

**Tilburg University** 

## Using print media indicators in researching organization concepts

Benders, J.G.J.M.; Nijholt, J.; Heusinkveld, S.

Published in: Quality & Quantity

Publication date: 2007

Link to publication in Tilburg University Research Portal

*Citation for published version (APA):* Benders, J. G. J. M., Nijholt, J., & Heusinkveld, S. (2007). Using print media indicators in researching organization concepts. *Quality & Quantity*, *41*(6), 815-829.

**General rights** 

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
  You may freely distribute the URL identifying the publication in the public portal

Take down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

## Using Print Media Indicators in Management Fashion Research

# JOS BENDERS\*, JURRIAAN NIJHOLT and STEFAN HEUSINKVELD

Nijmegen School of Management, Radboud University Nijmegen, PO Box 9108, NL-6500 HK Nijmegen, Netherlands

Abstract. Quantitative empirical research into 'management fashions' or 'organization concepts' is dominated by studies using print media indicators (PMI). Such research builds on the simple premise that the number of publications on an organization concept in the course of time reflects managerial interest in this concept. However, whilst PMI may be fruitfully used to study management fashions, this use is less straightforward than appears commonly assumed. We aim to fulfil the need for a methodological paper discussing the possibilities and limitations of using PMI. Thereby we draw on insights from bibliometrics and management fashion research, including our own ongoing research.

Key words: bibliographic method, organization concepts, management fashions

#### 1. Introduction

As 'prescriptive, more or less coherent views on management,' organization concepts are among the most influential category of ideas shaping contemporary organizational processes and structures, thereby affecting the working lives and well-being of billions of people. These prescriptions on organizing may be produced by academics, gurus or consultants or 'the management knowledge industry', and are meant to be used or 'consumed' by managers. An organization concept may receive considerable attention in the management press and induce a substantial number of change projects. This popularity is often temporary, and the public interest may disappear as quickly as it arose. The similarity of this process with aesthetic fashions made academic researchers label this phenomenon 'management fashions' (Eccles and Nohria, 1992; Gill and Whittle, 1993; Abrahamson, 1996; Kieser, 1997; Benders and Van Veen, 2001). Among the best-known

<sup>\*</sup> Address for correspondence: Jos Benders, Nijmegen School of Management, Radboud University, Nijmegen, PO Box 9108, NL-6500 HK Nijmegen, Netherlands, Tel.: +31 24 3611 835; Fax: +31 24 3611 933; E-mail: j.benders@fm.ru.nl

management fashions in 1990s were Lean Production (LP), the Learning Organization and Business Process Reengineering (BPR).

Research on such concepts' incidence is costly and methodologically difficult. Also, given a concept's interpretative viability and inherent vagueness (Benders and Van Veen, 2001; Giroux, 2006), constructing measurement instrument tends to be difficult and the result is likely to remain contentious. Consequently, reliable data on incidence of organization concepts (and indeed many phenomena on the organizational level) are fairly rare. This contributes to the popularity of an alternative for studying the popularity of organization concepts: the use of 'print media indicators' (PMI). Over the years a growing number of bibliographic databases has become available. These are often easily accessible from universities and libraries providing a convenient and economical data collection method. By investigating how much has been written about a particular organization concept the development of its popularity may be tracked. To our knowledge Pascale (1990: 20) was the first to use PMI to indicate interest in fashionable organization concepts. For illustrative purposes only, he supplied an 'influence index' based on the number of times 27 different organization concepts were mentioned in a select number of publications, but did not discuss his methodology.

As presented in some of the literature (Abrahamson, 1996; Boogaard and Vermeulen, 1997; Jones and Thwaites, 2000), searching databases to assess the popularity of a concept appears to be a straightforward and even commonsensical exercise: the data can be graphed, showing the noncumulative number of articles published through time. The graphs typically show bell-shaped curves, supposedly reflecting the rise and fall of a fashion's popularity. However, as we intend to show in this paper, the *prima facie* economies may proof costly if they invite uncritical use leading to erroneous conclusions. For instance, the use of PMI has invited the criticism that the popularity in the media is conflated with actual use in praxis of fashionable concepts (cf. the debate between Clark, 2004; Swan, 2004), although this problem will pertain more to the average reader than researchers in the field. More tricky is the implicit assumption underlying PMI-usage that the media, in a more or less indirect way, can give a reflection of what is considered fashionable in society.

