

## A STUDY OF AUTHORSHIP PATTERNS AND COLLABORATIVE RESEARCH IN PLANNER, 2010-2016

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### ABSTRACT

This paper presents a bibliometric study of PLANNER (Promotion of Library Automation and Networking in North Eastern Region) during the period of 2010-2016. It is a series of conventions and has completed 10<sup>th</sup> convention last year (2016). This paper deals with 7<sup>th</sup>, 8<sup>th</sup>, 9<sup>th</sup> and 10<sup>th</sup> conventions; those are organized in 2010, 2012, 2014 and 2016, respectively. A total of 187 research contributions and 362 others were examined by growth of contributions by year, growth of authors by year, authorship patterns, author productivity and degree of collaboration. Average number of authors per paper is 1.936. The highest number of author productivity, i.e., 0.517. The average degree of author collaborated in this study is 0.690, which clearly indicates its dominance upon multi authored contributions.

**KEYWORDS:** Bibliometrics, PLANNER, INFLIBNET, Authorship Patterns, Degree of Collaboration, Convention

### INTRODUCTION

Promotion of Library Automation and Networking in North Eastern Region (PLANNER) is a series of regional conventions, launched in 2003 to address the problems and issues in North-Eastern Region. These conventions are organized by INFLIBNET in collaboration with different universities of North Eastern States to promote library automation and networking. These conventions help the library professionals, as well as IT professionals in North-Eastern region to interact with each other and with, professionals from the rest of the country to discuss the current issues for mutual benefit. Ten conventions have since been organized on various topics of interest at different locations in North-East including NEHU, Shillong (2003), Manipur University, Manipur (2004), Assam University, Silchar (2005), Mizoram University, Aizawal (2006), Gauhati University, Gauwahati (2007), Nagaland University, Dimapur (2008), Tezpur University, Tezpur, (2010) and Central University of Sikkim, Sikkim (2012), PLANNER (2014) Dibrugarh University, Assam and PLANNER (2016) 10th in the series is being organized in North Eastern Hill University, Shillong.

### Objectives of the Study

The objectives of the present study are as follows:

- To study contributions by year;
- To study growth of authors by year;
- To examine authorship patterns by year;
- To study author productivity;
- To identify degree of author collaboration.

## Research Methodology and Data Collections

The data was collected from the website of INFLIBNET. Four conventions from 2010 to 2016 were selected for the study. Research contributions by year, number of authors, authorship patterns by year, author's productivity, and degrees of author collaboration are recorded. These data were organized, calculated, tabulated, analyzed, and presented by using simple arithmetic and statistical methods.

## Scope and Limitations

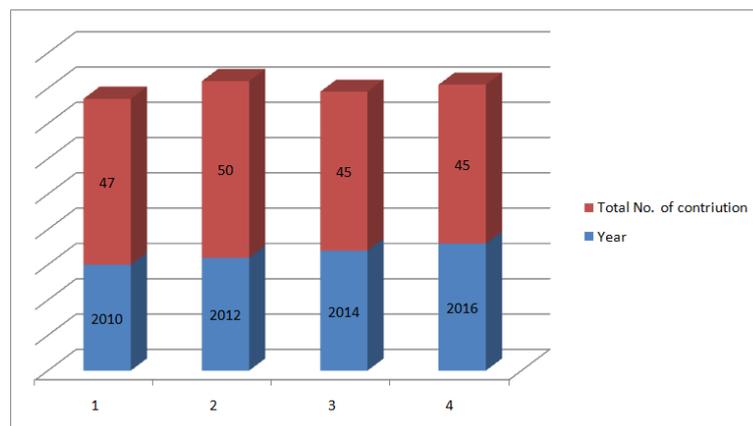
Collaboration is studied only as it relates to joint authorship. Other types of collaboration outside of authorship are not considered.

## Data Analysis and Findings:

A total of 187 contributions and 362 authors were analyzed in four conventions. The following six tables and brief analyses represent the substance of this research.

**Table 1: Contributions by Year**

Sl	Year	Total No. of contribution	Percentage (%)
1	2010	47	25.134
2	2012	50	26.738
3	2014	45	24.064
4	2016	45	24.064
<b>Total</b>		<b>187</b>	<b>100</b>



**Figure 1: Article Contributions by Year**

Table 1 and Graph 1 show the growth of contributions published in PLANNER from 2010 to 2016. In total, there are 187 articles. The highest number of contributions 50(26.738%) was published in 2012 while the lowest number 45 (24.064%) of research contributions in the year of 2014 and 2016. The second highest number of research contributions 47 (25.134%) was published in 2010.

**Table 2: Growth in Numbers of Authors by Year**

SL	Year	No of Author	Percentage
1	2010	91	25.138
2	2012	100	27.624
3	2014	82	22.651
4	2016	89	24.586
<b>Total</b>		<b>362</b>	<b>100</b>

