The Journal of Business Ethics: 2001 – 2010

Hugo Martínez
Jhuliana Galvis
Edna Bravo
Universidad Industrial de Santander / Universidad Politécnica de Cataluña

Abstract

The objective of this paper is to characterize through bibliometric tools the intellectual development of the Journal of Business Ethics from 2000 to 2010. The methodology used had three big phases: The collection of relevant information from the Social Sciences Citation Index (SSCI) on the Institute for Scientific Information (ISI), the transformation of information by descriptive and co-occurrence analysis and the results generation. The main results shows patterns and regularities related to the scientific productivity, main authors, journals, institutes, countries and the relevant key topics and their relations. The results indicate that major key topics studied are corporate social responsibility, ethics and stakeholder; and some important emergent topics are job satisfaction, value based management, innovation and social network.

Keywords: Bibliometric Analysis, Journal of Business Ethics, co-occurrence analysis.

Introduction

The Journal of Business Ethics since its initiation in 1980 has published original articles concerning ethical issues related to business. This journal is the central publication in the European Business Ethics Networks - EBEN[1], and is one of the 45 Journals used by the Financial Times in compiling the Business School research rank, included in both the Global MBA[2] and EMBA[3] rankings. These two facts are complemented by the relevantposition that the Journal has in the Social Science Edition of the Journal Citation Reports of the Institute for Scientific Information (ISI).

In the literature is common to find papers that focus on reviewing an specific field or area of research; some of them have shown that the Journal of Business Ethics is not the exception (Garriga& Mele, 2004; Sparkes & Cowton, 2004, Martin & Cullen, 2006; O'Fallon & Butterfield, 2005). However, despite of the importance of studies that focused on journals as their unit of analysis (Callon et al.,1999; Linstone, 1999; Garcia et al., 2006; Uysal, 2010); the Journal of Business Ethics does not have yet an evolutionary perspective and an analysis of its own development.

Having said the above, there is an opportunity to make a study to describe the current status as a result of the knowledge path followed by the journal and make sense about its possibilities for the future. Thus, the purpose of this study is to characterize through

---

[1]The European Business Ethics Network EBEN, founded in 1987 as a non-profit association, is a cross-national network dedicated to the promotion of business ethics, broadly defined, in academia, business, public sector and civil society.
[2]Global Raking of **management programmes** relating to Master Business Administration
[3]Raking of **management programmes** relating to Executive Master Business Administration

bibliometric tools the intellectual development of the journal from 2000 to 2010 to have a better understanding about the scientific productivity pattern; author, country and institute characteristics; and the key and emerging research topics included in the journal as an important matter for readers and potential authors. Although the use of bibliometric tools varies according to their purposes, its main application is related to the search, description and integration across domains of knowledge, monitoring paradigms and research trends in an efficient way, enabling rapid updating an inter-temporal comparison (Narin& Hamilton, 1996).

Following research purposes described before, a three methodology phases are used to achieve the research objectives: (i) The collection of relevant information from ISI data bases, (ii) the transformation of informationusing software designed to assist analysis of bibliometric data file and; (iii) the results generation.

The paper is structured as follows: We first present the source used to obtain the different information about the journal. Then, we give a detailed account of the methodology employed. Next, we try to provide a global characterisation of Journal of Business Ethics. Finally, we discuss the results and highlighted conclusions related to opportunities for the journal.

Background

Bibliometrics is nowadays a well studied field. It emerged time ago with some important researchers(Garfield, 1972; de Solla Price, 1963). Generally the analysis are done using information included on the fields of main articlesfrom journals (Palvia et al., 2004; Palvia, Mao, Salam, &Soliman, 2003). The most used definitions of bibliometrics are the Pritchard's which described it as the application ofmathematics and statistical methods to books and other media of communication (Pritchard, 1969); andthe Hawkins definition which described it as the quantitative analysis of the bibliographic features of abody of literature (Hawkins, 1977). Thus, the purpose is to describe literary production, patterns ofinfluence and the cognitive structure in a given field – e.g. authors, journals, countries, core themes andcollaboration between authors. These techniques have been proved to overcome some obstacles ofdistortion related to the subjectivity in assessments (Aksnes&Taxt, 2004) using reliable data and quantitative analysis to described and map some external and internal propertiesof a scientific field (Estabrooks et al., 2004).