To our knowledge there is as of yet no methodological publication available assessing the merits and drawbacks of print media indicators. Therefore, we draw on others' (cf. Abrahamson and Fairchild, 1999; Barley et al., 1988; Carson et al., 2000; Giroux, 2006) as well as our own research (f.i. Heusinkveld and Benders 2001; Nijholt and Benders, 2005) and on insights from related fields such as bibliometrics and information processing (cf. Hutchins, 1985) to discuss the possibilities and limitations of such research. In the following section, we focus on data collection (more specifically the qualities of the material obtained from selected bibliographic databases) and on search procedures. The third section deals with forms of data analysis. The paper ends with a conclusion and the suggestion that PMI may also be used as 'windows on praxis'.

## 2. Data Collection

When using print media indicators, data collection should ideally find all relevant references. Two key issues make that this is not automatically the case. In the first place, when using bibliographic databases the researcher is highly dependent on the composition of the database: what sources are covered, how has it been built up, and to what extent may it be seen as representative for the topic of interest? Once an understanding of this has been attained, retrieving data by using a proper search procedure is the second key step. Both steps are discussed subsequently.

### 2.1. DATABASE COMPOSITION

Often studies on print media indicators exploit bibliographic databases without considering the specific database composition (f.i. Pascale, 1990; Abrahamson, 1996; Boogaard and Vermeulen, 1997; Kieser, 1997). However, it is essential to understand what can be asserted about the portfolio of bibliographic records underlying the databases in use, since the outcome of the search is a function of

- (a) The specific characteristics of the database as well as
- (b) The total number of publications on the organization concept.

An important distinction is that between databases covering academic publications, and those containing practitioners' magazines. The latter are more apt for gaining insights into what managers are offered as reading topics.

Unfortunately, comparing the contents of databases may be extremely difficult as a master table of detailed database specifications is absent (Read and Smith, 2000; De Stricker, 1998). For more details on content and coverage one will often have to resort to contacting spokespeople of the relevant database producers. In the remainder of this section we will illustrate these points by referring to a selection of databases: ABI/Inform, Web of Science and the Online Contents (OLC) database.

## 2.1.1. ABI/Inform

ABI/Inform Global is available through the webpage of ProQuest, an information access and retrieval system. It focuses mainly on the English

language business press. A search of all periodicals in the database reveals that ABI/Inform covers 2661 journals and magazines (March, 2005). More than 350 of these are English-language titles published outside the US. In total, all sources represent over two million documents, almost half of which are in full-text form. Apart from the usual features, users are able to search the full texts of articles, when available. An interesting feature is that the search key makes it possible to limit the results to articles to scholarly journals. Coverage is from 1971 onwards, with most of the full-text articles available from 1991 onwards.

#### 2.1.2. Web of Science

Web of Science offers search possibilities into five scientific databases, among which the Social Sciences (1725 journals, with full-length abstracts available on 60% of articles since 1992) and Arts and Humanities (1144 journals) citation indices, as well as the Science Citation Index (5.900 journals, with full-length abstracts available of 70% of articles since 1991). It focuses on academic journals from a wide range of disciplines and languages, containing over 33 million articles from 1945 onwards. Users can search titles and abstracts, but not full texts. Often links are provided to webpages outside Web of Science where the full text of articles is available.

#### 2.1.3. Online Contents

Online Contents is a Dutch database. The concept has been taken over in Germany and given its quality further expansion seems likely, also because the owners are now partly American.

