

Scintometric Analysis of Indian Journal of Marketing During 2005-2014

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Abstract

Indian Journal of Marketing is one of the premier and reputed peer reviewed monthly journal of Marketing. The journal was first published in the year 1968 and it has completed 46 years of its publication. This paper presents scintometric analyses of Indian Journal of Marketing during 2005-2014. The analysis covers various parameters like growth pattern, authorship patterns, citation-wise distribution of research papers, etc.

Keywords: Scintometric Analysis, Content Analysis

1. Introduction

The Indian journal of marketing is a reputed double blind peer reviewed monthly journal in the field of Marketing. The journal was first published in the year 1968. It is the oldest the only monthly Indian journal of Marketing. It contains scholarly research papers written by reputed personalities in the field of marketing, commerce and economics. To accomplish the below mentioned objectives the scintometric principles are applied.

The term Scientometrics originated as a Russian term for the application of quantitative method to the history of science. This term was introduced and came into prominence with founding of the journal named 'scientometrics' by T. Braunin 1977, originally published in Hungary and currently from Amsterdam. Scientometrics used to mean communication process in the science including socio-cultural aspects and appear to be almost synonymous to science of science with more stress on quantitative aspects- it also used as a generic term for a system of knowledge, which endeavours to study the scien-

tific (and technological) system using a variety of approaches within the area of science and technology studies. Thus Scientometrics is a part of the sociology of science and has applications to science policy making¹. These scintometric studies will be helpful for librarians in collection development. The present study has been undertaken in order to know the nature and contents of research papers published in Indian Journal of Marketing during the period 2005 - 2014.

2. Objectives of the Study

The Objectives of the present study are:

1. To analyze the number of papers published (year wise).
2. To study number of references cited
3. To study the length of research papers
4. To know the authorship patterns
5. To understand the Geographical distribution of Contributions

3. Scope

The present study is made on the oldest monthly journal in the field of marketing i.e Indian Journal of Marketing. For the present study total 120 issues of



the Indian Journal of marketing from the year 2005 to 2014 are considered.

4. Methodology

The data of all the 120 issues of the Indian Journal of Marketing were scanned for the required data related to the Number of author, Number of pages, References, research papers per issue was noted down. The same data was entered in the spreadsheet and the data was then subjected to analysis as per the objectives of the study.

5. Literature Review

Janssens (2008)² Studies have shown that hybrid clustering methods that incorporate textual content and bibliometric information can outperform clustering methods that use only one of these components. Kademani (2006)³ studies was attempts to highlight quantitatively the growth and development of research work in this field on Bose-Einstein Condensation (BEC) in terms of publication output as per Science Citation Index (1982-2005). During 1982–2005 a total of 5258 papers were published by scientists in this field. Kumar (2008)⁴ analyse the growth and development of web-resources in INSPEC database during 1995–2005. A total of 18673 publications appeared in 171 web-resources contributed by the scientists in various areas of research. Nederhof & Wijk (1997)⁵ studies was developed a method to identify and map the internationally most visible research topics occurring in the social and behavioral sciences, as well as the topics which changed most over a decade. Blauwhof (1997)⁶ studies was contribution relations between scientific articles, conference proceedings and patents relating to telephone switching are analyzed. The state-of-the-art in scientometrics and science and technology studies leads one to expect relations among these

documents. Boyack (2009)⁷ studies represents the results of a prototype study that aims to map the structure and evolution of chemistry research over a 30 year time frame. Information from the combined Science (SCIE) and Social Science (SSCI) Citations Indexes from 2002 was used to generate a disciplinary map of 7,227 journals and 671 journal clusters. Sagar and other (2010)⁸ scientometric analysis of all Tsunami related publications as per the Scopus TM database during 1997-2008. A total of 4338 publications and 21107 citations to these papers were received. The parameters studied include growth of publication, country-wise distribution of publications, activity index of countries, most-frequently cited publications, authorship pattern, and co-authorship index. Kaur & Gupta (2010)⁹ Tri-citation analysis mapping of Eugene Garfield's Citation Image authors (those frequently co-cited with him) is used to identify the major research networks and topics that are linked to his highly cited publications in three successive decades, 1978-87, 1988-97, and 1998-2007.