Furthermore, bibliometric analysis has focused on science technology area in industries like biotechnology and nanotechnology (Murray, 2002). Data is used to assess research performance and to recognize future interest areas arguing that researchers build upon other work of scientist (Van, 1996) assuming that papers are reflections of knowledge produced by scientific research. The methods, principles and techniques related to bibliometrics can be used in different disciplines of science and engineering (Keiser &Utzinger, 2005; Tang &Thelwall, 2003). Bibliometric techniques are methods based on mathematical analysis, especially statistics, to asses and quantify attributes from a research subject such as the articles embedded in international journals literature in order to evaluate quality and efficiency (Abramo et al., 2009). These methods are non invasive, simple to implement, allowing rapid inter-temporal comparison with more quantitative data (Moed et al., 1991).

Methodology

Three methodology phases wereused to achieve the research objectives: (i) The collection of relevant information from ISI data bases, (ii) the transformation of informationusing software designed to assist analysis of bibliometric data file and (iii) the results generation. In the first phase,was used the Journal Business Ethics articles included in the ISI databases. The chosen time interval was from 2001 to 2010. The search criteria included the term "Journal of Business Ethics" in publication name. We collected 2623 documents, including articles, proceeding papers, review, editorial material, book review, correction, biographical-item, and letter. However from these data base we decided to choose only articles since our goal was to focus on original high quality pair review studies; this selection reduced the database to 2045 records.

In the second phase, we applied descriptive statistics based on frequency counting using the fields of bibliographic data of articles.. This descriptive part give us an overview on some indicators that have been used in other studies such as: authors (Chi &Ho, 2005), countries (Rahman et al., 2005), journals (Dannenberg, 1985), institutions (Rajendram et al., 2006), subject areas (Davis & Gonzalez, 2003), and the productivity growth of the field. Furthermore, besidea general descriptive characterization of the journal, the bibliometric analysis was based as wellon co-occurrence analysis. The co-ocurrenceanalysis wasbased on the nature of words (Ding et al.; 2001) that constitute an adequate description of the content or links between the problems of the articles (Cambrosio et al.; 1993) and therefore are indicators of the key concepts in a specific given domain (Bhattacharya et al.;2003). Co-occurrence analysis involves keywords and core themes. These analyses make the counting and study of concurrence of keywords on each pair of papers and can give a picture of topics included in the literature (Ding et al., 2001). This kind of analyses are based on the nature of words as key elements of knowledge, ideas and concepts (Callon et al., 1991) and take their relation to show the key topics in a specific domain (Bhattacharya et al., 2003; Cambrosio, et al., 1993; Ding et al., 2001). This analysis has been applied on the representation of different disciplines and fields in the literature (Cahlik, 2000; Ding et al., 2001; Lee &Jeong, 2008; van Meter et al., 2004; Neff & Corley, 2009; Viedma-Del-Jesus et al., 2011).

The third phase, is compose by a general description and the key research factors, the emerging themes and futures opportunities and the relations among principal and intermediary research themes that will be covered in the next section.

Results: Bibliometric Analysis

The purpose of the analysis is to analyze the information collected from 2001 to 2010 from ISI Web of Science using the general descriptive and the co-occurrence analyses bibliometric techniques in order to provide insights of the Journal of Business Ethics research.

General descriptive statistics

During the last ten years, the Journal of Business Ethics has presented a general increase on the published articles as shown in the Figure 1. There is a general growth on scientific productivity but some years output is maintained or even decrease. Is important to highlight that in 2010 there is a considerable decreasing on the paper publishing compare to 2009 even 2008.

