Content Analysis of Open Access LIS Journal "ALIS" (2002 -2011)

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Abstract. The present study investigated the trends of LIS open access Journal "ALIS" analysing articles, authors and LIS subjects covered in the articles. Quantitative content analysis was carried out for which the data were analysed in order to project literature growth, authorship pattern and related bibliometric phenomena. The analysis indicates that there were 283 articles published during 2002 to 2011. The authorship pattern indicates that the majority of articles published with multi-authorship. Authors from teaching faculty were paid more interest in "ALIS". The subject coverage of this journal is mostly towards bibliometric and scientometric study, covering other LIS subjects in the articles. The analysis of data clearly indicates that OA ejournal "ALIS" rapidly establishing themselves as a most viable media for scholarly communication.

Keywords: Content analysis, Bibliometric study, Scientometrics and Informetrics.

1 Introduction

Annals of Library and Information Studies, earlier published as Annals of Library Science and Documentation is a well known journal in the field of library and information science published from India. It covers articles, documentation notes and research reviews on library, documentation and information science, information systems, services and products, information technology, information users, bibliometrics, scientometrics and informetrics, education and training and other related areas. It is a quarterly journal published by the National Institute of Science Communication and Information Resources (NISCAIR), New Delhi. This study investigated the trends of LIS open access Journal "ALIS" analysing articles, authors and LIS subjects covered in the articles. Content analysis is a method commonly used in the social sciences and is therefore a viable choice for LIS research.

2 Content Analysis

"Content analysis is any research technique for making inferences by systematically and objectively identifying specified characteristics within text" (Stone, Dunphy, Smith & Ogilvie, 1996, with credit given to Holsti, p. 5).

Content analysis, a method which can be used qualitatively or quantitatively for systematically analyzing written, verbal, or visual documentation, goes back to the 1950s and the study of mass communication (White & Marsh, 2006, p. 22).

This article accepts a broad-based definition in a recent content analysis textbook by Krippendorff (2004). For the purpose of this article, content analysis is "a research technique for matter to the contexts of their use" (Krippendorff, 2004, p. 18). The notion of inference is especially important in content analysis. The researcher uses analytical constructs, or rules of inference, to move from the text to the answers to the research questions. The two domains, the texts and the context, are logically independent, and the researcher draws conclusions

from one independent domain (the texts) to the other (the context). In LIS studies the analytical constructs are not always explicit.

Content analysis involves specialized procedures that, at least in quantitative content analysis, allow for replication. The findings of a good study using quantitative content analysis, therefore, do not rely solely on the authority of the researchers doing the content analysis for their acceptability.

3 Literature Review

A review of related literature reveals that a number of authors have presented the results of the analysis of library and information science literature in different countries.

Zao Liu and Gang Wan (2007) analyze the publication trends of scholarly journal articles on open access in the library and information science literature from 2000 to 2005. The authors used the method of content analysis to systematically analyze the selected scholarly articles. A total of 227 articles were selected from the relevant databases and a comprehensive bibliography on open access. They were subject to a content analysis according to a classification scheme developed by the authors.

Tiew (2006) explored the authorship characteristics in Sekitar Perpustakaan, one of the LIS periodicals published from Malaysia, during 1994-2003. The results of this study discovered that 79%

articles were written by single author and female authors dominated by contributing 65.74% articles.

Tiew, Abrizah & Kiran (2002) carried out a bibliometric examination of the articles published in Malaysian Journal of Library and Information Science during 1996-2000 and found that the percentage of

multi-authored articles was slightly higher than the single authored articles. The most popular subject, according to this study, was scientific and professional publishing.

Ocholla & Ocholla (2007) investigated the research in LIS in South Africa during 1993-2006 and observed that research collaboration through co-authorship was encouraging at 69 percent. According to

the results of this study management, information retrieval and information services dominated the LIS research in South Africa.