6. Analysis

6.1 Year wise distribution of Research Papers

Table No. 1 show the number of research papers contributed from the year 2005-2014. Maximum 100 (12.12%) research papers were published in the year 2009. The year 2007 sees minimum publications of only 87 (10.53%) papers. The journal publishes on an average of 89 papers per year.

Table 1: Year wise distribution of Research Papers

| Year | Total No. of Papers | Percentage |
|--------------|---------------------|------------|
| 2005 | 85 | 10.29 |
| 2006 | 73 | 8.83 |
| 2007 | 87 | 10.53 |
| 2008 | 91 | 11.01 |
| 2009 | 100 | 12.12 |
| 2010 | 91 | 11.01 |
| 2011 | 93 | 11.26 |
| 2012 | 81 | 9.82 |
| 2013 | 70 | 8.47 |
| 2014 | 55 | 6.66 |
| TOTAL | 826 | 100 |

6.2 Authorship Pattern

The analysis shows that in all 1134 authors contributed the 826 papers. Table No. II depicts the authorship pattern in the journal. The total numbers of 826 contributions were made during the period 2005 – 2014. 349 papers (42.26%) were contributed by single-author. Two authors contributed the maximum papers 383 (46.36%) and ranked the highest among all other categories. 78 articles (9.44%) were contributed by three authors. Four, Five and Six authored contributions count is 12 (1.46%), 2(0.24%) and 2 (0.24%) respectively.

Table 2: Authorship Pattern

| Year | Single Author | Two Authors | Three Authors | Four Authors | Five Authors | Six Authors | Total |
|-------------------|---------------|--------------|---------------|--------------|--------------|-------------|------------|
| 2005 | 44 | 33 | 6 | 1 | 0 | 1 | 85 |
| 2006 | 27 | 37 | 8 | 0 | 1 | 0 | 73 |
| 2007 | 40 | 36 | 8 | 2 | 0 | 1 | 87 |
| 2008 | 31 | 45 | 12 | 3 | 0 | 0 | 91 |
| 2009 | 42 | 49 | 8 | 0 | 1 | 0 | 100 |
| 2010 | 42 | 42 | 7 | 0 | 0 | 0 | 91 |
| 2011 | 46 | 41 | 5 | 1 | 0 | 0 | 93 |
| 2012 | 39 | 35 | 7 | 0 | 0 | 0 | 81 |
| 2013 | 25 | 37 | 7 | 1 | 0 | 0 | 70 |
| 2014 | 13 | 28 | 10 | 4 | 0 | 0 | 55 |
| Total | 349 | 383 | 78 | 12 | 02 | 02 | 826 |
| Percentage | 42.26 | 46.36 | 9.44 | 1.46 | 0.24 | 0.24 | 100 |

6.3 Geographical Distribution of Contributions (State Wise)

The Table No.III & IV depicts the contribution of number of research papers from State Wise as well as Nation Wise. Out of the total 1279 research papers 1192 (93.20%) Papers are from India. Among the Indian contributions Tamil Nadu state stands first in the list with maximum number of 310 (26.02%) research papers. Andhra Pradesh and Karnataka contributed 146 (12.24%) & 112 (9.39%) papers and stood 2nd and 3rd in the list. The major chunk of research papers were contributed by these three southern states.