Figure 1. Distribution of published articles
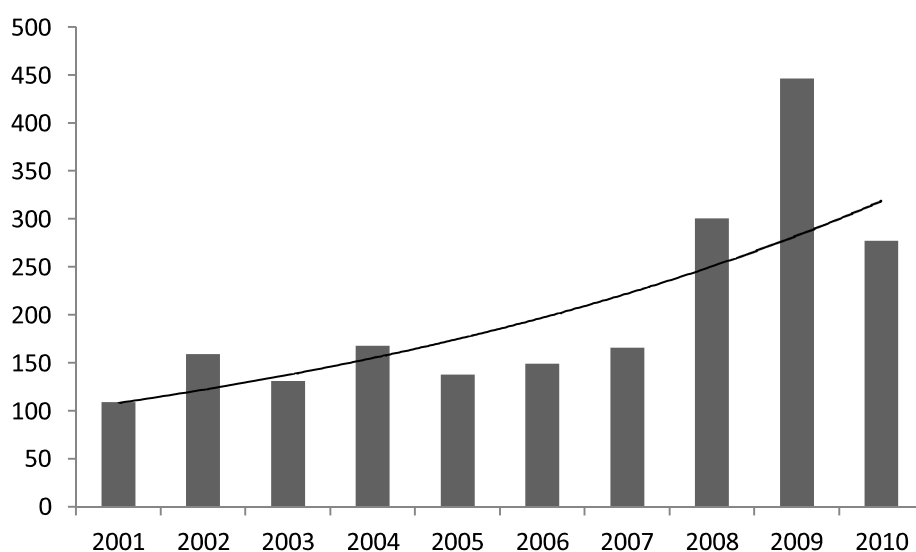
The top 15 countries were ranked on Table 1 by number of published articles where the specific country appears. The contribution of countries was estimated by the location of the affiliation of the authors. North American, European, Asian countries and Australia are found in this list. African and Latin American countries are absent into the ranking. It is important to highlight the major presence of countries belonging to the G8 such as Canada, France, Germany, Italy, and USA. USA and Canada are the most productive countries in the research stream. Only USA gives the 48% of the productivity in the ranking. The number of research papers can reflect the activity and academic level of these countries (Arunachalam & Jinandra, 2000).

Table 1.Ranking most productive countries

Country	Frequencies	Country	Frequencies
USA	983	France	29
Canada	218	Italy	26
England	192	Finland	24
Australia	124	Norway	24
Netherlands	97	South Korea	23
Peoples R China	85	Sweden	22
Spain	85	Turkey	22
Taiwan	66	Switzerland	19
Belgium	33	South Africa	17
Germany	33	India	16

Figure 2 shows the evolutionary production of the top 5 countries based on the number of papers published. In general, a slightly raise on the top 5 countries has been noted. USA has

higher productivity than the other countries maintaining a gap relevant to productivity during the time-frame of study (2001-2010). The growth rate of the Netherlands is maintained almost constant.

Figure 2. Evolution top 5 most productive countries
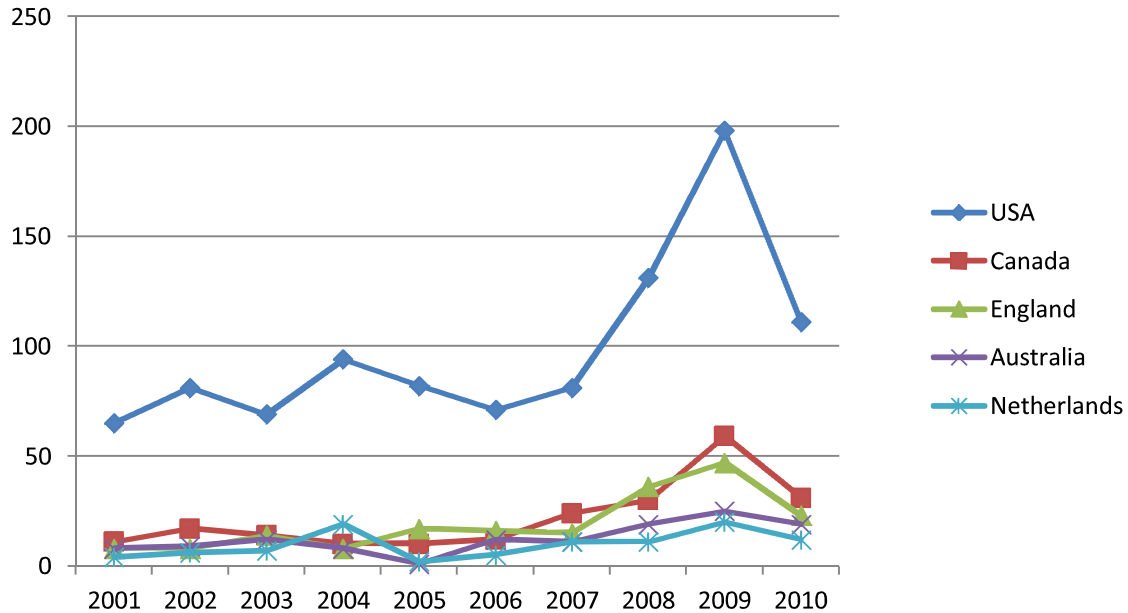
The top 15 institutes were ranked in Table 2. The York University is the largest contributor with 49 records on the research stream. Erasmus University and University of Notre Dame are second and third with 34 and 25 respectively. There are differences in the productivity among institutes, but these gaps are shorter when compared to the gaps founded in the countries' analysis. As is expected there is a relation between the institutions productivity and the countries productivity: 12 institutions from the top 15 are from USA, 2 are from Canada, and 2 are from England. On the other side, China is not representative from the most productive countries' ranking, however there are 3 universities from this country in the most productive institutions ranking, these are Chinese Univ Hong Kong, City Univ Honk Kong and Hong Kong Baptist Univ.

