

Content Analysis of DESIDOC Bulletin of Information Technology (1997-2002)

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Abstract

The paper is the outcome of the content analysis of 33 issues of DESIDOC Bulletin of Information Technology (DBIT) published during January 1997 to July 2002. The DBIT gives more emphasis on IT related areas. DBIT is a peer-reviewed journal and publishes thematic issues on different areas of IT, library management and information marketing and the contents of journal are analysed in this study. DBIT is a useful tool for library professionals, information managers, information scientists, and information specialists, computer personnels and researchers with a vision for development in IT.

1. INTRODUCTION

The content analysis is definitely a case of information analysis. Therefore the term content analysis and information analysis are used as synonyms. Such process is applied to single coherent sources of information and largely it is only the 'elements of general framework' that guides work of rearranging systematically selected portions for the purpose of condensation. The product of the process is quite distinct from coherent and unified body of information made out of loosely aggregated units.

1.1 About the Journal

DESIDOC Bulletin of Information Technology (DBIT) brings out the recent developments in information technology as applicable to library and information science. It highlights and propagates the study of original research review papers relating to information technology. It is a bi-monthly bulletin.

The content of the DBIT is classified into following:

- Editorial Trends

- Research/Review Papers
- Information Technology Events
- Information Technology Scan
- Book Review/Book Shelf
- Current Literature Survey

1.2 Aims and Objectives

The content analysis of the DBIT has been carried out as part of MLISc project work during 2003-2004. The purpose of this project is to analyse content of the DBIT keeping in view the following objectives:

- To determine extent of coverage given to the subject areas specified in DBIT
- To discover the evolving subjects in DBIT
- To find out the number of articles published in each volume
- To find out the authorship pattern.
- Contributions in various fields
- To know the current IT covered in DBIT
- To find out subject areas of current literature published.

2. RESEARCH METHODOLOGY

All the issues of the January 1997 to November 2002, with six each year were collected for the study. Both the methods of research in content analysis i.e., quantitative (or descriptive) and inferential have been use in evaluating the bulletin.

3. ANALYSIS & INTERPRETATION

Table 1 (included as appendix 1) shows distribution of general issues and thematic issues. Out of 33 issues, 16 are general issues and 13 are thematic issues. There is no thematic issue in 2001 & 2002 (vol. 21 & 22). The DBIT's concentration on thematic issues provides a great opportunity for young professionals to learn the advances in the latest IT developments in library and information science; as the journal is peer reviewed.

Table 2 shows volume-wise distribution of guest editors in six years. The highest number of guest editors are 5(38.46) in volume 17 and 18 and the lowest number of guest editor is 1(7.69%) in the volume 20. In 2001 and 2002 there is no guest editor. Figure 1 shows volume-wise distribution of guest editor.

Table 2. Volume-wise distribution of guest editors

| Sr. No. | Year | Vol. | Guest Editors | % |
|--------------|----------|----------|---------------|--------------|
| 1 | 1997 | 17 | 5 | 38.46 |
| 2 | 1998 | 18 | 5 | 38.46 |
| 3 | 1999 | 19 | 2 | 15.38 |
| 4 | 2000 | 20 | 1 | 7.69 |
| 5 | 2001 | 21 | - | 0 |
| 6 | 2002 | 22 | - | 0 |
| Total | 6 | 6 | 13 | 99.99 |

Table 3 (appendix 2) shows distribution of guest editors and their contribution in various subject areas. It indicates that out of 11 guest editors, the highest number in the contribution is 2(15.38%) which is related to Indian bibliographic databases by Abhijit Lahiri, and collection development by I.K. Ravichandra Rao.

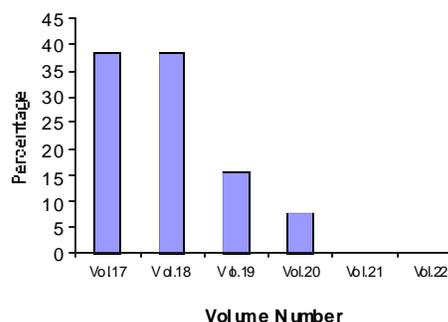


Fig 1. Volume-wise distribution of guest editors

Table 4 shows the geographical distribution of guest editors of 33 issues of DBIT. Out of 12 editors, six editors are from Delhi, i.e., 50% of the issues have been edited by library professionals from Delhi.