Table 3: Geographical Distribution of Contributions (State Wise)

| S. No | Name of State | Contributions | Percentage |
|-------|-----------------|---------------|------------|
| 1 | Tamil Nadu | 310 | 26.02 |
| 2 | Andhra Pradesh | 146 | 12.24 |
| 3 | Karnataka | 112 | 9.39 |
| 4 | Maharashtra | 86 | 7.23 |
| 5 | Uttar Pradesh | 60 | 5.03 |
| 6 | Delhi | 56 | 4.69 |
| 7 | Punjab | 53 | 4.44 |
| 8 | West Bengal | 50 | 4.19 |
| 9 | Haryana | 47 | 3.96 |
| 10 | Gujarat | 32 | 2.68 |
| 11 | Orissa | 30 | 2.53 |
| 12 | Jammu & Kashmir | 28 | 2.34 |
| 13 | Madhya Pradesh | 27 | 2.26 |
| 14 | Uttarakhand | 26 | 2.18 |
| 15 | Kerala | 25 | 2.09 |
| 16 | Rajasthan | 20 | 1.67 |
| 17 | Assam | 19 | 1.59 |
| 18 | Mizoram | 15 | 1.26 |

| | | | |
|--------------|------------------|-------------|------------|
| 19 | Pondichery | 10 | 0.83 |
| 20 | Jharkhand | 9 | 0.76 |
| 21 | Unknown | 8 | 0.68 |
| 22 | Himachal Pradesh | 5 | 0.42 |
| 23 | Goa | 5 | 0.42 |
| 24 | Chandigarh | 3 | 0.26 |
| 25 | Bihar | 3 | 0.26 |
| 26 | Manipur | 3 | 0.26 |
| 27 | Meghalaya | 2 | 0.16 |
| 28 | Tripura | 2 | 0.16 |
| TOTAL | | 1192 | 100 |

Table 4: Geographical Distribution of Contributions (Nation Wise):

| S. No | Name of the Country | Contributions | Percentage |
|-------|---------------------|---------------|------------|
| 1 | India | 1192 | 93.20 |
| 2 | Malaysia | 19 | 1.48 |
| 3 | Bangladesh | 15 | 1.17 |
| 4 | Sri Lanka | 10 | 0.78 |
| 5 | Botswana | 8 | 0.62 |
| 6 | UK | 5 | 0.39 |
| 7 | Ethiopia | 5 | 0.39 |
| 8 | Iran | 5 | 0.39 |
| 9 | USA | 3 | 0.23 |
| 10 | Algeria | 3 | 0.23 |
| 11 | Australia | 3 | 0.23 |
| 12 | Oman | 2 | 0.15 |
| 13 | Saudi Arabia | 2 | 0.15 |
| 14 | France | 2 | 0.15 |
| 15 | Japan | 1 | 0.07 |
| 16 | New Zealand | 1 | 0.07 |
| 17 | Pakistan | 1 | 0.07 |
| 18 | Singapore | 1 | 0.07 |
| 19 | Tanzania | 1 | 0.07 |
| Total | | 1279 | 100 |

6.5 Authorship Productivity

Table-V shows that total 1134 authors contributed 826 research papers during the period 2005-2014. The maximum number i.e 984 (86.77%) authors contributed one research paper, followed by 113(9.98%) authors contributed two papers. Three and Four papers were contributed by 34(2.99%) & 3(0.26%) authors respectively. This shows that only few authors are regularly contributing to the journal.

Table 5: Authorship Productivity

| No. of Papers Contributed | Number of Authors | Percentage |
|---------------------------|---------------------|------------|
| 1 | 984 Authors | 86.77 |
| 2 | 113 Authors | 9.98 |
| 3 | 34 Authors | 2.99 |
| 4 | 3 Authors | 0.26 |
| TOTAL | 1134 Authors | 100 |

6.6 Length of Papers

Table VI shows that 14.52% of the papers cover 1-4 pages followed by 26.15% of papers covers 9-12 pages. Maximum numbers of papers 55.81% are between 5-8 pages. Only 3.52 % of papers are of length more than 13 pages.

