JOURNAL OF INFORMATION SYSTEM AND TECHNOLOGY MANAGEMENT (2018-2022): A BIBLIOMETRIC STUDY

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ABSTRACT

A quantitative assessment of publications using mathematical and statistical methods is called bibliometric. The articles published in the Journal of Information Systems and Technology Management (JISTEM) during the years of 2018 and 2022 were the subject of the current investigation. The journal of information systems and technology management's status and development patterns are examined in this essay using the bibliometric technique. Data for the years 2018 through 2022 have been gathered by downloading the journal's website's contents. The research primarily looks at how articles are distributed by year, authorship patterns, and productivity of writers, prolific authors, thematic mapping, and article length, among other things. This research examined 53 articles in total. With 35 total papers published, or 55.38 percent of the total, Brazil was the most productive publishing nation. The most no. of articles that was published was in 2022 i.e. 12 articles with 25% of the total publication.

1. INTRODUCTION

The most important source of information about new ideas in any discipline, as well as written accounts of original research and development, descriptions of future approaches, or interpretations of current themes and concepts, is journals. They are intended to serve as the main venues for the publication of papers on the theory and methods of a discipline as well as the main channel for disseminating significant findings from that field's research. Research trends in the fields can be correctly represented by a publication that covers the entire academic subject and is released on a regular basis by a respectable institution. In the subject of library and information science, bibliometric trends are the most popular techniques, but they also have a wide variety of applications in all other fields.

2. REVIEW OF LITERATURE

Prakash et. Al (2022) depicts that the goal of this research is to provide an overview of significant research trends in the lean six sigma domain that have been published in the (IJLSS) since it commences. Using the bibliometric patterns, the study looks at publications published in IJLSS between 2010 and 2019. The outputs of the data analysis reveal the journal's most productive writers, as well as their affiliations, citation design, and highly referenced publications. In furthermore, the inquiry is enriched by a data presentation of the corpus that includes bibliographic coupling and co-citation analysis. As per the aftermath of the bibliometric research, the number of IJLSS articles and citations has boomed significantly over time. The amount of organisational diversity and collaboration among IJLSS writers is expanding. The most prevalent research designs in publications are the case study and focus group. A total in three significant topics emerged from the research: business adoption of lean, integration of lean and six sigma, and business consequences of lean six sigma.

Mokhtari et. Al (2021) discussed in their study of the bibliometric analysis of JDoc a journal on the library and info. Science field for the tenure from 1945 to 2018. A total of 2056 papers were published during this time. Ms Excel was used for the analyzation of the document. Increase in published papers and reappearance of citation were noticed. The authors who published papers in this journal were renowned in the library science field. The contribution of the uprising countries and their institutes were less in his journal. To represent the outcomes of this study was presented through different tables, graphs, and unique pattern of figures which represent the aftermath of the research.

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Obong & Essien et. Al (2021) found that various bibliometric journal studies on education have been conducted, none has been conducted on the Publication of (JHEM), which is the leading journal for university admin. Aftermath, in the context of bibliometric analysis of specific journals, this study is an attempt to fill that vacuum. The goal of such a bibliometric study was to look at the publishing features and trends of 'JHEM' over the course of eight years, from '2007 to 2016'. This study looked at the following bibliometric measures: (a) 'article productivity', (b) 'author productivity', (c) 'degree of author collaboration', (d) 'core author listings', (e) 'author affiliations by institution and nation', (e) 'categories of sources mentioned by researchers' (i) 'to identify the sorts of sources referenced by authors in "JHEM", (f) 'timeliness of sources cited by researchers', (g) 'rank list of frequently cited journal titles', and (h) 'rank list of frequently cited authors'. During the research period, there were in total of '83' papers. The number of articles written by a single author was '54' percent. With 27 citations, the Journal of Higher Education was the most cited journal. Furthermore, the data indicated that journal had a poor self-citation rate. According to the findings, it needs to expand its indexed databases in order to boots up the availability and usability of the journal.

Vellaichamy (2021) discussed that the research uses bibliometric tools to examine publications published in the Journal of Advances in Library and Information Science (JALIS) from 2016 to 2020. (5 years). The research looks at the number of publications, the degree of collaboration, the authorship structure of the articles, and the distribution of references. According to the findings, the year 2017 had the largest number of papers published, followed by 2016. The degree of collaboration varies between 0.70 and 0.78, with a mean of 0.74. According to the data, 431 authors contributed to 243 publications, with an average of 0.53 percent per author and the bulk of articles written by joint authors. Bibliometrics/Scientometrics and Electronic Resources ranked first and second, respectively, in terms of the number of articles submitted.