4 Methodology

Since this study has been designed to analyse the content of the articles published in LIS OA ejournal "ALIS", the use of survey method has been found suitable. The survey method is an acceptable device for collecting data or factual information on certain decided characteristics or items of a universe of population. For the analysis of the study, nine volumes (Vol 49 to 58) containing 40 issues of "Annals of Library and Information Studies" published during the year 2002 to 2011 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, name of authors, place of authors, number of references and their forms, number of pages, etc., were recorded and analyzed for making observations. The data were collected; organised and analysed using MS-Excel spreadsheets.

5 Objectives of the Study

The objectives of this study, covering the period 2002-2011, were:

- 5.1 To know the publication output of ALIS.
- 5.2 To examine authorship characteristics of LIS literature published in ALIS.
- 5.3 To know the length of the articles.
- 5.4 To know the most prolific author contributing to ALIS.
- 5.5 To know the geographical distribution of articles (countrywise and statewise) published in ALIS.
- 5.6 To know the institutional involvement of publication in ALIS.
- 5.7 To analyze LIS literature published in ALIS so that areas of interest for LIS researchers and current trends may be explored.

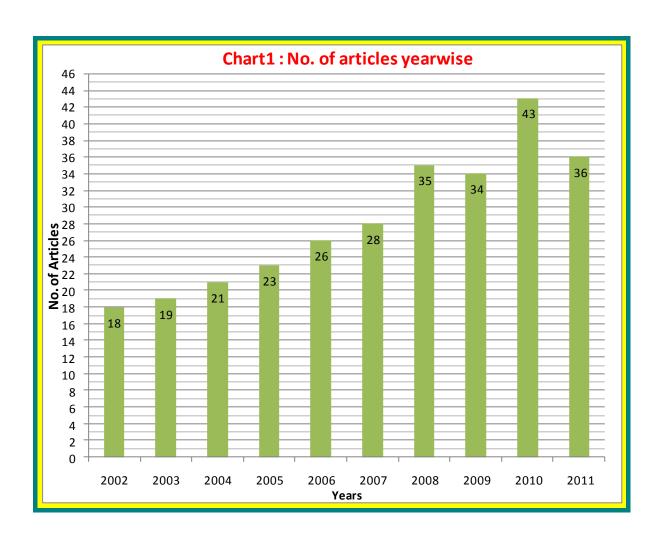
6 Analysis and findings

6.1 Yearwise distribution of articles

Year	Vol.No.	No.of	No. of	Percentage
		Issues	articles	
2002	49	1-4	18	6.36
2003	50	1-4	19	6.71
2004	51	1-4	21	7.42
2005	52	1-4	23	8.12
2006	53	1-4	26	9.18
2007	54	1-4	28	9.89
2008	55	1-4	35	12.36
2009	56	1-4	34	12.01
2010	57	1-4	43	15.19
2011	58	1-4	36	12.72
		Total	283	100.00

Table 1

Table 1 shows that total of 283 contributions have been published in ten years (2002-2011), which consists of full articles. Table 1 gives details regarding the distribution of 283 contributions published from 2002-2011. Maximum number of articles i.e., 43 (15.19 %) was published in 2010 and minimum number of contributions i.e., 18 (6.36 %) in 2002.



6.2 Authorship pattern of articles (Volumewise)

Vol.No.	No. of Authors			Total	
	One	Two	Three	More than three	
49	6	8	3	1	18
50	6	11	2		19
51	7	8	5	1	21
52	9	8	5	1	23
53	6	14	5	1	26
54	12	10	6		28
55	12	15	7	1	35
56	6	20	8		34
57	17	18	6	2	43
58	14	14	7	1	36
Total	95	126	54	8	283

Table 2

Table 2 gives the details about the authorship pattern. A total of 95 contributions out of 283 have been contributed by single author, 126 contributions by two authors and 54 contributions by three authors and 8 contributions by more than three authors.

