

REVIEW OF ARTICLES: “An introduction to infometrics”

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The article aims to explain terminologies such as Bibliometrics, Scientometrics and Informetrics. The term informetrics has become common outside Western Europe only in the past five years, as a general field of study which includes the earlier fields of bibliometrics and scientometrics. Its acceptance really dates from the 1987 International Conference on Bibliometrics and Theoretical Aspects of Information which eventually became the International Conference on Informetrics.

Bibliometrics is the study of the quantitative aspects of the production, dissemination, and use of recorded information. It develops mathematical models and measures for these processes and then uses the models and measures for prediction and decision making. Nowadays the term refers mainly to library studies. *Scientometrics* is the study of the quantitative aspects of science as a discipline or economic activity. It is part of the sociology of science and has application to science policy-making. It involves quantitative studies of scientific activities, including, among others, publication, and so overlaps bibliometrics to some extent. *Informetrics* is the study of the quantitative aspects of information in any form, not just records or bibliographies, and in any social group, not just scientists. Thus, it looks at the quantitative aspects of informal or spoken communication, as well as recorded, and of information needs and uses of the disadvantaged, not just the intellectual elite. It can incorporate, utilize, and extend the many studies of the measurement of information that lie outside the boundaries of both bibliometrics and scientometrics.

The article then explains how the value of a model in the informetrics field lies in its ability to summarize, in terms of a few parameters, the characteristics of many data sets: the overall shape, concentration, and scatter, and the way data sets change over time. In addition, models allow predictions of future behaviours and the isolation of the effect of different factors on variables of interest. Thus, together with the measures that have been derived from the models, they provide a firm basis for practical decision making.

The main areas of study in the informetrics field are:

1. Statistical aspects of language, word, and phrase frequencies, in both natural language text and indexes, in both printed and electronic media;
2. Characteristics of authors-productivity measured by number of papers or other means, degree of collaboration;
3. Characteristics of publication sources, most notably distribution of papers in a discipline over journals;
4. Citation analysis: distribution over authors, papers, institutions, journals, countries; use in evaluation; cocitation-based mapping of disciplines;
5. Use of recorded information: library circulation and in-house book and journal use, database use;

6. Obsolescence of the literature, as measured both by use and citation;
7. Growth of subject literatures, databases, libraries; concomitant growth of new concepts.

Two phenomena that have not, in the past, been seen as a part of bibliometrics or Scientometrics, but fit comfortably within the scope of informetrics are:

8. Definition and measurement of information, and
9. Types and characteristics of retrieval performance measures.

The article then digs into the different authors that have contributed to the study and definition of concepts in the field. This paper was published in 1995 therefore no mention is done on Information Technologies or the part they play in the field of informetrics.