of the literature published in the Journal of Big Data from 2016 to 2020. The literature and data relevant to this particular research have been gathered from https://journalofbigdata.springeropen.com/. A total of 352 articles have been retrieved from the websites. The collected data were recorded in MS-Excel Sheet and has been systematically analyzed and interpreted and has been presented in the form of tables and graphs by using MS- Excel. The authorship pattern, citation and altmetric pattern, and country-wise distribution of literature, etc. have been presented through study. In addition, different formulas given below with text of tables have been used to calculate Annual Growth Rate (AGR), Cumulative Growth Rate (CGR), Compound Annual Growth Rate (CAGR) Relative Growth Rate (RGR), Doubling Time of literature followed by the indicators such as degree of collaboration; collaboration coefficient; and collaborative index and presented.

5. Data Analysis and Interpretation

Year-wise Literature

Table 1: Year-wise distribution of articles from 2016-2020

Year	Volume	Total no. of Articles	Cumulative total of articles	Percentage	Cumulative %
2016	3	26	26	7.38	7.38
2017	4	49	75	13.92	21.30
2018	5	53	128	15.06	36.36
2019	6	113	241	32.11	68.47
2020	7	111	352	31.53	100
	Total	**352**			

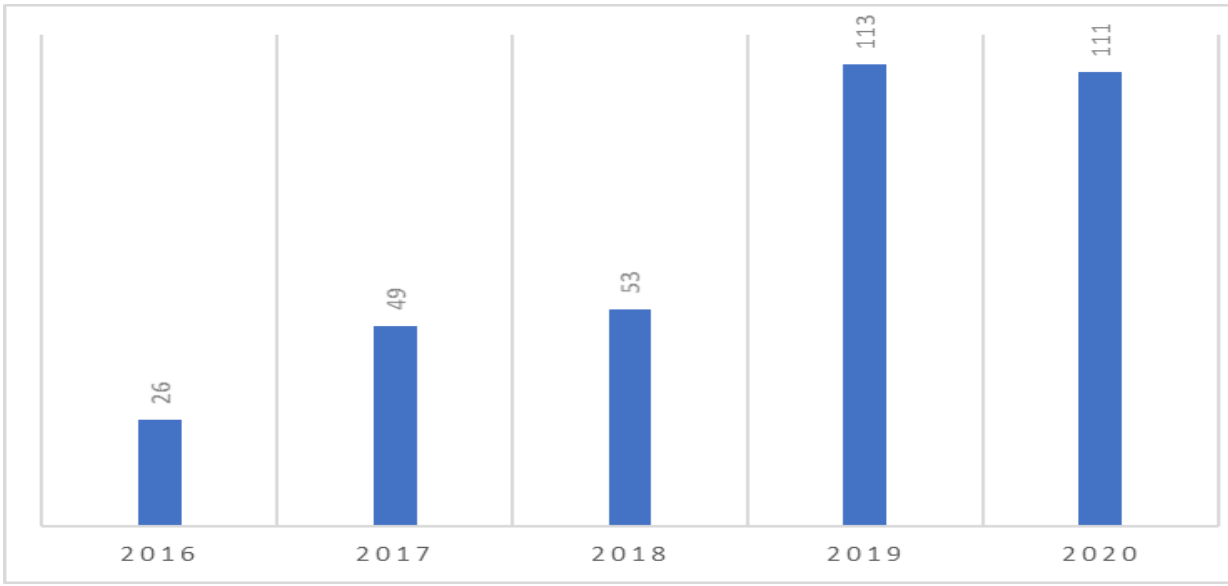

Fig. 1: Year-wise Literature Published

Table 1 and Fig. 1 show the year-wise distribution of articles published in the Journal of Big Data from 2016 to 2020. A total of 352 articles were published in the journal by researchers from around the world. During the timeframe, there were a total of 5 volumes (volumes 3, 4, 5, 6, and 7) published one volume each year. 2019 had the highest number of publications (113), followed by 2020 (111 articles). The year 2016 had the least percentage of published literature with 7.38 %.