20-■ Single Author ■ Two Author 16 **■** Three Author 14 ■ More than three Author **Number of Articles** 10-8 4 50 51 57 49 54 55 56 53 **Volume Numbers**

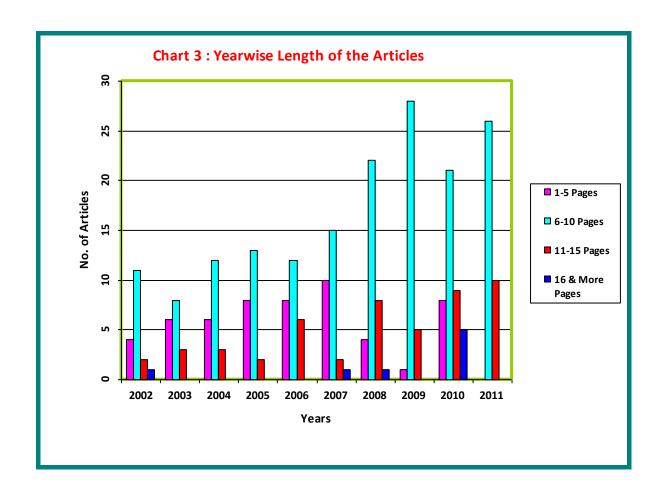
Chart 2 : Authorship Pattern of Articles (Volumewise)

6. 3 Length of the articles

Year	No. of pages of the articles			Total	
	1-5	6-10	11-15	16 & more	
2002	4	11	2	1	18
2003	6	8	3	2	19
2004	6	12	3		21
2005	8	13	2		23
2006	8	12	6		26
2007	10	15	2	1	28
2008	4	22	8	1	35
2009	1	28	5		34
2010	8	21	9	5	43
2011		26	10		36
Total	55	168	50	10	283

Table 3

Table 3 indicates the details about the page length of the articles. Out of 283 articles, 55 articles have page length of 1-5 pages while 168 articles have length of 6-10 pages. There are 50 articles having page length of 11-15 pages and there are 10 articles having page length of 16 & more pages.

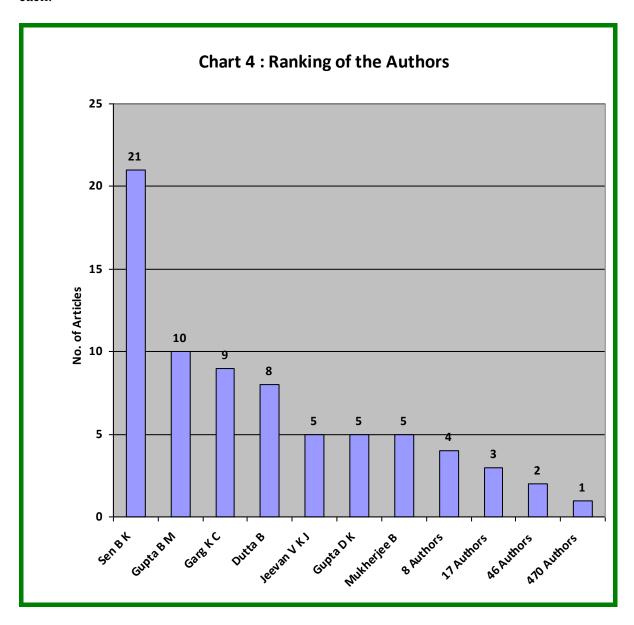


7 Ranking of Authors

Sr.No.	Rank	Name of Author	No. of articles
1	1	Sen B K	21
2	2	Gupta B M	10
3	3	Garg K C	9
4	4	Dutta Bidyarthi	8
5	5	Jeevan V K J	5
6	5	Gupta Dinesh K	5
7	5	Mukherjee Bhaskar	5
8	6	Mohamed Haneefa	4
9	6	Biradar B S	4
10	6	Kumar B T Sampath	4
11	6	Shivalingaiah D	4
12	6	Das Anup Kumar	4
13	6	Kumar S	4
14	6	Kalyane V L	4
15	6	Kumar Vijai	4
16	7	17 no. of authors	3 each
17	8	46 no. of authors	2 each
18	9	470 no. of authors	1 each