Data gathering started in September 1992. With daily updates this now results in an annual growth of over two million references. OLC contains references, but no full texts, to the articles of over 15,000 periodicals in all fields of science, as well as more general and popular periodicals. OLC is comprised of nine databases, such as OLC – Economics and Management, OLC – Humanities, et cetera. A number of different publishers supply references, based on the tables of contents of the periodicals. Since differences exist between the procedures of the respective publishers, unfortunately only a selection of the periodicals have searchable abstracts. Strong points of the database, however, are its large size and its references to journals and magazines in different languages. Some 1100 out of the 15,000 periodicals are in the Dutch language. Contacting an OLC content manager, it became clear that, although exact numbers are not available, the largest portion of the remaining periodicals is in English, followed by German and French (S. Korse, personal communication, March 10, 2005).

#### 2.1.4. Characteristics

In this section a number of vital database characteristics are discussed. As stated before, these are important because the outcome of the search is a function of these characteristics.

*Focus of the database* ABI/Inform focuses mainly on business press and scholarly journals on management, whereas Web of Science focuses on academic journals from all fields of research. OLC aims at comprehensiveness, both in the popular and scholarly press. This difference makes clear that the results of a database search do not necessarily give a representative picture of topics dealt with in the practitioner-oriented business press. Once again, the issue is to make sure that the pattern generated is not a result of the composition of the database, but an accurate reflection of the organization concept's spread through the print media.

The number of publications in the database per year The researcher needs to know whether or not the results are caused by varieties in the number of database records between years. One also has to account for processes of backloading (adding old entries). Many databases contain references to articles published before the databases existed, and it takes time for all of the older literature to be incorporated. For instance, in September 1998, OLC generated 1969 hits from the years 1992–1997 for keywords relating to BPR. In November 2000 the same key words generated 2027 hits for exactly the same time period (Heusinkveld and Benders 2000). The practical implication is that, as when citing websites, it is essential to mention the date(s) when the databases were consulted.

The relative representation of different languages In contrast to ABI/ Inform, OLC contains publications in multiple languages. OLC may thus be used to make cross-language analyses of the popularity of concepts, which may be indicative of differences in popularity in different nations. One needs to have an estimate of the relative representation of the different languages in the database, so these can be related to the number of records found. See, for instance, the estimates of the contents of OLC above.

The relative representation of different disciplines The popularity of organization concepts may be discipline-specific. Of course, the number of hits one get from journals within a certain discipline is dependent on the representation of this discipline within the database. For instance, ABI/Inform focuses mainly on management-related publications and will therefore not bring forward articles from other professional discourses (for instance health care) where the concept may have been applied and reported on.

Types of media covered Whilst researchers may be interested what is covered in the business press only and thus search just for articles in management magazines, other media may be assessed as well. Management books are beyond doubt a significant source, and more recently electronic media have come to play a role as well. The databases described above are mostly suited for finding the contents of periodicals, but other (multi-material) databases containing books, conference proceedings, periodicals, dissertations, microfilms and electronic resources may be used for uncovering different types of sources.

Database triangulation One way to circumvent the possibly idiosyncratic composition of a particular database is by using multiple bibliographic databases. This is especially useful when two or more databases are believed to complementary. Figure 1 is an example of the latter, showing a sinusoid wave associated with a typical management fashion (Nijholt and Benders, 2005). In this case results from OLC and a database published on CD-ROM called the 'Management CD' were combined. This was done because it was believed OLC was not sufficiently back-loaded, and the Management CD would provide a more accurate picture of the intensity of the debate surrounding 'self-managing work teams' in earlier years. It is of course essential to take any overlap between the results of the databases into account, as has been done in this case by creating a category 'both', denoting articles that were found in both databases.

#### 2.2. SEARCH PROCEDURE

The outcome of the search is also a function of the search procedure by which texts are retrieved. As early as 1985, Hutchins warned against some



Figure 1. Print media indicator 'zelfsturende teams' (self-managed teams). Combination of OnLine contents and management CD. Source: Nijholt and Benders (2005).

of the pitfalls of using 'computerized bibliographies' in print-media analysis and stressed the importance of understanding the search procedure to interpret the findings.