Table 2.Ranking most Productive Institution

Author Affiliations	Frequencies	Author Affiliations	Frequencies
York Univ	49	Chinese Univ Hong Kong	15
Erasmus Univ	34	City Univ Hong Kong	14
Univ Notre Dame	25	Hong Kong Baptist Univ	14
Univ Penn	24	Univ Bath	14
Florida Int Univ	23	Univ N Carolina	14
Univ Calgary	23	Univ Wisconsin	14
Univ Nottingham	19	Boston Coll	13
Univ Mississippi	17	Loyola Univ	13
Univ Wyoming	17	St Thomas Univ	13
Baylor Univ	16	Texas A&M Univ	13

The most productive authors were ranked in Table 3. Vitel, S.J. (14 article); Choi, C.J. (11 articles); Valentine, S. (11 article); Tsalikis, J (10 articles) and Caldwell, C. (9 articles) are the top 5 on published papers. On the other hand the 10 more cited articles are shown on Table 4. As can be seen the three most cited articles are related to the ethics codes and personal values.

Table 3. Ranking most productive authors

Authors	Frequencies	Authors	Frequencies
Vitell, S J	14	Van Kenhove, P	7
Choi, C J	11	Alas, R	6
Valentine, S	11	Argandona, A	6
Tsalikis, J	10	Cohen, J R	6
Caldwell, C	9	Giacalone, R A	6
Seaton, B	9	Grunewald, D	6
Jamali, D	8	Heugens, PPMAR	6
Crane, A	7	Kaptein, M	6
Fleischman, G	7	Lin, C P	6
Thorne, L	7	Natale, S M	6

Table 4. Ranking more cited articles

Title	Author(s)	Times Cited
Business codes of multinational firms: What do they say?	Kaptein M.	71
The nature of the relationship between corporate codes of ethics and behaviour.	Schwartz M.	64
Managers' personal values as drivers of corporate social responsibility.	Hemingway C.A.; Maclagan PW	58
Evolution and implementation: A study of values, business ethics and corporate social responsibility.	Joyner B.E., Payne D.	54
Enron ethics (or: Culture matters more than codes)	Sims R.R.; Brinkmann J.	53
Consumers' perceptions of corporate social responsibilities: A cross-cultural comparison.	Maignan I.	50
Ethical codes of conduct and organizational context: A study of the relationship between codes of conduct, employee behavior and organizational values.	Somers M.J.	49
The Fair Trade movement: Parameters, issues and future research.	Moore G.	48
Behind the mask: Revealing the true face of corporate citizenship.	Matten D. et al.	47
The role of consumers' trust in online-shopping .	Grabner-Kraeuter S.	47

Something to note are the authors that appear in both of the previous tables, Table 3 and Table 4 in order to obtain the most productive authors with the most cited articles. This can be interpreted as a balance between quantity and quality of scientific productivity of the journal

in the academic community. Thus, it is important to highlight the role of the authors Crane, A. and Kaptein, M. and their research contribution to the journal.

Keywords analysis: Research key topics

Recent studies have used author keywords in bibliometric analysis (Chiu & Ho, 2007) normally because they offer information about trends as viewed by researchers (Garfield, 1990). The most used keywords in the articles of the Journal of Business Ethics are corporate social responsability (324), ethics (253), business ethics (193), stakeholder (110), corporate governance (64) and ethical decision making (50).

The tendency of the five most important topics in the research field from 2001 to 2010 is show in Figure 3. The general tendency is to growth. Corporate social responsability is the most relevant topic from 2006 and have presented a constant trend to raise in time-frame studied 2001-2010.