Table 4

Table 4 depicts the ranking of authors. There are a total of 548 authors who contributed 283 numbers of articles to *Annals of Library and Information Studies* from 2002 to 2011. From Table 4 it is found that Sen B K, is the leading author contributing *twenty one* articles followed by Gupta B M contributing *ten* articles securing the second position. Garg K C with *nine* articles securing the third position. Dutta Bidyarthi contributed *eight* articles and ranked fourth. Jeevan V K J, Gupta Dinesh K and Mukherjee Bhaskar contributed *five* articles securing fifth rank. Mohamed Haneefa, Biradar B S, Kumar B T Sampath, Shivalingaiah D, Das Anup Kumar, Kumar S, Kalyane V L and Kumar Vijai contributed *four* articles each securing sixth rank. Besides the above mentioned authors, 17 authors contributed *three* articles each, 46 authors contributed *two* articles each and 470 authors contributed *one* article each.

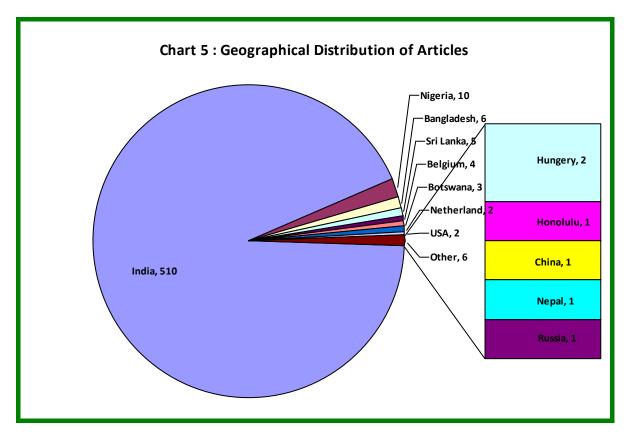


8 Geographical Distribution articles (country wise)

Sr.No.	Rank	Country	No. of author	% of contribution
			contributions	
1	1	India	510	93.06
2	2	Nigeria	10	1.82
3	3	Bangladesh	6	1.09
4	4	Sri Lanka	5	0.91
5	5	Belgium	4	0.72
6	6	Botswana	3	0.54
7	7	Netherland	2	0.36
8	7	USA	2	0.36
9	7	Hungery	2	0.36
10	8	Honolulu	1	0.18
11	8	China	1	0.18
12	8	Nepal	1	0.18
13	8	Russia	1	0.18
		Total	548	100

Table 5

From Table 5 it is clear that there are a total of 548 authors representing 13 different countries. Out of 548 contributions, the highest number, i.e., 510 (93.06%) has been contributed by authors from India and lowest number i.e., 1 (0.18%) has been contributed by authors from Honolulu, China, Nepal and Rassia each. From the table it is clear that most of the articles are from Indian authors where the publication of the ALIS takes place.

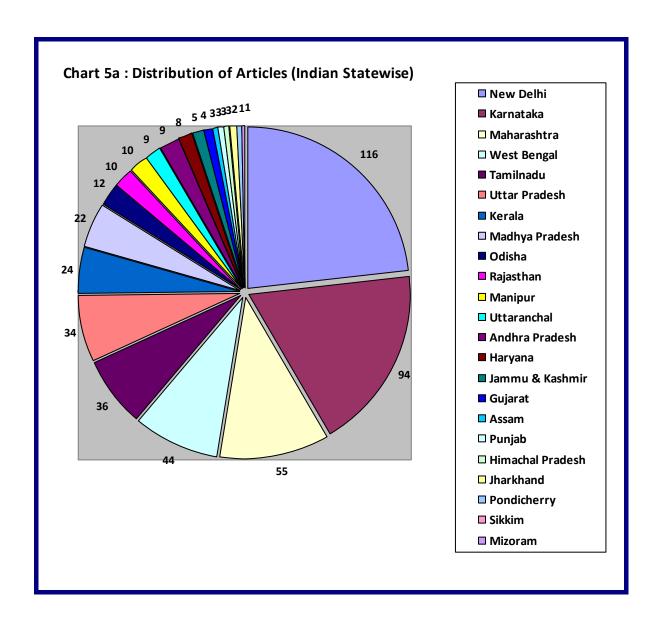


8 (a) Geographical Distribution of Contributors (Indian States)