Annual Growth Rate of Publications

Table 2: Annual Growth Rate (AGR) of Publications

Year	Literature (in no.)	Cumulative growth	AGR (Annual growth rate)
2016	26	26	-
2017	49	75	88.46
2018	53	128	8.16
2019	113	241	113.21
2020	111	352	-1.76

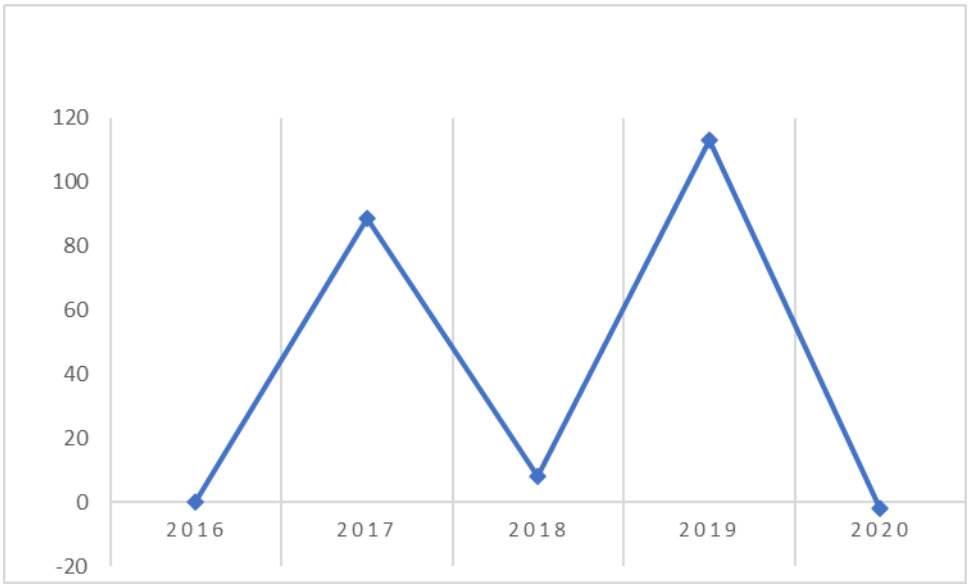

Fig 2: Annual Growth Rate of Publication

Table 2 and Fig. 2 present the annual growth rate of publication of the Journal of Big Data. According to the table, the year 2019 was the most significant growth year with 113.21 followed by 2017 with 88.46 growth rates. 2020 has the lowest annual growth rate with -1.76.

The annual growth rate is calculated by using the formula by Kumar and Kaliyaperumal (2015),

$$AGR = \frac{\text{end value - first value}}{\text{first value}} \times 100$$

Compound Annual Growth Rate (CAGR):

Table 3: Compound Annual Growth Rate (CAGR)

Year	Literature (in no.)	Cumulative growth	CAGR
2016	26	26	-
2017	49	75	53.06
2018	53	128	55.40
2019	113	241	28.71
2020	111	352	33.44