Figure 3 shows a raise in 2009 for the whole key topics but 'ethical decision making'. That could find an explanation on the economic crisis of USA at 2007 which had impacts on financial and social dimensions in 2008. The causes of this crisis were rooted on corporate ethical problems. Furthermore, this assumption can even give an explanation to the raise on published articles by USA on 2009 shown on Figure 2.

Figure 3. Evolution of top 5 keyword authors
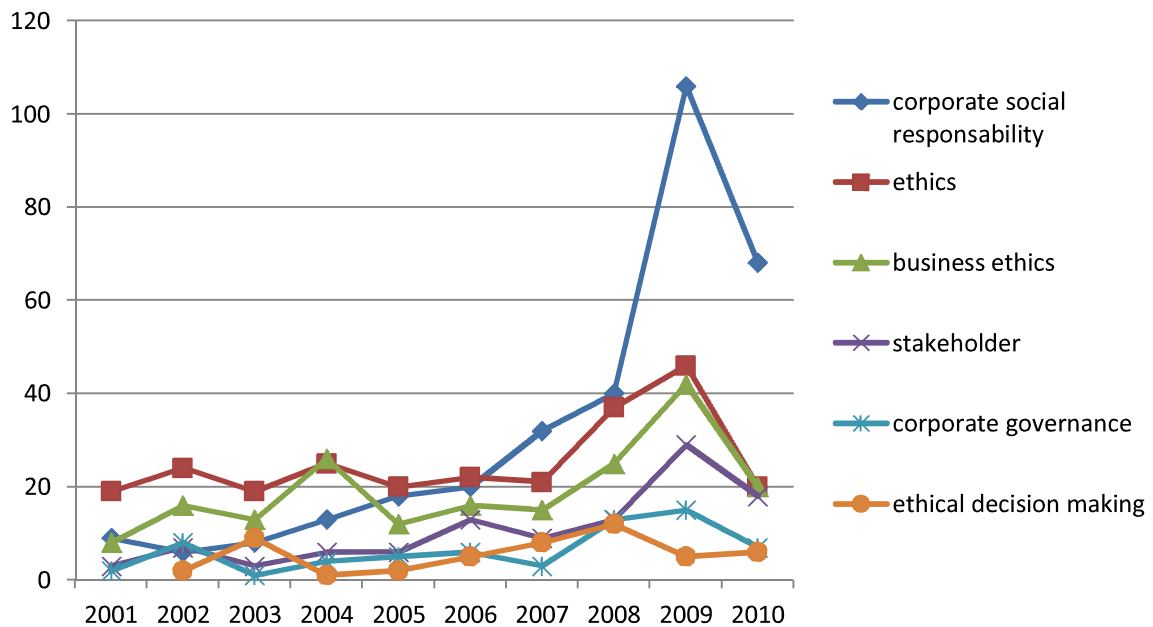
Table 4 shows the relations between the most productive countries and the most used topics. For USA and Australia the key research theme during this ten years is ethics; however for the others countries the key theme is corporate social responsibility. USA, Canada and England have researched the whole packet of most relevant key topics, while countries like Belgium and Germany have studied the half of the total stated relevant topics, excluding important themes like corruption, code of ethics, culture, trust and fair trade.

Table 4. The most used keyword by Country

Keyword	USA	Canada	England	Australia	Netherlands	Peoples R China	Spain	Taiwan	Belgium	Germany
Corporate social responsability	88	41	52	18	23	11	20	8	7	11
Ethics	151	19	22	20	8	10	8	2	1	1
Business ethics	99	16	11	12	9	7	9	6	5	6
Stakeholder	40	11	20	5	8	3	10	2	7	2
Corporate governance	28	12	9	2	1	2	4	4		1
Ethical decision making	30	5	6	5			1	3	2	
China	16	5	5	5		20				1
Corruption	23	6	4	1	1	4	2	2		
Code of ethics	26	5	1	2	5	1	2	1		
Gender	22	2	3	5		2		1	2	2
Culture	23	2	3	1	1	4		3		
Trust	17	4	3	3	1		5			
Value	12	3	4	1	2	1	1	2		2
Leadership	16	5	1	4	3	2	1		1	3
Fair Trade	1	8	8						2	