Sr.No.	Rank	Name of the State	No. of author	% of
			contributions	contribution
1	1	New Delhi	116	22.74
2	2	Karnataka	94	18.43
3	3	Maharashtra	55	10.78
4	4	West Bengal	44	8.62
5	5	Tamilnadu	36	7.05
6	6	Uttar Pradesh	34	6.66
7	7	Kerala	24	4.70
8	8	Madhya Pradesh	22	4.31
9	9	Odisha	12	2.35
10	10	Rajasthan	10	1.96
11	10	Manipur	10	1.96
12	11	Uttaranchal	9	1.76
13	11	Andhra Pradesh	9	1.76
14	12	Haryana	8	1.56
15	13	Jammu & Kashmir	5	0.98
16	14	Gujarat	4	0.78
17	15	Assam	3	0.58
18	15	Punjab	3	0.58
19	15	Himachal Pradesh	3	0.58
20	15	Jharkhand	3	0.58
21	16	Pondicherry	2	0.39
22	17	Sikkim	1	0.19
23	17	Mizoram	1	0.19
		Total	510	100

Table 5(a)

From Table 5, it is found that India has contributing 510 numbers of articles and has 93.06 % of total number of contribution. So it was decided to make a study of geographical distribution of contributors among different states of India which is presented in Table 5(a). The analysis shows that New Delhi has 116 (22.74%) numbers of contributions and ranked first. Among the other states Karnataka has 94 (18.43%) contributions and ranked second. Maharashtra has 55 (10.78%) contributions and ranked third. Other states have less than 50 contributions.

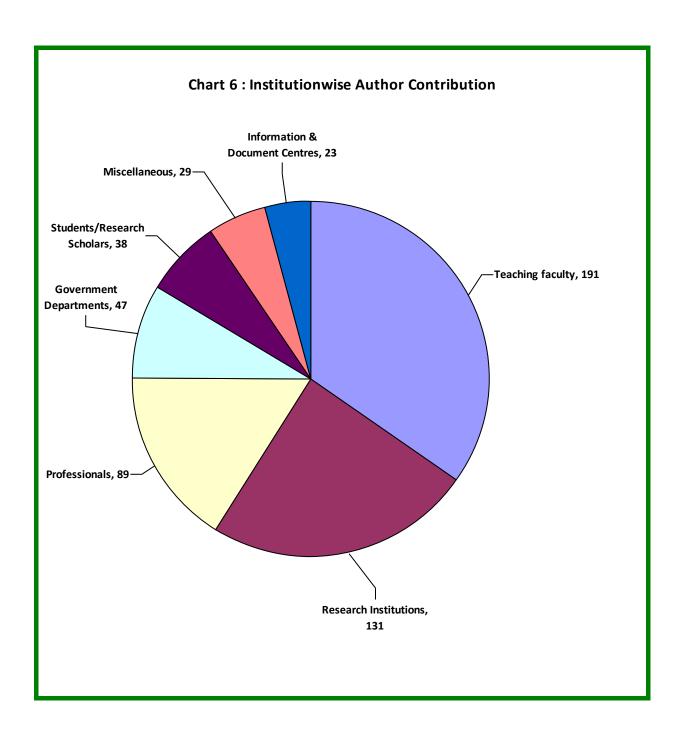


9 Institutionwise author contribution

Institutions	No. of contributions by	Percentage
	author	
Teaching faculty	191	34.85
Research Institutions	131	23.90
Professionals	89	16.24
Government Departments	47	8.57
Students/Research Scholars	38	6.93
Miscellaneous	29	5.29
Information & Documentation	23	4.19
Centers		
Total	548	100.00

Table 6

Table 6 gives institutionwise author of contributions of this journal. Out of 548 contributions, the highest number, i.e., 191 (34.85%) has been contributed by teaching faculty and lowest number, i.e., 23 (4.19%) has been contributed by the authors from information/documentation centres.