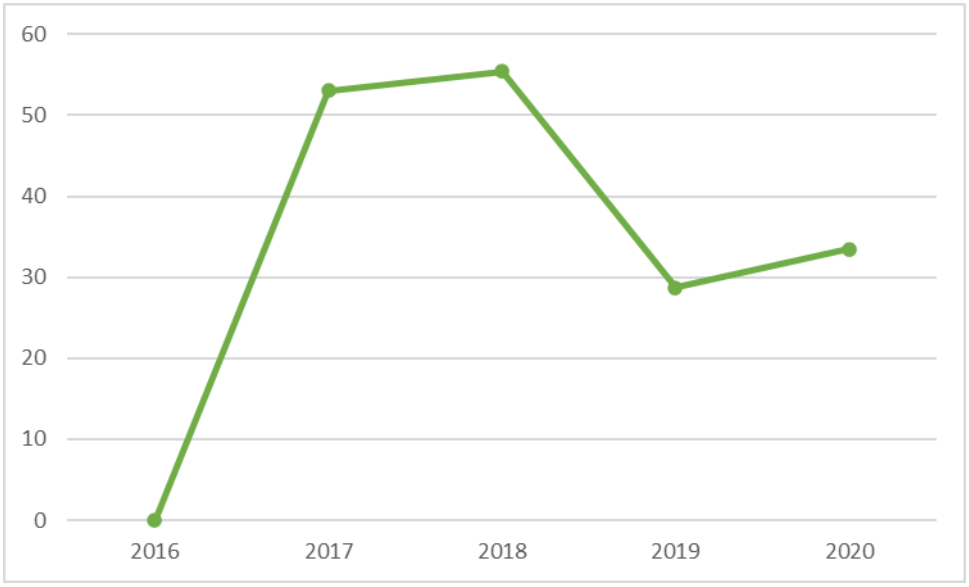

Fig. 3: Compound Annual Growth Rate (CAGR)

It is observed from Table & figure no. 3 that 2018 had the highest compound annual growth rate of 55.40, while 2019 had the lowest at 28.71. The formula given by Kumar and Kaliyaperumal (2015) was used to derive the compound annual growth rate (CAGR) of the literature published in the Journal of Big Data during the year 2016 to 2020.

$$CAGR = \left\{ \frac{\text{end value}}{\text{first value}} \right\}^{(1/\#\text{of years})} - 1$$

Relative growth rate (RGR) and Double Timing (DT)

To derive the relative growth rate, we used the following formula given by Mahapatra's RGR and Doubling Time (DT) model (1985)

RGR= $W2-W1\ /T2-T1$
Where,

- RGR is the growth rate over a given time interval
- W1 is the loge of the interval
- W2 = Log (natural log of the final number of contributions)
- T1 is the initial time unit
- T2 is the final time unit

.

Table 4: Relative growth rate (RGR) and Doubling Time (DT)

Year	Literature (in no.)	Cumulative growth	W_1	W_2	RGR	DT
2016	26	26	-	3.25809	-	-
2017	49	75	3.25809	4.31748	1.05939	0.65415
2018	53	128	4.31748	4.85203	0.53455	1.29641
2019	113	241	4.85203	5.48479	0.63276	1.09520
2020	111	352	5.48479	5.86363	0.37884	1.82926

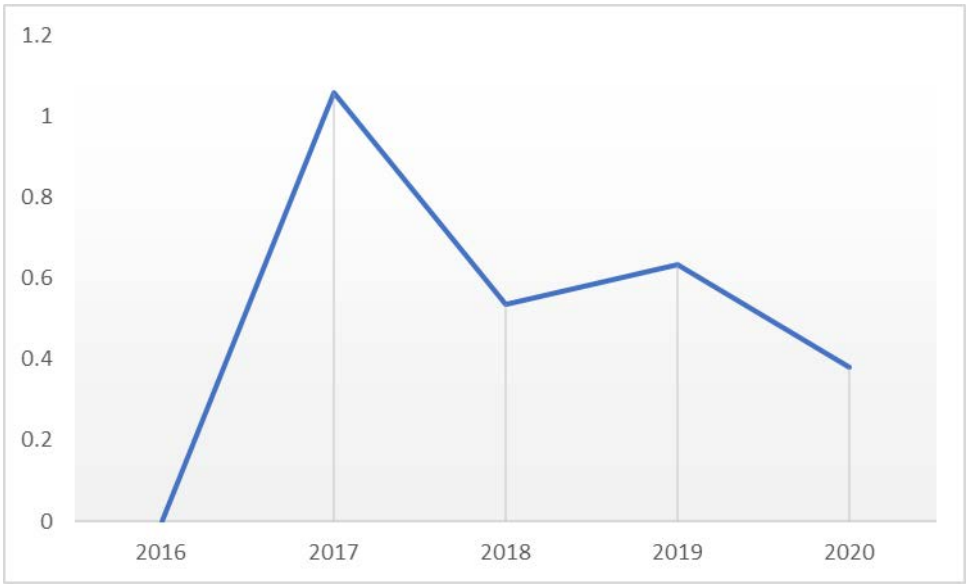

Fig. 4: Relative growth rate (RGR)

Figure 4 and Table 4 show the relative growth rate (RGR) and the doubling time (DT) of the journal's published literature between 2016 and 2020. This figure shows that the RGR has gradually decreased from 1.05039 (2017) to 0.37884 (2020) while the doubling time has increased exponentially from 0.65415

(2017) to 1.82926 in 2020. It is apparent from the table that both RGR and DT coincide directly with each other. RGR decreases as cumulative increases, whereas DT increases.