Table 5 shows the relations and profiles between the most productive authors and the most used topics. On the 'corporate social responsibility' topic the interested authors are Jamali, D. (7 articles); Argandona, A. (4 articles); Preuss, L. (4 articles); Brammer, S. (3 articles); Lindgreen, A. (3 articles); Perrini, F. (3 articles); Swaen, V. (3 articles); y Zhang, R. (3 articles). On the 'ethics' and 'business ethics' topics the interested authors are Choi, C.J. (7 articles); Beekun, R.I. (5 articles); Alas, R. (4 articles); Robertson, C.J. (4 articles); Schwartz, M. (4 articles); Tsalikis, J. (7 articles); Seaton, B. (6 articles); Brink, A. (3 articles). Although 'corruption' is one of the most studied topics none of the most productive authors has focused on it. Furthermore, few of the most productive authors have studied key themes such as corporate governance, ethical decision making and code of ethics. Even kaptien, M. who's the author of the most cited article in the Journal of Business Ethics, does not have among his key topics some important themes such as 'corporate social responsibility' and ' ethics' which are found among the 3 more studied topics.

Table 5. The most used keyword by author

Author	Corporate social responsability	Ethics	Business ethics	Stakeholder	Corporate governance	Ethical decision making	China	Corruption	Code of ethics	Gender
Vitell, S J		3	2						1	
Choi, C J		7	1							
Valentine, S	2								1	
Tsalikis, J		1	7				1			
Caldwell, C		1	1							
Seaton, B		1	6				1			
Jamali, D	7			1						
Crane, A	2	1		2		1				1
Fleischman, G	2								1	
Thorne, L	1	1			1					
Van Kenhove, P						2				2
Alas, R	1	4					1			
Argandona, A	4	1	1							
Cohen, J R		1								1
Giacalone, R A	1	2								
Grunewald, D			3							
Heugens, PPMAR	1			2						
Kaptein, M				2					1	
Lin, C P	1	1								
Natale, S M		1	1	1		1				

The keywords were classified to obtain information about the year they have appeared. These give us an understanding about relatively new topics or old ones that are studied from a different perspective. Among these topics were found job satisfaction, value based management, innovation and social network.

About the key research topics, it had been expected that every paper had a relation to the main components of the journal which are Business, ethics and business ethics as can be seen from Fig. 4. However there are other key topics which are important and have relations to the central one`s. The key topic 'stakeholders' is highly related to 'social corporate responsibility' and in lesser grade to 'ethics' and 'business ethics'. On the other hand, 'corporate governance' and 'sustainable' are strongly related to social corporate responsibility. 'Ethics' is related to value. 'Business ethics' is highly related to 'corruption', 'ethic codes' and 'stakeholder'; at the same time 'corruption' is related to 'culture' and 'culture' is related to 'ethics'.

Fig.1 Key Research Areas and their relations in the Journal of Business Ethics[4]

Conclusions

The co-occurrence analysis and the mapping resulting from it give us a structure of knowledge about the most important topics published in the "Journal of Business Ethics". This kind of analysis can propose influential terms and theories about a specific phenomenon under study that can be use to make the research process more efficient.

There are important implications resulting from the present analysis. The number of articles in the journal present a general growth in the time-frame studied. This trend is maintained even at the country level. USA, Canada and England have the 65% of the production from the top 20 productive countries at the Journal of Business Ethics.

Latin American and African countries need to be more proactive on the research on the topics studied in the journal. In these countries the corruption is one of the most problematic factors for doing business. Furthermore, Latin America and Africa are the continents with larger corruption indicators as it is stated on the World Competitive Report (2010).

The main subject categories been researched in the Journal of Business Ethics are: Corporate social responsibility, ethics and stakeholder. However there are other important subjects in other context that have been impacted by the research stream such as: Corporate governance, corruption and ethical decision making. The most productive authors are Vitell, SJ; Choi, CJ and Valentine, S; and the most cited are Kaplein M, Schwartz M, Hemingway CA. The main institutions classified by number of record are University of York, University of Notre Dame, University of Navarra, Erasmus University and University of Pennsilvania.

This paper then offers general characteristics about how the Journal of Business Ethics has evolved having into account its presence in the JCR of ISI and on prestigious networks like EBEN. Its publications are characterized by both theory and practice broadening the spectrum of research in different fields from the business ethics perspective. The important themes were highlighted and mapped in order to describe the intellectual structure of the journal during ten years and the emerging themes which are the bases for future work, these are job satisfaction, value based management, innovation and social network. Congratulations to the journal for its success in the ethics field and its continuous search for "humanizing the technique"[5].

REFERENCES

Arunachalam, S., & Jinandra, D. M. (2000). Mapping international collaboration in science in Asia through coauthorship analysis. Current Science, 79(5), 621-628.