Table 4. Geographical distribution of guest editors

| Sr. No. | Name of State/City | No. of Guest Editors | % |
|--------------|--------------------|----------------------|------------|
| 1 | Delhi | 6 | 50.01 |
| 2 | Bangalore | 3 | 25 |
| 3 | Lucknow | 2 | 16.6 |
| 4 | Nagpur | 1 | 8.33 |
| Total | 4 | 12 | 100 |

In 33 issues, only 13 editorial trends are given. In July issue of volume 18, editor's description is not given.

Fig. 2 shows geographical distribution of guest editor and fig. 3 shows volume-wise distribution of contribution.

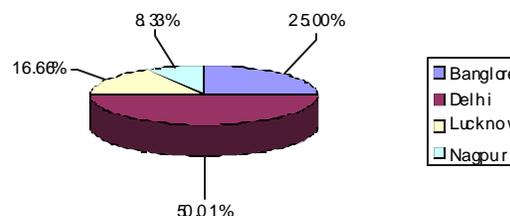


Fig 2. Geographical distribution of guest editor

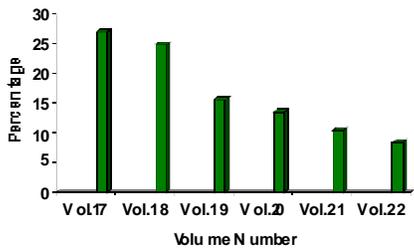


Fig 3. Volume-wise distribution of contributions

The total number of contributions in 33 issues of the 6 volumes are 96 from which the highest number of contributions is 26 (27.08%) in volume 17 and the lowest number of contributions is 8 (8.33%) in volume 22. Table 5 indicates the distribution of contributions in six volumes of the journal.

Table 5. Volume-wise distribution of contributions

| Year | Vol. No. | No. of issues | No. of contri. | % |
|-------|----------|---------------|----------------|-------|
| 1997 | 17 | 6 | 26 | 27.08 |
| 1998 | 18 | 6 | 24 | 25 |
| 1999 | 19 | 5 | 15 | 15.62 |
| 2000 | 20 | 6 | 13 | 13.54 |
| 2001 | 21 | 6 | 10 | 10.41 |
| 2002 | 22 | 4 | 8 | 8.33 |
| Total | 6 vol | 33 | 96 | 99.98 |

Fig. 4 shows authorship pattern of contributions. Analysis of authorship of the contributions in table six reveals the contributions of one author, two, three or more three authors.

Table 6. Authorship pattern of contributions

| No. of author(s) | No of contri. | % |
|------------------|---------------|-------|
| One | 68 | 70.83 |
| Two | 17 | 17.70 |
| Three | 6 | 6.25 |
| More than three | 4 | 4.16 |
| Institution | 1 | 1.04 |
| Total | 96 | 99.98 |

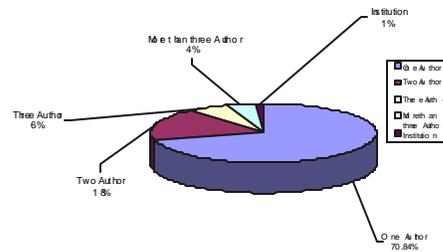


Fig 4. Authorship pattern of contributions

This table shows that out of 96 contributions 68 (78.83%) have been contributed by single author, 17 (17.70%) by two authors, 6 (6.25) by three authors, 4 (4.16%) by more than three authors, and only 1 (1.04%) has been contributed by an institution. Fig. 5 shows volume wise authorship pattern of contributions.

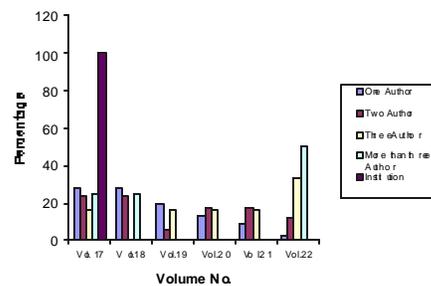


Fig 5. Volume-wise authorship pattern of contributions

Table 7 (appendix 2-A) indicates volume-wise authorship pattern of contributions. It indicates that out of 68 contributions of single author, volume 17 & 18 has the highest number i.e., 19 (27.94%) and volume 22 has the lowest number i.e. 2 (2.94%). Out of the contributions by two authors, volume 17 and 18 have the lowest number i.e., 1(5.88%). Five volumes i.e., volumes 17, 19, 20, 21 & 22 have contributions by three authors, One and two contribution respectively more than three author contributed in volume 17, 18 & 22 having contribution of 1 & 2 respectively by more than three author. Only volume 17 has one contribution by an institution.