The search procedure consists of two important phases. In the first place, it is essential to understand how to capture the organization concept under investigation and operationalize it into adequate key words. Second, database users are required to express their search request in the language and format of the system they are using (Hutchins, 1985: 109). Although common knowledge in the field of bibliographic research, awareness of these processes underlying the search procedure have not been addressed in research on organization concepts.

#### 2.2.1. Organization Concepts

Database users always have to break down search questions into several individual search terms and determine how these should be combined and entered. Here, it is important to realize that an organization concept has two dimensions: the label and its content. Almost by definition one uses the label of the concept when doing research on print media indicators. However, concepts – and management fashions in particular – always have a certain degree of interpretative viability (cf. Ortmann, 1995; Benders and Van Veen, 2001): they are characterized by certain degrees of generality, ambiguity and vagueness. (cf. Giroux, 2006) so that users can shape the concept in different ways and in various contexts. For instance, a concept can move across country borders and get translated or even re-labeled, so that the content of the retrieved articles ultimately become loosely coupled from the original label. As an example, in Germany 'Lean Production' became a generic label for downsizing and delayering (Benders and Van Bijsterveld, 2000).

The reception of BPR in the Netherlands illustrates these points (Heusinkveld and Benders, 2001). Many articles on BPR simply used the label 'reengineering' in their titles. Using this as a search term, however, generates a considerable amount of unrelated records, because the 'reengineering' of business processes is synonymous with the 'reengineering' of strictly technical systems. On the other hand, using the exact phrase 'BPR' when searching will not reveal articles that merely use 'reengineering'. Furthermore, the label of a concept may change. BPR has been alternately used as referring to 'business process reengineering' and 'business process redesign'. For reasons we have just explained, the content of a concept may change as well. Throughout IT discourse in the Netherlands, there is an extensive plea to incorporate a BPR approach within systems development methods. In this discourse, the discussion focused on analyzing business processes as well as addressing organizational and technological changes

in a balanced way, while in the more general discourse BPR came to be interpreted for being a mere euphemism for downsizing (Heusinkveld and Benders 2000).

The researcher must then define a point after which texts are considered to be unrelated to the organization concept being researched, but these decisions may be difficult and are highly dependent on the research question. As a starting point, there must be a set of well-defined criteria determining an article's relevance, varying on the following continuum of strictness. A researcher may consider the fact that the concept's label is mentioned in the context of another discussion or as one of several independent variables (Barley et al., 1988) indicative of its popularity, and therefore relevant. Then nearly all hits on the search term - save unrelated synonyms - can be considered to be relevant. On the other end of the continuum, a researcher may only be interested in articles that feature conceptual discussions and empirical data on a strictly defined version of the concept. Then, not only must articles merely mentioning the organization concept be considered unrelated, the discussion should also show a consistent interpretation of the concept. Ideally, once these criteria are established, several researchers should judge the texts on their relevance, inter-rater reliability should be assessed and, in cases where there is doubt, consensus should be reached.

In some cases, decisions on spelling can also influence the results: searching for BSC in OLC for the years 1992–1999, the key word 'score-card' gave 453 hits and the combination 'balanced' and 'scorecard' 155 (Aubel, 2000, unpublished data). However, using the term 'score card' generated six additional and relevant articles.

Iterativity is therefore essential in research on print media indicators. Once a search has been done on an initial label, studying the texts may point to new labels that again can be fed into the bibliographic database, thereby gaining richer insights into the diffusion of a concept across different thematic or linguistic boundaries.

#### 2.2.2. Search Fields

Researchers should be aware of how the search terms are linked or matched to the underlying portfolio of database content (Hutchins, 1985). A database usually allows search terms to be matched to (1) the title of the publication, (2) the key word assigned to the publication, (3) to words appearing in the abstract of the publication, or (4) a combination of all three. Increasingly, databases also enable users to search the full text of articles and access the accompanying texts on-line. ABI/Inform, for instance, claim that half of its two million documents are now accessible in full-text form.