Usman & Ewulum (2019) in their study organised on a journal name JAIST to work upon different objectives, that includes as fruitfulness of JAIST, to analyse the productiveness on the topographic zones of Nigeria, topic covered in the journal, productive author etc. The total no. of issue published during the period of 2007-2011 was eleven. The study was designed and presented in tabulation and scattered plot area. Outcome of the whole study shows that the total no. of article that was published during these 11 years of tenure was 182 (one eighty-two). The patterns of the authors were mostly collective, highest rate was of two authors' i.e. 37.7% and lowest of five author's i.e. 4%. As per the topographic zones in Nigeria it reflects those 3 zones out of 6 zones have the strong hold on the geo patterns behaviour and also reflect that there is very little or pinch of international occupancy. Talking of the most prolific institute there are in total 6 institute with highest rate of (30.02%) is University of Nigeria and lower to (6%) of Federal University of Petroleum Resources. The whole research depicts that the Nigeria LIS literature is on the development phase but with minute international invasion, so the Nigerian LIS educators and researchers have to come up with international level literature so that they can build there LIS literature into the world.

Verma et. al (2015) in their bibliometric study was designed on one of the libraries electronic journals for the period of ten years, 2005 to 2014. During this period 1177 articles were published in this journal, with the study of the article the author found that 117 article were published annually. This study work upon different bibliometric objectives as like the sequential development of the literary text, author design, topographical fruitfulness these are some of the objectives of the study. Tabulation, graphs, pie charts is used to show case the result. Some of the major findings of the study is that 2011 is the year with highest number of publish articles with 16.08%, and low with 3% in 2006, and words for author design highest publish articles was of single author, continued with second author and three author respectively. This journal is getting into the notice of international authors after 2005 before that it has only recognition in its native country (u.s.a). As a result, articles publishing rate is increased in the journals.

Hussain & Fatima (2011) found in their study focused on the analysis of IFLA journal for a time span of five years that is 2006-2010. The study displays different objectives as author pattern of the paper, avg. no. of reference per paper, etc. In total 129 articles of 20 issues of the journal were selected for

the study. As annually distribution of the articles maximum no. of articles was published in the year 2006 that total of 33(25.58%) articles.

Mahapatra (n.d.) in his study found that the number of citations varies from one article to the next. The number of citations and the sort of citations disclose numerous aspects of the subject, such as the nature of publications, the breadth of access, and the use of documents in a certain country. In social science, books and journals are the most often mentioned documents among the various categories of materials. Earle and Vickery compared the form of citations in social science to those in science and technology, finding that books were mentioned more frequently (46%) in social science than journals (29 per cent). A lot of studies on the types of documents mentioned by Indian social scientists have been done. Rana looked at the types of materials mentioned by Indian anthropologists and found that books accounted for 51.68 percent of the total citations, while journals accounted for 33.20 percent. Singh discovered that books were used 45.62 percent of the time in four social science disciplines (economics, political science, psychology, and sociology), whereas journals were only 38.7% of the time. As a result, books were acknowledged more frequently in social science. Kundu looked into the peculiarities of Indian Library scientists' referenced literature. He looked at a single publication, Annals of Library Science and Documentation, from 1954 to 1975, and found that book and journal citations were virtually evenly distributed (37.1 percent books and 37.0 percent journals).

3. OBJECTIVES OF THE STUDY

   i. To examine the journal's article publication distribution by year;
   ii. To determine the greatest number of author's connection;
  iii. To depict the length of the article published;
  iv. Find out the country wise distribution of the article published.

4. SCOPE OF THE STUDY

The current study's focus is confined to examining the publishing patterns of the Journal of Information Systems and Technology Management, an online journal of library and information science. The time frame from 2018 to 2022 is also constrained to five years.

5. METHODOLOGY

The data for the present study consisted of contributions published in JOURNAL OF INFORMATION SYSTEM AND TECHONOLOGY MANAGEMENT (JISTEM). The data for the study is taken from the journal itself. The article is published online. The information with regards to each paper published such as title, no. of authors, affiliation country, subject category, language of the article will be noted in excel sheets. The data will be subsequently analyzed to meet the objectives mentioned above.