3.1 Papers

Table 8 (appendix 3) covers distribution of papers according to subject and table 9 (appendix 4) shows volume-wise distribution of the subjects of articles. Out of 96 articles, there are only 36 subject areas. The highest number of the articles i.e., 10(10.86%) covers information technology which is the most important subject area for DBIT, which is followed by bibliographic databases and collection development, i.e., 9 (9.78%). The lowest number of articles i.e., 1(1.08%) in other subject area mentioned in 22 to 36.

Table 10 (included as appendix 5) shows the distribution of articles in each volume in various subject area. Volume 17 (1997) covers the maximum number of the articles i.e., 26. Collection development is the most contributed subject area i.e., 9 (34.61%) were contributed in volume 17. Volume 22 is having the lowest number of article.

3.1 Sections

Figure 6 and Table 11 (appendix 4) represent the subject areas from the 226 entries of current literatures surveyed in DBIT. It was found that there were 98 subjects which were documented during 1997-2002. Highest no. of subject according to its ranking was on information technology i.e. 23 (10.17%), digital libraries 14(6.19%), information retrieval 13(5.75), electronic publishing 9(3.98%) and there were 57(0.44) subject areas which appeared only once.

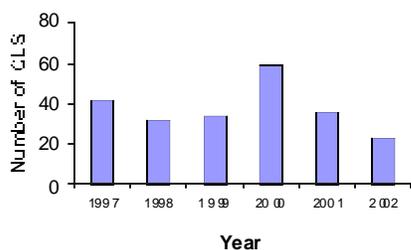


Fig 6. Year-wise number of CLS

Table 12 and figure 7 depicts the percentage of CLS per year. The total number of CLS in 33 issue of six volumes is 226. The highest number of CLS is 59 (26.10%) in

2000 and the lowest number of CLS is 23(10.17%) in 2002.

Table 12. Year-wise distribution of current literature survey (CLS)

| Year | No. of CLS | % |
|--------------|------------|--------------|
| 1997 | 42 | 18.58 |
| 1998 | 32 | 14.15 |
| 1999 | 34 | 15.04 |
| 2000 | 59 | 26.10 |
| 2001 | 36 | 15.92 |
| 2002 | 23 | 10.17 |
| Total | 226 | 99.96 |

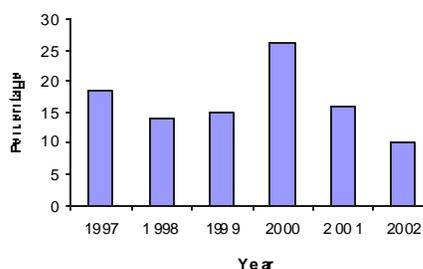


Fig 7. Year-wise percentage of CLS

Table 13 and figure 8 show volume-wise distribution of IT events. The highest numbers of IT Events are 34(20.85) in volume 17 and the lowest numbers are 18(11.04) in volume 19 and 20.

Table 13. Distribution of information technology events coverage

| Vol. No. | No. of events | % |
|--------------|---------------|--------------|
| 17 | 34 | 20.85 |
| 18 | 31 | 19.01 |
| 19 | 18 | 11.04 |
| 20 | 33 | 19.63 |
| 21 | 29 | 17.79 |
| 22 | 18 | 11.04 |
| Total | 163 | 99.36 |

Table 14 shows volume-wise distribution of IT scan. The total no. of IT scans are 213. The highest number of IT scan is 52(24.41 %) in volume 17 and 21. The lowest number is 22(10.32%) in volume 18.