If it is important to distinguish between the sources that are going to be searched (i.e. books, articles, and internet sources), one needs to know whether the database in use allows this distinction during the search procedure.

The use of the search key is self-explanatory, as are often-used Boolean operators such as AND or NOT. What is more problematic, however, is the use of key words. A database may only use key words given to an article by the authors. However, since not all authors supply key words with their articles, searching by using the organization concept as key word will not yield all relevant results, as some articles will not have key words at all or use synonyms. Key words may also be supplied by the compilers of the database. In this case, the quality of this process is important. The best solution is when databases use a thesaurus with a standardized taxonomy, containing all allowed key words (Law and Whittaker, 1992). Then, if the concept under investigation has reached the status of a key word, all relevant articles should be found, and there is no need to supply alternative spellings and synonyms. For instance, ABI/Inform allows users to search via a thesaurus.

The disadvantage is that a fairly new organization concept may not be taken up in the thesaurus yet (also see Section 2.3). Web of Science uses key words provided by the authors, as well as a system called Key Word Plus, that generates key words automatically, based on words or phrases that appear frequently in the titles of an article's citations. These key words can be considered as linked to the content of that article, and can be used to search for further articles with similar citations.

#### 2.3. INFLUENCES OF DATABASE COMPILERS

Unfortunately, not only functional characteristics of databases influence the search results. Many editorial decisions are taken in the process indexing titles, abstracts and key words in a database from a collection of texts. Some of these selections are critical for the validity of the conclusions, but are usually very hard to take into account when setting out the methodology of research on print media indicators.

Sometimes spelling mistakes are made: in ABI/Inform searching for 'management' in article titles of scholarly journals generates 32,026 hits, whereas the faulty term 'mangement' gives 51 hits - an error rate of 0.16% (March 2005).

Databases also do not necessarily include the full range of articles from the allegedly covered journals. Jacso (1997) found that the Information Science Abstracts database did not fully index and abstract its core journals, which were supposed to be incorporated cover to cover. This may be considered an error or even malpractice. The opposite can also be true. Especially when databases use multiple suppliers of references, such as OLC, it is possible to get two or more hits referring to the same source. In cases where there is doubt – and depending on the possible impact on the results – it may be useful to check the results of PMI for doublets.

Furthermore, with the increasing availability of easily accessible online full texts, the importance of having high-quality informative abstracts has diminished; formerly, informative abstracts would sometimes be used as 'stand-ins' for full papers (Ojala, 2002). Abstracts in ABI/Inform have lately become more indicative of the article content.

As stated in the introduction, research on print media indicators should, as far as possible, be an objective reflection of the active role of the media in disseminating popular concepts. Unfortunately, compilers of databases can also be influenced by the popular status of concepts. This is especially important in two different processes: that of connecting key words to texts and in abstracting.

Key words are either assigned to the texts by the author, which makes the researcher dependent on the author's choice of terms. Although much bibliographic research is based on the assumption that an article's keywords are an adequate reflection of its content (Ding et al., Foo 2001), the wording intended to capture concepts may vary between authors. In other cases database editors assign key words. We have stated earlier that the best method for this is by use of a thesaurus. However, when no thesaurus is available, the outcomes of using key words are highly dependent on subjective choices by editors, who may be influenced by the popularity of organization concepts resulting in the improper usage of fashionable labels.

The same holds for using abstracts. In many academic publications abstracts are provided by the authors, but often abstracts are made by database editors. Abstracting print media texts is a complex process that goes beyond mere miniaturization. Instead, it involves not only processes of selection and deletion but also generalization and reconstruction. This may cause deviations from the initial print media texts and, again, improper usage of fashionable labels.