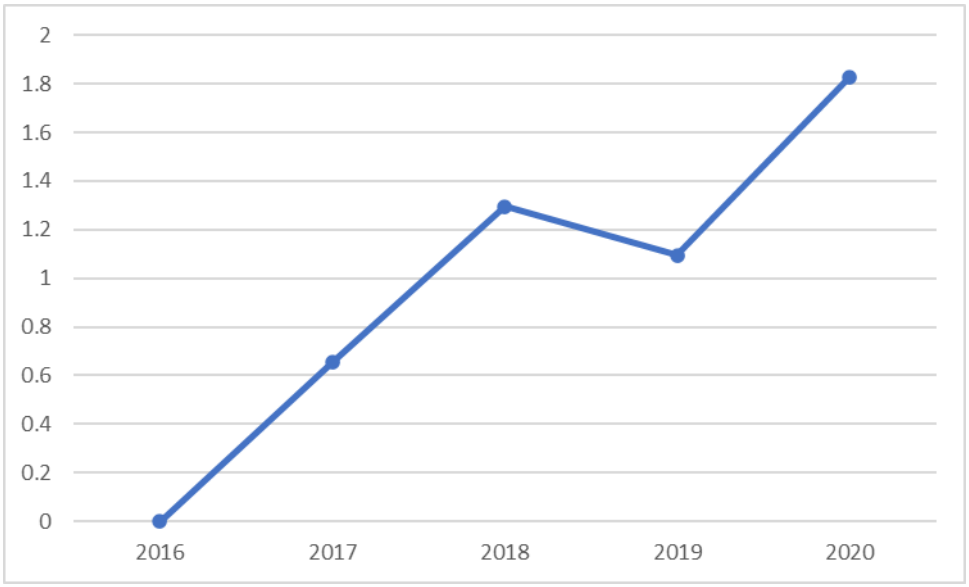

Fig. 5: Doubling Time (DT)

To calculate Doubling Time (DT), we used the formula DT=0.693/R, where R is the relative growth rate. Every year doubling time has been increased. Each year doubling time has been increased. 2020 had the highest DT (1.82926) while 2017 had the lowest (0.65415), it's represented through table 4 and figure 5.

Authorship Pattern

Table 5: Authorship Pattern

S.N.	Authorship Pattern	No. of Items	Percentage	Rank
1	Single Author	34	9.65	4
2	Two Authors	105	29.82	2

3	Three Authors	108	30.68	1
4	Four Authors	54	15.34	3
5	Five Authors	25	7.10	5
6	More than Five Authors	26	7.38	6
	Total	**352**		