Table 14. Information technology scan distribution

| Vol. No. | No. of IT Scan | % |
|----------|----------------|-------|
| 17 | 52 | 24.41 |
| 18 | 22 | 10.32 |
| 19 | 25 | 11.73 |
| 20 | 39 | 18.30 |
| 21 | 52 | 24.41 |
| 22 | 23 | 10.79 |
| Total | 213 | 99.96 |

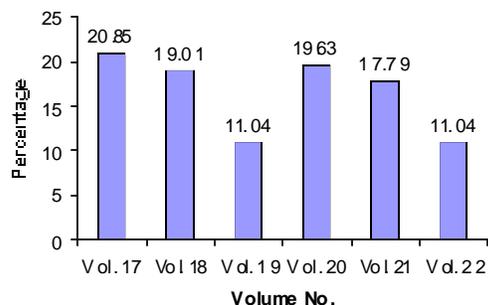


Fig. 8 Volume-wise distribution of information technology events

Table 15 shows the coverage of book reviews and selected readings in DBIT during 1997-2002.

Out of 57 book reviews covered, 18 (31.57) are covered in volume 20 and 21, which is the highest number. The lowest number is 1 (1.75). There is no book review in volume 18.

Total number of selected reading is 93. The highest number of selected readings is 69(74.19) in volume 17 and the lowest number is 12(12.90) in volume 18 and 19. There are no selected readings in volume 19, 20, and 21.

4. OBSERVATIONS

1. It is observed that out of 33 issues, 13 issues were thematic issues on specialised subject fields. Highest numbers of special issues were published in 1997 and 1998. In 2001, and 2002 no special issues were brought out.
2. Out of 12 experts who edited special issues as guest editors, Abhijit Lahiri and I. K. Ravichandrarao have edited two issues on Indian Bibliographic Databases and Collection Development respectively.
3. Other subjects areas on which special issues were brought out are: Information System for Agriculture; Research in Library and Information Science; Access to Social Science Information; Information Technology; Digital Libraries; Multimedia Applications; Information Marketing; Classification and Cataloging; and Environmental Information systems.
4. Out of 12 guest editors, six were from Delhi, three from Bangalore, two from Lucknow, and one from Nagpur.
5. Distribution of articles according to subject area reveals that out of 96 articles, 10 articles are on IT subject area.

Table 15. Coverage of book reviews and selected readings

| Vol. No. | Book Review | % | Selected Readings | % | Cumulative | % |
|---------------|-------------|--------------|-------------------|--------------|------------|--------------|
| 17 | 3 | 5.26 | 69 | 74.19 | 72 | 48 |
| 18 | Nil | - | 12 | 12.90 | 12 | 8 |
| 19 | 1 | 1.75 | 12 | 12.90 | 13 | 8.66 |
| 20 | 18 | 31.57 | Nil | | 18 | 12 |
| 21 | 18 | 31.57 | Nil | - | 18 | 12 |
| 22 | 17 | 29.82 | Nil | - | 17 | 11.33 |
| 6 Vol. | 57 | 99.97 | 93 | 99.99 | 150 | 99.99 |

6. The total articles published are spread in various issues of the journal. The maximum numbers of articles published are in 17th volume of the journal.
7. It has been observed that out of 96 articles 68 (70.83%) are single authored. Corporate authorship in this journal is very less i.e. only one article was published by corporate author.
8. Maximum articles by single authors are published in 17 and 18 volume. other volumes has less number of single authored articles.
9. Analysis of the current literature survey revealed that in all 226 articles were surveyed. Out of which highest are on authored articles. However this shows the trend in growing towards collaborative research from solo research.
10. Highest number of articles (59) were covered in 2000.
11. 163 different events happened nationally and internationally were covered.
12. Various issues also covered book reviews and selected readings. In all 57 book reviews and 93 selected readings were included.

5. CONCLUSIONS

1. Nearly 40% (39.39) of the total issues are special issues. It can be concluded that the journal brings out mainly good number of special issues as compared to general issues.
2. The experts in the field of Library and information science have edited all the special issues, as a result the journal has grown to be a peer reviewed journal.
3. Special issues brought out were on the latest and current subject areas.
4. Editorship of the special issue has been held by the persons from varied geographical areas. Most of them were from Delhi.
5. Articles published in the bulletin are on varied topics in the field of library science. Most of the articles are published on the current topics such as information

technology, bibliographic databases and collection development.

6. The subject areas included are spread over all the issues.
7. Single authorship is in trend as most of the articles are of single authorship
8. The journal has a section of Current Literature Survey in which the literature published in various sources are surveyed, and their descriptions are also given. In 33 issues 226 articles were surveyed which were on different topics and from various sources.
9. Like National and International level events are covered in these issues, so that the seminar symposia that conducted in other parts of the world are brought together at one source.

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