For example, the editors of the Excerpta Informatica database used 'business process redesign' instead of 'reengineering' as a key word. Consequently, 'redesign' generates more hits than 'reengineering', which internationally became the dominant label. Researchers investigating the fashionability of BPR may erroneously conclude that this hardly gained ground. A low number of articles on Reengineering must in this case be attributed to the use of Redesign by the database editors. In addition, the editors interpreted many types of change programs as being 'BPR' when the label was fashionable, even when the original texts did not use this label. The same happened in the production of abstracts, where Excerpta Informatica labeled many organizational reforms 'Business Process Redesign' after its introduction (Heusinkveld and Benders, 2001). Thus, in a certain number of articles retrieved Business Process Redesign is not even the central topic. Researchers should thus be aware of the editorial processes by which keywords are assigned and abstracts are made.

#### 3. Data Analysis and Interpretation

After going through the search procedure the results can be stored in a database compiled by the researcher. If the research simply aims to indicate the level of interest in a given organization concept within a certain bibliographical database, spreadsheet programs can be used to indicate the impact of the concept within that database, and its development over the years. The growth in the bibliographic database might be controlled for by relating the number of articles found in a year to the total number of articles in the database for that year.

However, the analysis might go further. We discuss several possibilities, grouped under the headings 'record analysis' and 'content analysis'.

#### 3.1. RECORD ANALYSIS

Once the records found are stored, different kinds of record analysis can be performed. Although the research aims should determine what kind of distinctions are made, some often-used distinctions are discussed below.

By assessing the target audiences of the journals in which the texts are published, it is possible to indicate subsets within the print media where the organization concept may have had significant differences in impact. Criteria such as the presence of an editorial board or the (extensive) use of references may be used to distinguish academic from practitioner-oriented journals. Barley et al. (1988) used a panel of respondents to assess whether magazines belonged to academic or practitioner-oriented subsets. Based on this distinction, they found that attention for Organizational Culture was greatest in the practitioner-oriented press. ABI/Inform makes this distinction for its users and makes it possible to limit the results to academic outlets.

Furthermore, the popularity of a concept is often discipline-specific (Fincham and Roslender, 2003). Tracking the reception between different thematic or scientific fields may be done by using the 'classification code' which is usually attached to journals and sometimes to specific publications within journals. Ponzi and Koenig (2002) have used classification codes from multiple databases to assess to what extent articles on knowledge management were published in divergent disciplines over the years.

By including or excluding results from different languages it is possible to compare media interest in a given organization concept in different lan-

JOS BENDERS ET AL.

guage regions. Of course, here the results are highly dependent on whether the original label (which is often in English) has been translated or not (cf. Benders and Van Bijsterveld, 2000).

With all of these distinctions into audiences, the researchers should be aware of the relative proportions of these audience subsets in the bibliographic database. Ideally the number of articles on an organization concept in a given subset should be indexed to the total number of articles in a subset available in the database (all articles from journals on IT), so that this index score can be compared to other disciplines, which may have a different proportion in the database. This is unfortunately not always possible given the limitations of some databases (cf. Section 2.1).

Finally, rather than studying audience subsets, a researcher might be more interested in the producers of discourse on the organization concept. That is, since many magazines and journals give short biographical notes on authors, it is possible to study the authors of relevant articles. Where no information is provided, the authors are usually journalists - be they freelance or not. Especially by looking at these suppliers of the organization concept, attention is drawn to the function of the media as a platform for different kinds of producers of management knowledge. For instance, a high percentage of consultants publishing on a concept, relative to the number of journalists and academics, indicates that the media are being used as a podium from which consultants advertise their products and services related to the concept. In contrast, Nijholt and Benders (2005) have used the percentage of academic authors publishing in practitioner-oriented magazines to indicate that the concept of self-managing work teams in the Netherlands has diffused from an academic background into the domain of practitioners.

#### 3.2. CONTENT ANALYSIS

Analyzing the records found in the print media and studying the content of the corresponding articles may reveal ways in which the concept has been received in different subsets within the media. A broad term for analyzing texts is content analysis, which is described as 'any systematic procedure devised to examine the content of recorded information (Gunter, 2000: 56). Content analysis has been used for a wide variety of purposes, such as analyzing the symbolic content of television advertising in order to determine what values are being supported (2000: 86), or measuring readability of texts by indexing the number of short and long or compound words (Krippendorff, 1980: 41). Even in the context of research on organization concepts, quantitative content analysis has seen different applications with different methodologies.