6. DATA ANALYSIS & INTERPRETATION

Table 6.1: Country-Wise Rank

Sr. No.	Country	No.	%	Rank
1	Brazil	36	55.38462	1
2	Argentina	1	1.538462	8
3	Australia	2	3.076923	5
4	Cuba	2	3.076923	5
5	Denmark	1	1.538462	6
6	India	5	7.692308	3
7	Jordan	1	1.538462	5
8	Malaysia	1	1.538462	5
9	Mali	1	1.538462	5
10	Palestinian	1	1.538462	5
11	Portugal	4	6.153846	3

12	Spain	1	1.538462	4
13	Sweden	2	3.076923	3
14	USA	7	10.76923	2
Total		**65**	**100**	

According to a study of the geographical distribution of JISTEM papers for the years 2018 through 2022 (Table 6.1 and Figure 6.1), 53 articles were submitted by writers from 14 different countries. The country with the most papers published during the research period is Brazil, where 36 articles, or 55.38 percent of all articles, hold the position of rank 1. With seven papers, the USA published the second-most articles (10.76 percent). With a total of 5 articles, or 7.69% of the total in this publication, INDIA was also a contributor. Other nations that made contributions were Argentina, Australia, Cuba, Malaysia, and others. As a result, it was discovered that the majority of the papers in the current research were written by Brazilian authors.
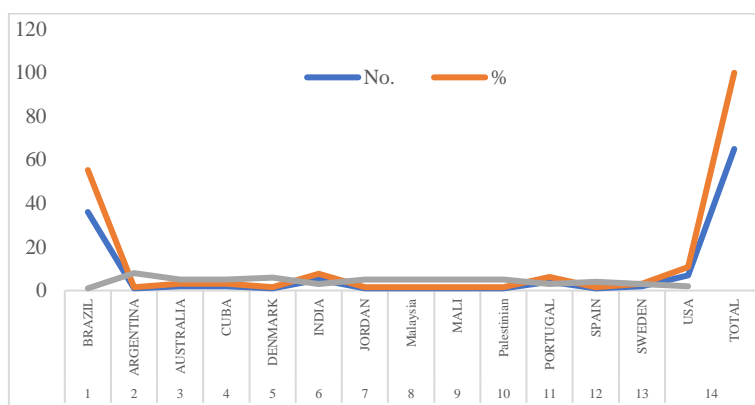

Figure 6.1: Country-Wise Rank

Table 6.2: Year Wise Article

Sr. No.	Year	No. of Article	Percentage (%)	Rank
1	2018	10	20.83333333	3
2	2019	11	22.91666667	2
3	2020	10	20.83333333	2
4	2021	5	10.41666667	2
5	2022	12	25	1
Total		**48**	**100**	

The distribution of papers in the International Journal of Digital Library Services by year is shown in Table 6.2 and Figure 6.2. The journal published 5 volumes, 5 issues, and a total of 53 articles between 2018 and 2022. It was found that 2021 had the lowest contribution with 5 articles, contributing just 10.41 percent, while 2022 had the highest contribution with 12 articles, contributing 25 percent.
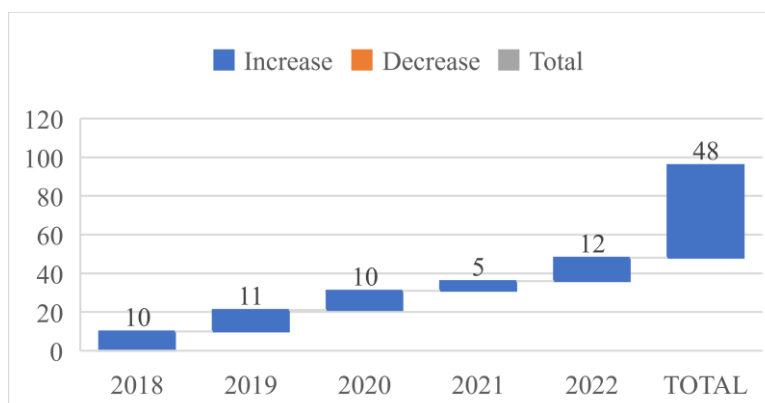

Figure 6.2: Year Wise Article

Table 6.3: Numbers of Author Year Wise

No. of Authors	Number of Article Published						
	2018	2019	2020	2021	2022	Total	Average
One	2	1	2	2	1	8	2.66667
Two	2	5	2	2	6	17	5.66667
Three	3	3	2	0	3	11	3.66667
Four	3	2	4	1	1	11	3.66667
Six	0	0	0	0	1	1	0.33333