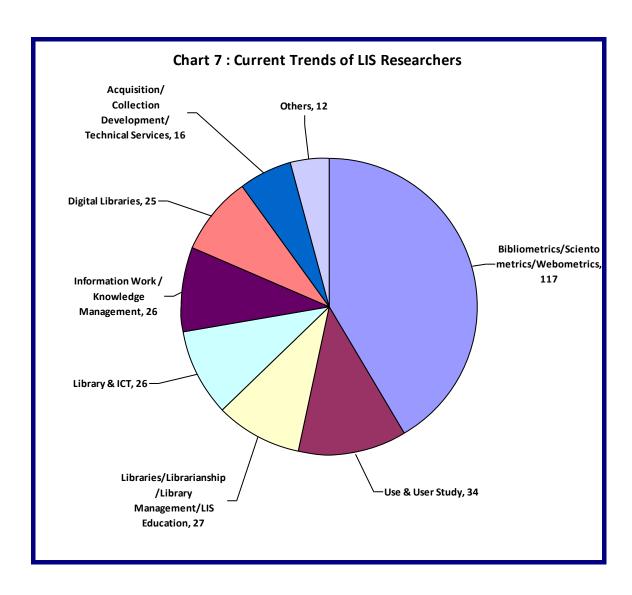
10 Areas of interest for LIS researchers and current trends

Main Area of Research	Descriptors/ Keywords	No. of Articles
	connected in Journal	
	Articles	
Bibliometrics/Scientometr	Periodicals, Articles,	117
ics /	Research, Scholarly	
Informetrics/Webometrics	Publication, Scholarly	
	Publishing, Scientists,	
	Science & Technology etc.	
Use & User Study	User needs, Information	34
	seeking behaviour,	
	Academic Libraries,	
	Internet users, Library	
	Professional, Researchers,	
	Students etc.	
Libraries /Librarianship/	Co-operation, History,	27
Library Management/ LIS	Library consortia, Library	
Education	serveys, Public Libraries,	
	Academic Libraries, Library	
	Staff, Job Satisfaction,	
	Professional Education,	
	Leadership, Finance, Man	
	Power Planning, Research,	
	Library Building,	
	Management Techniques,	
	Curricula etc.	
Library & ICT	Computers,	26
	Computerisation, Networks,	
	Library Softwares,	
	Communication	
	Technology, Electronic	
	Media, Internet, E-	
	resources, Web 2.0 etc.	
Information Work /	Information Sources &	26
Knowledge Management	Services, Information	
	Dissemination, Keywords,	
	Descriptors, International	
	Standards, Information	
	Retrieval, Knowledge	
	Sharing, Conceptualisation	
D	of knowledge etc.	<u> </u>
Digital Libraries	Digitization, Open Access,	25
	Institutional Repository,	
	Courseware, Softwares for	
1 1 1 1 2 1 1	Digitization etc.	4.5
Acquisition/ Collection	Books, Periodicals,	16
Development/ Technical	Journals, Prices, Record	
Services	Management, Classification,	
	Cataloguing, Bibliography,	

	Abstracting, Indexing etc.	
Others	Information Literacy,	12
	Distance Learning,	
	Copyright Issues,	
	Educational Technology,	
	Publishing etc.	
	Total	283

Table 7

Descriptors are the keywords/words used to describe the topic of the published literature. From table 7 it is clear that most of the articles i.e. 117 out of 283 articles, researchers carried out their work on Bibliometrics/Scientometrics/Informetrics/Webometrics followed by Use and User Study, i.e. 34 out of 283 article. Also it is clear that ALIS covered almost all areas of Library & Information Science Subject.



11 CONCLUSIONS

The analysis indicates that there were 283 articles published during 2002 to 2011. The authorship pattern indicates that the majority of articles published with multi-authorship. Most of the articles having page length of 6 to 10 pages. Dr. B K Sen is the most productive author during the study period. With respect to country productivity, India topped the list & with respect to states, New Delhi stood first. Authors from teaching faculty were paid more interest in "ALIS". The subject coverage of this journal is mostly towards bibliometric and scientometric study, covering other LIS subjects in the articles. The analysis of data clearly indicates that OA ejournal "ALIS" rapidly establishing themselves as a most viable media for scholarly communication.

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