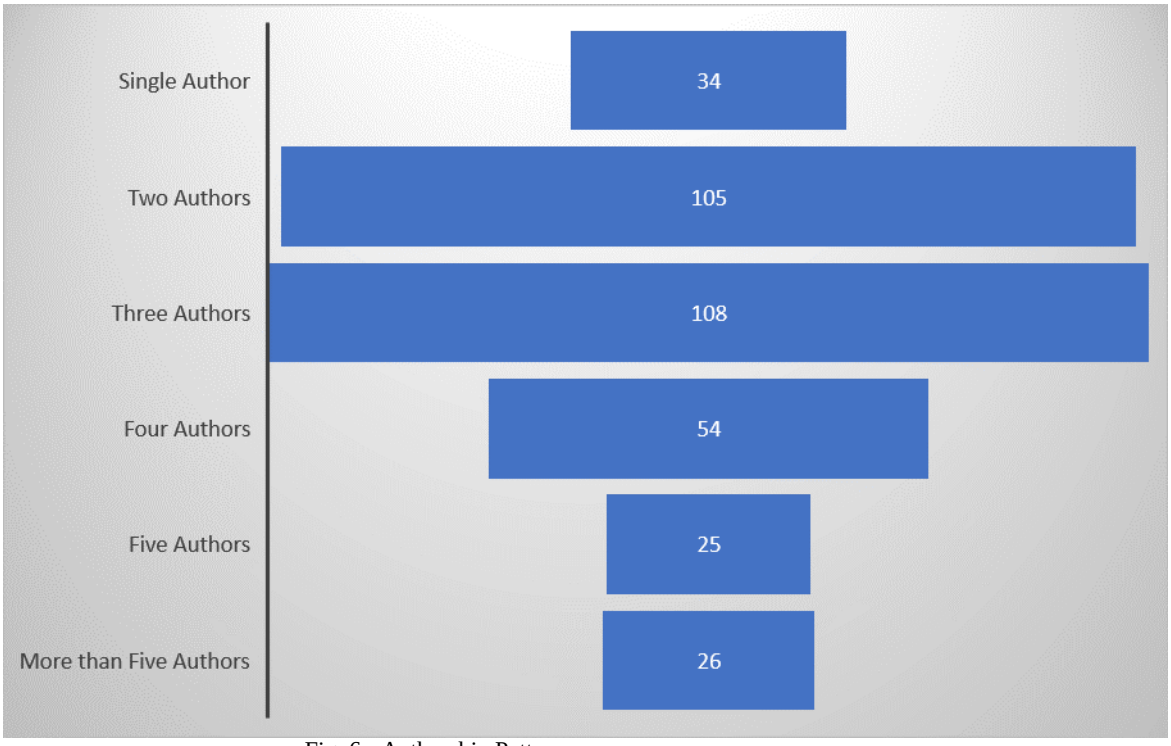

Fig. 6 - Authorship Pattern

The aim of table 5 and Fig. 6 is to provide information about the authorship pattern associated with the literature published in the Journal of Big Data. According to the data, it is found that most of the literature was contributed by three authors with 108 articles (30.68%), followed by two authors with 105 articles (29.82%). The papers contributed by single authors total only 34 (9.65%). More than three authors have contributed to 105 (29.82) articles.

Co-Authorship Pattern

Table 6: Co-Authorship Pattern

Year	Total	1	2	3	4	5	5<	DC	CI	CC

		(Author)								
2016	26	4	7	8	6	1	-	0.84	2.73	0.55
2017	49	3	19	14	6	5	2	0.93	2.93	0.60
2018	53	5	19	14	9	4	2	0.91	2.88	0.58
2019	113	12	28	39	15	11	8	0.89	3.07	0.59
2020	111	10	32	33	18	4	14	0.91	3.14	0.60
Total	**352**	**34**	**105**	**108**	**54**	**25**	**26**	**0.90**	**2.88**	**0.59**

Degree of Collaboration (DC): To calculate the degree of collaboration, the formula given by (Subramanyam, 1983) was adopted:

$$C = \frac{N_m}{N_m + N_s}$$

Here, Nm denotes the number of publications that have multiple authors; Ns denote a publication with one author.

From Table 6, we can see a range of cooperation degrees from 0.84 to 0.90. The table shows that 34 publications were written by one author and 318 articles were collaboratively written. In 2017, the collaboration level was the highest at 0.93 and the lowest (0.84) in 2016. The years 2018 and 2020 had the same score of collaboration of 0.91.

Collaborative Index (CI): To calculate the collaborative index, the formula given by Lawani (1986) was used:

$$CI = \sum \frac{A}{f} = \frac{1/fi}{N}$$

Where f1, f2, f3.. are the number of authors, N' denotes the number of publications in that year

Based on the findings, the year 2020 has the highest collaborative index of 3.14, and the year 2016 has the lowest (2.73). Collaboration scores increased from 2.73 (2016) to 3.14 in 2020. Based on co-authorship patterns, the total collaborative index is 2.88.

Collaboration Coefficient (CC): The following formula was used for calculation (Savanur & Srikanth, 2010):

$$CC = 1 - \frac{\sum_{j=1}^{k} \left(\frac{1}{j}\right) f_j}{N}$$

- Where J = Authorship in an article;

- FJ= Number of j authored articles;
- K= the greatest no. of authors per paper, and
- N= Total number of articles published in a year.