Content analysis can be useful in determining evaluations of the concept as reported in the media. For instance, Abrahamson and Fairchild (1999) have elaborately exploited the abstracts of ABI/Inform to understand developments in the representation of Quality Circles (QC) in the press. They counted the frequency of words from constructed groups of 'positive', 'negative', 'thought' and 'emotion' words. Results indicated that discourse on QC was positive, emotional and unreasoned in its upswing (1999: 726).

Barley et al. (1988) have used print media indicators as a starting point to indicate a rising interest in the media in Organizational Culture. They then differentiated between academic and practitioner-oriented journals and performed a content analysis on both sets of texts in the beginning of the wave. They identified contextual markers that indicated a specific underlying idea about or perspective on Organizational Culture (such as Alternative Paradigm, Normative Control or Rational Control) and counted the incidence of such markers in all texts, concluding that academic texts through time began to display more contextual markers that were originally associated with the practitioner-oriented discourse. That is, they concluded that the practitioner-oriented discourse influenced academic discourse rather than vice versa.

Carson et al. (2000) analyzed an aggregated set of articles on several management fashions and scored each fashion on variables describing some of their characteristics such as 'difficulty in implementation' and 'fear-inducing'. They used these data to find relationships between fashion characteristics and the length of their respective lifecycles in the media, concluding that more recent fashions have shorter life spans (as measured by the length of the wave of the print media indicators). They also find a weak statistical relationship between certain types of fashions and economic indicators. For instance, production-oriented fashions are more likely to arise when there is an unfavorable trade balance.

#### 4. Conclusion and Discussion

Using print-media indicators is probably the most popular quantitative method to get insight into the evolution of the popularity of specific organization concepts. As we discussed, gathering these data is economical and the growth of bibliographic databases is likely to contribute to PMI's own popularity among researchers. However, we also stressed that there are many pitfalls in using these. For various reasons, the trends found may be an artifact of the databases.

We stress that PMI must not be conflated with the actual use of concepts by organizations. Both should be distinguished sharply. However, PMI niglat be a useful starting point or collecting data on organizational praxis and a concept's dissemination. For instance, if a large proportion of texts found in the print media are published in journals pertaining to healthcare, it is plausible that the concept is actually applied more often in healthcare praxis. More generally, PMI can give indications about the disciplines and/or sectors in which a concept enjoyed popularity, and the oftoccurring interpretations. The texts found may also contain empirical data such as survey and case studies that can shed light on how much and how organizations used the concept studied. The actual applications of concepts are an important dimension in assessing the popularity of an organization concept. In this sense, the texts found might generate 'windows on praxis'.

#### Acknowledgments

We would like to thank dr Hélène Giroux for her help and encouragement to publish this paper. An earlier and modified draft of this paper was published in German as a book chapter (Benders et al., 2005).