Table 6: Length of Papers

| Length of paper | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 | 2008 | 2007 | 2006 | 2005 | Total | % |
|-----------------|-----------|-----------|-----------|-----------|-----------|------------|-----------|-----------|-----------|-----------|------------|------------|
| 1-4 | 3 | 1 | 2 | 4 | 4 | 11 | 9 | 21 | 26 | 39 | 120 | 14.52 |
| 5-8 | 24 | 36 | 41 | 50 | 52 | 68 | 61 | 51 | 36 | 42 | 461 | 55.81 |
| 9-12 | 27 | 30 | 33 | 33 | 30 | 20 | 16 | 14 | 9 | 4 | 216 | 26.15 |
| 13 and More | 1 | 3 | 5 | 6 | 5 | 1 | 5 | 1 | 2 | 0 | 29 | 3.52 |
| Total | 55 | 70 | 81 | 93 | 91 | 100 | 91 | 87 | 73 | 85 | 826 | 100 |

6.7 Study of References/Citations

Table VII gives details of the number of references cited by the authors in their respective papers published from 2005-2014. Out of the 826 research papers, 284 (34.38 %) have 1-10 references; followed by 311 papers (37.65%) with 11-20 references; 125 papers (15.13%) with 21-30 references; and 91 pa-

pers (11.02%) with more than 31 references. 15(1.82%) papers had no references.

Table 7: Study of References/Citations

| No. of References | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 | 2008 | 2007 | 2006 | 2005 | Total | % |
|-------------------|-----------|-----------|-----------|-----------|-----------|------------|-----------|-----------|-----------|-----------|------------|------------|
| Nil | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 6 | 5 | 1 | 15 | 1.82 |
| 1-10 | 02 | 01 | 13 | 25 | 32 | 40 | 38 | 45 | 45 | 43 | 284 | 34.38 |
| 11-20 | 34 | 33 | 38 | 32 | 30 | 38 | 44 | 21 | 17 | 24 | 311 | 37.65 |
| 21-30 | 15 | 28 | 20 | 12 | 14 | 13 | 2 | 11 | 4 | 6 | 125 | 15.13 |
| 31and More | 04 | 08 | 10 | 24 | 15 | 8 | 5 | 4 | 2 | 11 | 91 | 11.02 |
| Total | 55 | 70 | 81 | 93 | 91 | 100 | 91 | 87 | 73 | 85 | 826 | 100 |

7. Conclusion

Indian Journal of Marketing has indeed established itself as the oldest and leading marketing journal in the country. It is now available not only in print format but also in electronic format. The papers predominantly contributed by single author indicate that individual authors rather than research teams are active in the field of Marketing. The journal has published 826 articles during the period of study. The maximum number of research papers (12.12%) was published in the year 2009. The study reveals that, the maximum numbers of contributions are from the Two Authors with 46.36%. The study also revealed that majority of contributions are from India, the foreign author contribution is very less.

Reference

- Sangam, S.L. (2008). Areas of Research in the field of Scientometrics and Informetrics in Kognurmath. Et. at... (editors). Library Science Profession in the Knowledge Society ;268-269.
- Janssens, F., Glänzel, W., & Moor, B. D. (2008). A Hybrid Mapping of Information Science. belgum: Department of Electrical Engineering ESAT-SCD
- Kademani, B. S. (2006). Mapping of Literature on Bose-einstein Condensation. Malaysian Journal of Library & Information Science. 11.
- Anil Kumar. (2008). Web-resources in Inspec Database: A Scientometric Mapping. SRELS Journal of Information Management. 45.
- Nederhof, A. J. & Wijk, E. (1997). Mapping the Social and Behavioral Sciences world-wide: Use of Maps in Portfolio Analysis of National Research Efforts. Scientometrics. 40, 237-276.
- Blauwhof, G. (1997). Mapping the Dynamics of Telephone Switching Devices. Scientometrics. 38, 117-140.
- Boyack, K. W. (2009). Mapping the Structure and Evolution of Chemistry Research. Scientometrics. 79, 45-60.
- Anil Sagar. at. el... (2010). Scientometric Mapping of Tsunami Publications: A Citation Based Study. Malaysian Journal of Library & Information Science. 15.
- K. U. Leuven Leuven Belgium. Scientometrics, 75(3), 607-631.

9. Kaur, H. & Gupta, B.M. (2010). Mapping of Dental Science Research in India: A Scientometric Analysis of India's Research Output, 1999-2008. *Scientometrics*. 85, 361-376.

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