The results indicate that both 2017 and 2020 had a collaboration coefficient of 0.60, which is the highest score, followed by 0.59 (2019). The total collaboration coefficient score during the year 2016-2020 is 0.59. The collaborative coefficient was lowest in 2016 (0.55).

Author Productivity

Presented below are table and figure 7 showing the author(s) productivity followed by average authorship. Throughout the period from 2016 to 2020, a total of 352 articles were published with an average of 3.13 authors per paper. The productivity rate per author is 0.31. 2020 had the highest average author per paper with 3.29. The year 2016 had the highest productivity with 0.36.
The average author per paper and productivity per author is calculated by using the following method:

1) Average author per paper = No. of authors / No. of papers.
2) Productivity per author = No. of Papers/No. of authors.

Table 7: Author productivity

Year	Total no. of Papers	Total no. of Authors	Average Author per Paper	Productivity per Author
2016	26	71	2.73	0.36
2017	49	147	3	0.34
2018	53	157	2.96	0.33
2019	113	361	3.19	0.31
2020	111	366	3.29	0.30
Total	**352**	**1102**	**3.13**	**0.31**

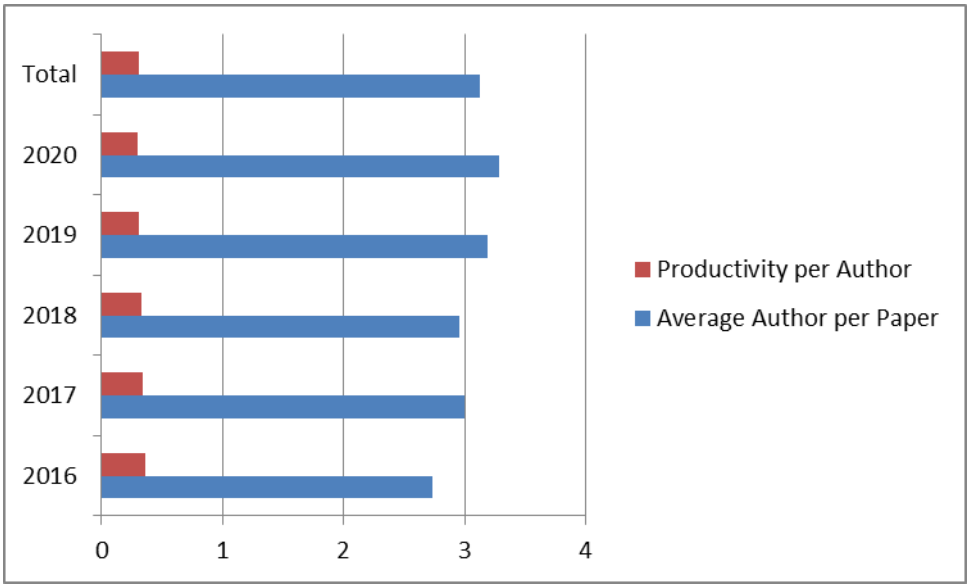

Fig 7: Author productivity

Citation Pattern

Table 8: Citation pattern

S.N	No. of Citation	No. of Items	Percentage	Rank
1	0-10	249	70.73	1
2	11-20	56	15.91	2
3	21-30	20	5.68	4
4	Above 30	27	7.67	3
	Total	**352**		

An analysis of journal citation patterns is provided in above table 8. 70.73% of articles had fewer than 10 citations, 15.91 percent had between 11 and 20, 5.68 percent had between 21 and 30, and only 7.67 percent of publications had more than 30 citations.

Altmetric Pattern

Table 9: Altmetric Pattern

S.N.	No. of Altmetric	No. of Items	Percentage	Rank
1	0-10	316	89.77	1
2	11-20	15	4.26	2
3	21-30	8	2.27	4
4	Above 30	13	3.69	3

Total	**352**	

Based on the altmetric pattern of the literature, it is evident from Table 9 that 0-10 had the maximum contributions with 89.77%, 11-20 had 4.26 %, and in between 21-30, only 2.27% were included. Above 30, only 3.69% were included.