The exact details of the authorship pattern for the papers published between the years of 2018 and 2022 are shown in Table 6.3 and Figure 6.3. There was a total of 53 articles published during this time period, with the maximum number of contributions—17 articles, or 5.66 average—coming from two authors. The next highest number of contributions—11 articles, or 3.66 average—came from three and four authors, and the fewest—1 article, or 0.33 average — came from six authors.
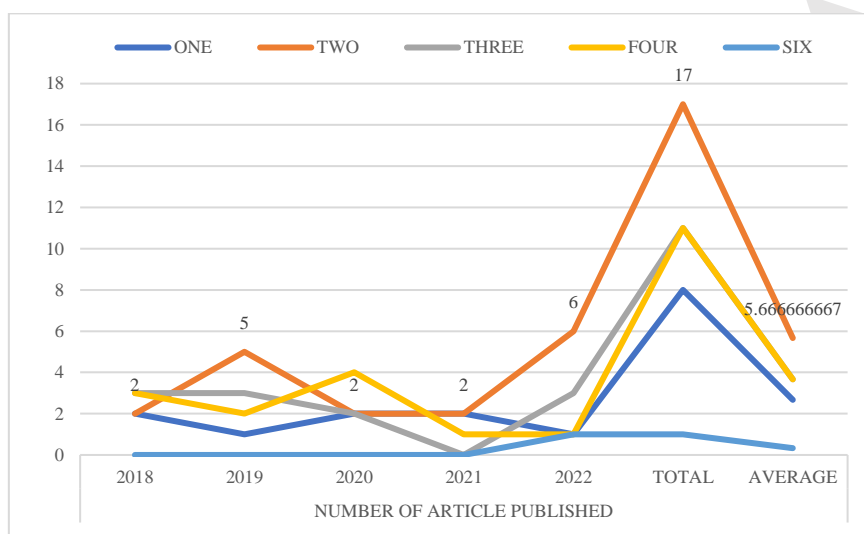

Figure 6.3: Numbers of Author Year Wise

Table 6.4: Length of Article

Length of Article (Pages)	Number of Article Published						
	2018	2019	2020	2021	2022	Total	Average
Page 11 - 20	7	10	6	4	10	37	12.33333
Page 21 - 30	3	0	2	2	2	9	3
Page 31 - 40	0	0	1	0	0	1	0.333333

Table 6.4 and Figure 6.4 clearly show the range or length of the articles in each article. From the study, it was found that there were 53 articles published with proper reference. In this tables the range of the length of the article was of 10 points each. The highest number of articles having the range (11-20) in 37 articles with 12.33 of average. The second highest number of articles having the range of references (21-30) in 9 articles with average of 3 and it was followed by the range of references (31-40) in 1 article with the average of 1.
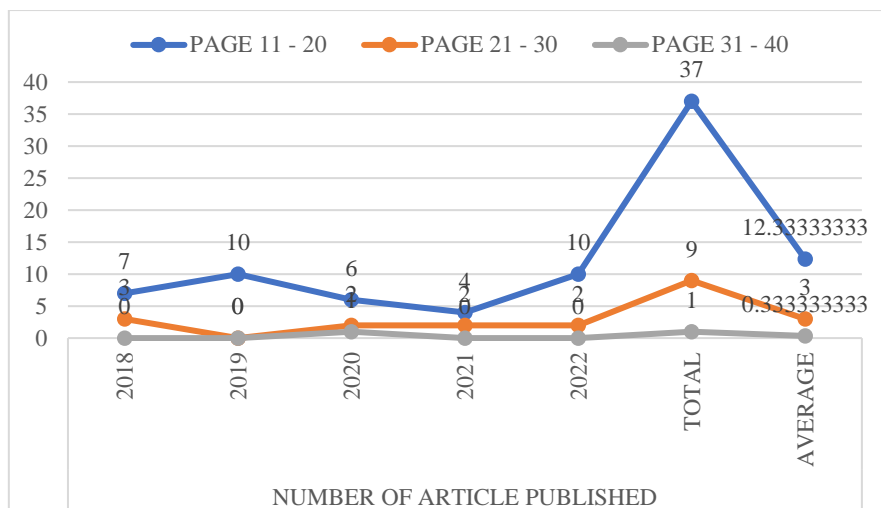
Figure 6.4: Length of Article

7. CONCLUSION

The study found that total 53 publications were published during the period of study and found that most productive year was 2022 with highest number of articles 12 (25%) and least productive year is 2021 with 5 (10.41%) number of articles. It was discovered that length of the articles were not too much long and not too much short, the length of the articles were moderate, maximum no. of articles that were published were in the range of 11-20 no. of pages with total of 37 articles. Glimpse on the collaboration of the authors there were collaboration of maximum two authors with 17 articles.

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