**Figure 2: Authors by Year**

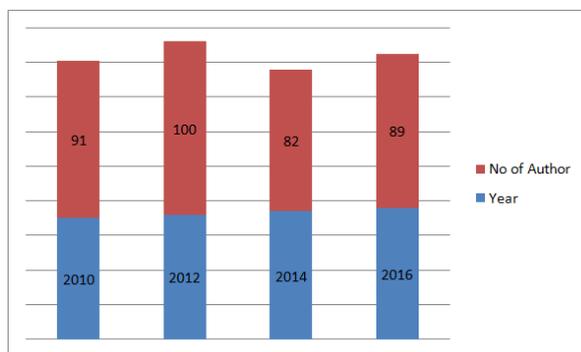


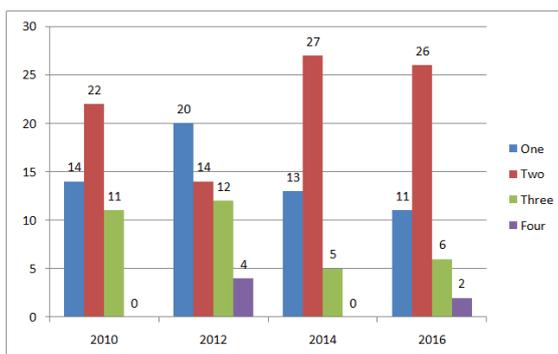
Table 2 and Graph 2 show the growth of authors by year. The highest number of authors contributed 100 (27.624%) was published in 2012, while the lowest number 82 (22.651%) of author contributions in the year of 2014.

**Table 3: Numeric Authorship Patterns by Year**

Sl. No.	Year	Author per Article				Total paper	Total Author
		One	Two	Three	Four		
1	2010	14	22	11	----	47	91
2	2012	20	14	12	4	50	100
3	2014	13	27	5	----	45	82
4	2016	11	26	6	2	45	89
<b>Total</b>		<b>58</b>	<b>89</b>	<b>34</b>	<b>6</b>	<b>187</b>	<b>362</b>

**Table 4: Authorship Patterns**

Sl. No.	Author	Total	Percentage
1	Single Author	58	16.022
2	Two Authors	178	49.171
3	Three Authors	102	28.177
4	Four Authors	24	6.630
<b>Total</b>		<b>362</b>	<b>100</b>



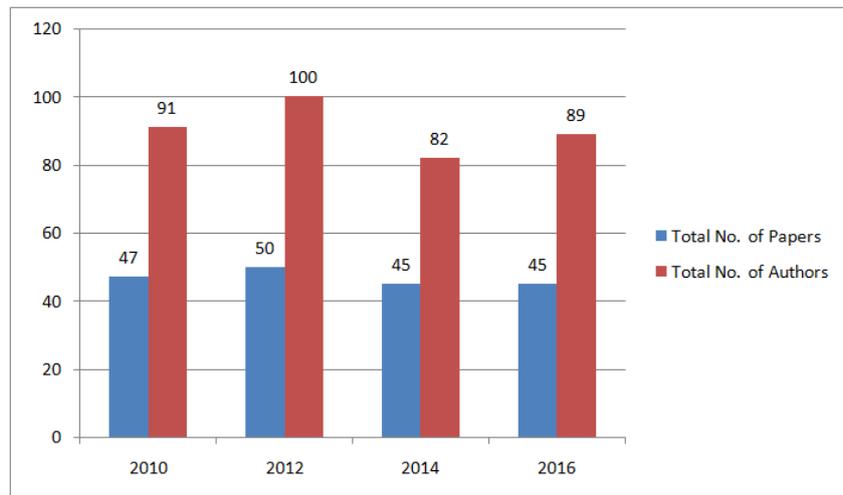
**Figure 3: Authorship Patterns**

Table 4 and Graph 3 show that the majority of the contributions were written by a two authors 178 (49.171%), followed by three authors 102 (28.177%) and single author 58 (16.022%). The lowest numbers of contributions were made by four authors 24 (6.630%).

**Table 5: Author's Productivity**

Sl. No.	Year	Total No. of Papers	Total no. of Authors	AAPP*	Productivity Per Author
1	2010	47	91	1.936	0.516
2	2012	50	100	2.000	0.500
3	2014	45	82	1.822	0.549
4	2016	45	89	1.978	0.506
<b>Total</b>		<b>187</b>	<b>362</b>	<b>1.936</b>	<b>0.517</b>

Notes: \*Average Authors per Paper (AAPP) = Number of authors/Number of papers. Productivity per author = Number of papers/Number of authors.



**Figure 4: Author's Productivity**

Table 5 and Graph 4 show the data related to author's productivity. The total average number of authors per paper is 1.936 and the average productivity per author is 0.517. The highest number of author's productivity 45 (0.549) was in 2014. The minimum number of author's productivity 50 (0.500) was in 2012.

**Table 6: Degree of Author Collaboration**

Sl. No.	Year	Single Authored Paper (Ns)	Multi Authored Papers (Nm)	Total (Nm+Ns)	Degree of Collaboration
1	2010	14	33	47	0.702
2	2012	20	30	50	0.600
3	2014	13	32	45	0.711
4	2016	11	34	45	0.755
<b>Total</b>		<b>58</b>	<b>129</b>	<b>187</b>	<b>0.690</b>

Table 6 shows the degree of author collaboration in the PLANNER. The trend of collaboration research is measured by calculating degree of collaboration by using the formula stipulated by K Subramanyam. The formula is as follows,

$$C = N_m / (N_m + N_s)$$

Where,

C=Degree of collaboration

N<sub>m</sub>=Number of multi authored articles in a particular period.

N<sub>s</sub>=Number of single authored articles in that period.

So, in the present study the average value of C = 129 / (129+58)

$$= 0.690$$

The result shows the average degree of author collaboration in the study is 0.690, which clearly indicates its dominance upon multi authored contributions.

## CONCLUSIONS

The PLANNER has been growing over last 14 years in the publishing of research articles and has completed its 10th convention in the year 2016. It has been seen in the last 4 consecutive conventions that, though the multi authored contributions are prevailing, two and three authored contributions are found highest in the study. Only 6 four authored contributions have been seen in the study, and not a single contribution found with five or more authored.

## REFERENCES

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