Accessed Pattern

Table 10: Accessed Pattern

S.N.	No. of Times Accessed	No. of Items	Percentage	Rank
1	0-5000	213	60.51	1
2	5001-10,000	79	22.44	2
3	10,001-15,000	26	7.38	3
4	15,001-20,000	11	3.12	5
5	Above 20,000	23	6.53	4
	Total	**352**		

Table 10 displays the access pattern of the journal's literature from 2016 to 2020. 352 articles were found in the journal, of which 213 (60.51%) were accessed between 0-5000 times and 79 (22.44%) between 5001-10000 times. Approximately 26 (7.38%) articles were accessed between 10,000 and 15,000 times, 11 (3.12%) between 15001 and 20,000 times, and 23 (6.53%) above 20,000 times.

Geographic Distribution of Literature

Table 11: Geographic Distribution of Literature

S. N	Country	No. of Articles	Percentage	Rank
1	USA	80	19.65	1
2	India	38	9.34	2
3	Iran	24	5.89	3
4	Morocco	23	5.65	4
5	Indonesia	20	4.91	5
6	UK	18	4.42	6
7	Italy	18	4.42	6
8	Australia	17	4.17	7
9	Syria	12	2.94	8
10	Russia	11	2.71	9
11	Canada	9	2.21	10

12	China	8	1.96	11
13	Ethiopia	8	1.96	11
14	Finland	7	1.72	12
15	Malaysia	7	1.72	12
16	Germany	6	1.47	13
17	Japan	6	1.47	13
18	Nigeria	6	1.47	13
19	Greece	5	1.23	14
20	Norway	5	1.23	14
21	Switzerland	5	1.23	14
22	Saudi Arabia	5	1.23	14
23	Yemen	5	1.23	14
24	South Africa	4	0.98	15
25	Sweden	4	0.98	15
26	Qatar	4	0.98	15
27	Egypt	3	0.73	16
28	Ghana	3	0.73	16
29	The Netherlands	3	0.73	16
30	Spain	3	0.73	16
31	South Korea	3	0.73	16
32	New Zealand	3	0.73	16
33	Poland	3	0.73	16
34	UAE	3	0.73	16
35	Belgium	2	0.49	17
36	Vietnam	2	0.49	17
37	France	2	0.49	17
38	Israel	2	0.49	17
39	Ireland	2	0.49	17
40	Mexico	2	0.49	17
41	Portugal	2	0.49	17
42	Austria	1	0.24	18
43	Iraq	1	0.24	18
44	Taiwan	1	0.24	18
45	Thailand	1	0.24	18
46	Denmark	1	0.24	18

47	Lebanon	1	0.24	18
48	Brazil	1	0.24	18
49	Jordan	1	0.24	18
50	Pakistan	1	0.24	18
51	Serbia	1	0.24	18
52	Colombia	1	0.24	18
53	Tunisia	1	0.24	18
54	Bangladesh	1	0.24	18
55	Uganda	1	0.24	18
	Total	**407**		

As shown in Table 11, the Journal of Big Data distributes literature among different countries. As a result, the USA ranked first with the most articles written 80 (19.65%). India followed with 38 (9.34%) articles and Iran with 24 (5.89%) articles. With only one article each, 14 countries have the fewest articles out of 55 countries.

Most Productive Institutions

Below is a table with a list of the ten most prestigious institutions for the Journal of Big Data. According to the study, The Florida Atlantic University, USA had the most publications (30). The Higher Institute for Applied Sciences and Technology, Syria had the second-highest publications with 11, and Islamic Azad University, Iran secured the third position with 9 publications. Bina Nusantara University, Indonesia, and Sidi Mohammed Ben Abdellah University, Morocco had 5 publications each.