Bhattacharya, S., Kretschmer, H., & Meyer, M. (2003).Characterizing intellectual spaces between science and technology.Scientometrics, 58(2), 369-390.

Callon, M., Coenen, R., Cohen, W. H., Freeman, C., Kodama, F., Meyerkrahmer, F., et al. (1999). Retrospective evaluation (1971–1999). Research Policy, 28, 911-919.

Cambrosio, a, Limoges, C., Courtial, J. P., & Laville, F. (1993). Historical scientometrics?Mapping over 70 years of biological safety research with coword analysis.Scientometrics, 27(2), 119-143.

Chiu, W. T., & Ho, Y. S. (2007). Bibliometric analysis of tsunami research. Scientometrics, 73, 3-17.

Ding, Y., Chowdhury, G., & Foo, S. (2001). Bibliometric cartography of information retrieval research by using co-word analysis. Information Processing & Management, 37(6), 817-842.

Garcia Merino, M., Pereira do Carmo, M., & Santos Álvarez, M. (2006). 25 Years of Technovation: Characterisation and evolution of the journal. Technovation, 26, 1303- 1316.

---

[5] Part of Spain EBEN slogan.

Garfield, E. (1990). Keywords plus-ISIS breakthrough retrieval method. 1. Expanding your searching power on current-contents on diskette. Current Contents, 32, 5-9.

Garriga, E., &Mele, D. (2004). Corporate Social Responsibility theories: Mapping the territory. JOURNAL OF BUSINESS ETHICS, 53(1-2), 51-71

Keiser, J., &Utzinger, J. (2005). Trends in the core literature on tropical medicine: A bibliometricanalysis from 1952-2002. Scientometrics, 62(3), 351-365.Linstone, H. A. (1999). TFSC: 1969–1999. Technological Forecasting and Social Change, 62, 1-8.

Li, L.L., Ding, G.H., Feng, N., Wang, M. H., &Ho, Y. S. (2008). Global stem cell research trend:Bibliometric analysis as a tool for mapping of trends from 1991 to 2006. Scientometrics, 80, 41-60.

Ma, R. M., Qiu, J. P., Ni, C. Q., & Li, X. L. (2009). An author co-citation analysis of information science in China with Chinese Google Scholar search engine, 2004-2006. Scientometrics, 81(1), 33-46.

Martin, K. D., & Cullen, J. B. (2006). Continuities and Extensions of Ethical Climate Theory: A Meta-Analytic Review. Journal of Business Ethics, 69(2), 175-194.

Murray, F. (2002). Innovation as co-evolution of scientific and technological networks: Exploring tissueengineering. Research Policy, 31, 1389-1403.

Narin, F., & Hamilton, K. F. (1996).Bibliometric performance measures.Scientometrics, 36(3), 293-310.

O'Fallon, M. J., & Butterfield, K. D. (2005). A Review of The Empirical Ethical Decision-Making Literature: 1996–2003. Journal of Business Ethics, 59(4), 375-413.

Klaus S. (2010). The Global Competitiveness Report 2010-2011.

Small, H., & Griffith, B. C. (1974). The structure of scientific literatures I: Identifying and graphing specialties. Science Studies, 4(1), 17-40.

Sparkes, R., &Cowton, C. (2004). The maturing of socially responsible investment: A review of the developing link with corporate social responsibility. Journalof Business Ethics, 52(1), 45-57.

Tang, R., &Thelwall, M. (2003).US academic departmental Web-site interlinking in the United Statesdisciplinary differences. Library & Information Science Research, 25(4), 437-458.

Uysal, O. O.. (2010). Business Ethics Research with an Accounting Focus: A Bibliometric Analysis from 1988 to 2007. Journal of Business Ethics, 93(1), 137-160.

Van Raan, A. F. J. (1996). Advanced bibliometric methods as quantitative core of peer review basedevaluation and foresight exercises. Scientometrics, 36, 397-420.

Zhao, Y. Y., Cui, L., & Yang, H. (2009). Evaluating reliability of co-citation clustering analysis in representing the research history of subject.Scientometrics, 80(1), 91-102.

Zitt, M., Ramanana-Rahary, S., &Bassecoulard, E. (2003). Bridging citation and reference distributions: Part I—the referencing-structure function and its application to co-citation and co-item studies. Scientometrics, 57(1), 93-118.