#### References

- Abrahamson, E. (1996). Management fashions. *Academy of Management Review* 21(1): 254–285.
- Abrahamson, E. & Fairchild, G. (1999). Management fashion, lifecycles, triggers and collective learning processes. *Administrative Science Quarterly* 44(4): 708–740.
- Barley, S., Meyer, G. & Gash, D. (1988). Cultures Of culture; academics, practitioners and the pragmatics of normative control. *Administrative Science Quarterly* 33(1): 24–57.
- Benders, J., Klumb, J., Nijholt, J. & Heusinkveld, S. (2005). Printmedienindikatoren. In S. Kühl, P. Strodtholz & A. Taffertshofer (eds.), Organisationsforschung; Handbuch der quantitativen Methoden. Opladen: SV Verlag für Sozialwissenschaften, pp. 335–357.
- Benders, J. & van Bijsterveld, M. (2000). Leaning on lean; the reception of a management fashion in Germany. *New Technology, Work and Employment* 15(1): 50–64.
- Benders, J. & van Veen, K. (2001). What's in a fashion? Interpretative viability and management fashion. *Organization* 8(1): 33–53.
- Boogaard, M. & Vermeulen, R. (1997). De levenscyclus van management-buzzwords. *Holland Management Review* 56: 71–79.
- Braam, G., Heusinkveld, S., Aubel, A. & Benders, J. (2001). De balanced score card in Nederland. Een empirische optiek. Accounting 105(1248): 405–414.
- Carson, P., Lanier, P., Carson, K. & Guidry, B. (2000). Clearing a path through the management fashion jungle. *Academy of Management Journal* 43(6): 1143–1158.
- Clark, T. (2004). The fashion of management fashion: a surge too far? *Organization* 11(2): 297–306.
- De Stricker, U. (1998). Daring to compare database coverage. Information Today 15(6): 12.
- Ding, Y., Chowdhury, G. G. & Foo, S. (2001). Bibliometric cartography of information retrieval research by using co-word analysis. *Information Processing and Management* 37(6): 817–842.
- Eccles, R. G. & Nohria N. (1992). Beyond The Hype Rediscovering the Essence of Management. Harvard: Harvard Business School Press.
- Fincham, R. & Roslender, R. (2003). Intellectual capital accounting as management fashion: a review and critique. *European Accounting Review* 12(4): 781–796.

- Gill, J. & Whittle, S. (1993). Management by panacea; accounting for transience. *Journal of Management Studies* 30(2): 281–295.
- Giroux, H. (2006). It was such a handy term; management fashions and pragmatic ambiguity. *Journal of Management Studies* vol 43.
- Gunter, B. (2000). Media Research Methods. London: Sage.
- Heusinkveld, S. & Benders, J. (2000). Print Media Traces and Reception Patterns: Exploring the Uptake of Management Fashions, Paper Presented at CEMP Conference 'The Role of the Media in the Consumption of Management Ideas', Barcelona.
- Heusinkveld, S. & Benders, J. (2001). Surges and sediments; shaping the reception of reengineering. *Information and Management* 38(4): 241–253.
- Hutchins, J. W. (1985). Information retrieval and text analysis. In: T.A. van Dijk (ed.), *Discourse and Communication (New Approaches to the Analysis of Mass Media Discourse and Communication)*. Berlin: De Gruyter, pp. 50–62.
- Jacso, P. (1997). Databases: Peter's picks and pans. Database 20(1): 84-87.
- Jones, M. & Thwaites, R. (2000). Dedicated followers of fashion (BPR and the Public Sector). In D. Knights & H. Willmott (eds.), *The Reengineering Revolution; Critical studies of corporate change*. London: Sage, pp. 50–62.
- Kieser, A. (1997). Rhetoric and myth in management fashion. Organization 4(1): 49-74.
- Krippendorff, K. (1980). Content Analysis. London: Sage.
- Law, J. & Whittaker, J. (1992). Mapping acidification research: A test of the co-word method. Scientometrics 23(3): 417–461.
- Nijholt, J. & Benders, J. (2005). Zelfsturende teams als managementmode. *Tijdschrift voor* Arbeidsvraagstukken 20(1): 51–68.
- Ojala, M. (2002). History lessons; ABI/Inform. Online 26(1): 61-62.
- Ortmann, G. (1995). Formen der Produktion. Organisation und Rekursivität. Opladen: Westdeutscher Verlag.
- Pascale, R. T. (1990). *Managing on the Edge; How successful companies use conflict to stay ahead*. New York: Simon and Schuster.
- Ponzi, L. & Koenig, M. (2002). Knowledge management (another management fad?). Information Research 8(145) (http://informationr.net/ir/8-1/paper145.html).
- Read, E. J. & Smith, C. R. (2000). Searching for library and information sciences literature; a comparison of coverage in three databases. *Library Software Review* 19(1): 118–126.
- Swan, J. (2004). Reply to Clark: the fashion of management fashion. *Organization* 11(2): 307–314.