Table 12: Most Productive Institutions

S.N.	Institution	Country	No. of Publication
1	Florida Atlantic University	USA	30
2	Higher Institute for Applied Sciences and Technology	Syria	11
3	Islamic Azad University	Iran	9
4	University of Nevada, Las Vegas	USA	8
5	University of Indonesia	Indonesia	7
6	Sharif University of Technology	Iran	6
7	South Ural State University	Russia	6
8	Swinburne University of Technology	Australia	6
9	Bina Nusantara University	Indonesia	5
10	Sidi Mohamed Ben Abdellah University	Morocco	5

Most Prolific Authors

Table 13: Most Prolific Authors

S. No.	Author Name	Publications (In No)	Institution Name	Country
1	Taghi M. Khoshgoftaar	22	Florida Atlantic University	USA
2	Justin Zhan	8	University of Nevada, Las Vegas	USA
3	Joffrey L. Leevy	7	Florida Atlantic University	USA
4	Richard A. Bauder	6	Florida Atlantic University	USA
5	Ankur Agarwal	5	Florida Atlantic University	USA
6	Iqbal H. Sarker	5	Swinburne University of Technology	Australia
7	Durga Toshniwal	3	IIT, Roorkee	India
8	Widodo Budiharto	3	Bina Nusantara University	Indonesia
9	KadanAljoumaa	3	Higher Institute for Applied Science and Technology	Syria
10	Assef Jafar	3	Higher Institute for Applied Science and Technology	Syria

Table 13 shows the most prolific authors who published the maximum number of articles in the Journal of Big Data (2016-2020). Taghi M. Khoshgoftaar from Florida Atlantic University, USA contributed the highest number (22) of publications, followed by Justin Zhan (8) from the University of Nevada, Las Vegas, the USA, and Joffrey L. Leevy (6) from Florida Atlantic University, USA.

7. Findings and Discussion

From the study, several findings can be seen such as (i) It is found that a total of 352 articles published in the Journal of Big Data during the timeframe that shows the interest of scholars; (ii) The journal has a total of 6 volumes, publishing one volume each year. The maximum articles appear in volume 6 (113), whereas volume 3 has the least number of publications with 26; (iii) It is the year 2019 that has the highest number of articles (113) and the fastest annual growth rate with 113.21; (iv) 2017 recorded the highest relative growth rate, 1.05939, and 2020 recorded the lowest relative growth rate, 0.37884. From 2017 (0.65415) to 2020 (1.82926), the doubling time has been increased; (v) Based on the Authorship Pattern, the majority of the articles (108 out of 352) were

contributed by three authors, followed by two authors (105), and four authors (54); (vi) The Degree of collaboration was the highest in 2017 at 0.93 and the lowest was 0.84 in 2016. The year 2020 was found to have the highest collaborative index with 3.14 and the year 2016 at the lowest; (vii) It is found that the years 2017 and 2020 had a collaboration coefficient of 0.60, which is the highest score for five years, followed by 0.59 (2019). The total collaboration coefficient score during the year 2016-2020 is found 0.59. And further, the collaborative coefficient was lowest in 2016 (0.55); (viii) In the years 2016 to 2020, the average number of authors per article is found 3.13. With an average of 3.29 authors per publication, 2020 had the highest average number. The productivity rate per author was highest in 2016 with 0.36; (ix) The USA had the highest number of publications out of 55 countries, with 80 articles published. India leads in second place; (x) The Florida Atlantic University, USA had the most publications with 30, followed by Higher Institute for Applied Sciences and Technology, Syria, with 11; (xi) It is found that the maximum number of authors in the journal is from the USA; and (xii) The most prolific author of this period was Taghi M. Khoshgoftaar from Florida Atlantic University, USA. And further, after going through the trend of the literature published, it can be concluded that more and more research must be conducted on the concept for better understanding about the concept.

8. Conclusion

Journal of Big Data is an open-access publication that publishes original research articles on analytics, computing, big data technologies, data capturing & its storage, and data visualization in all their forms. Researchers from all over the world have published numerous articles about various topics in this journal. The Journal of Big Data has published 352 articles throughout the study period with a total of 1102 authors. 2014 marks the launch of The Journal of Big Data. As of 2021, there are a total of 8 volumes, published one per year. During the study period, the number of publications in the Journal of Big Data increased from 26 articles in 2016 to 111 articles in 2020. The study aimed to discover the average growth rates of articles, the most prolific authors, the year-wise distribution of articles, etc. of the Journal of Big Data. In short, it can be concluded that the concept of Big Data has emerged as a research area in which scholars are supposed to take a keen interest in the betterment of the discipline.

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