

Study on Scientific Production in Strategic Management Period 1980-2014

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Abstract: - When a discipline is consolidated through advances and research it entails, it is necessary to analyze what were the elements of impact in the field, through an analysis of the work that the scientific community of the field generated. This paper analyzes, through free software programs Sitkis, Ucinet and VOSviewer, information on major authors, articles and keywords of the twelve high impact publications in Strategic Management for the period 1980 2014. The purpose of this research is to determine what were the major journals, authors and themes of SM in the past thirty-four years.

Keywords: Strategic Management, bibliometric indicators, literature review.
JEL: D80, D83, Z00

Resumen

Cuando una disciplina se consolida por medio de los avances y las investigaciones que de ella se derivan, resulta necesario analizar cuáles han sido los elementos de impacto en la materia, esto a través de un análisis de los trabajos que la comunidad científica del campo genera. En este trabajo se analiza, por medio de los programas de software libre Sitkis, Ucinet y VOSviewer, la información sobre los principales autores, artículos y palabras clave de las doce publicaciones de mayor impacto en Gestión Estratégica (GE), para el periodo de 1980 a 2014. El propósito de esta investigación es determinar cuáles han sido las principales revistas, autores y temas de la GE en los últimos treinta y cuatro años.

Palabras clave: Gestión estratégica, indicadores bibliométricos, revisión bibliográfica

I. INTRODUCTION

Development and incorporation of knowledge in the discipline of strategic management (SM) is growing every day, so it is important to perform such studies that can be identified where the work, publications, authors and trends that mark the evolution of this area. Knowing the new research, adaptation and expiration of some of the theories of SM puts scholars in a more favorable conduct research to innovate and contribute to the development of new knowledge in the subject. This paper presents a methodology for the analysis of the scientific production of SM is exposed and it is considered that this could be applied

in assessing the state of art of any other field using the following tools:

- A. Google Scholar is a search of documents program with plenty of information retrieval, free and easy to use. It is a data source that complements other more specific as the Web of Science. Also, it offers a product called bibliometric statistics, which identifies the impact of scientific journals, using as the sort index metric h with a time frame of five years, giving stability results (Cabezas-Clavijo and Delgado -López-Cózar, 2013).
- B. Web of Science Thomson Reuters (2015) is a product that allows access and analyze information indexed in the major journals of 150 disciplines (Cortés, 2008) is considered one of the main sources of information for bibliometric studies.
- C. Sitkis is a bibliometric tool that accelerates the search, management and data processing. It was developed by Schildt H., (2002). Allows you to import text files result of searches in a Web of Knowledge to a database Microsoft Access, generates reports and analyzes that can be interpreted with other programs like Net draw of Ucinet (Tarrats, 2012).
- D. Ucinet 6 is a program that creates items correlation matrices and graph their relationships with network maps through Netdraw tool (Borgatti, Everett and Freeman, 2002).
- E. VOSviewer 1.5.7 is free software based on neural network technique for segmentation, developed by Nees Jan van Eck and Ludo Waltman. It is used to generate maps that are based on data linked and is used mainly for analyzing bibliometric networks (Waltman and Van Eck, 2010).

II. BACKGROUND OF THE PROBLEM

According to Lyman and Varian (2000), in their report called How much information? mention that the number of

scientific articles produced in the world each year is approximately two million items. Consistent with Tarrats, (2012), traditional techniques to determine the bibliographic contributions in this discipline that require the immersion of scientists on documents generated in their area of interest. However, these results in a process that requires a lot of time of reading and analysis, and the results are usually subjective and difficult to replicate. For this and given the technological tools available today, using programs that facilitate the location of the most relevant scientific material is recommended.

The bibliometric data analysis techniques are especially useful when large amounts of information as the literary production of some discipline (Frias, Ribeiro and Portugal, 2013) are discussed.

III. DEFINITION OF THE PROBLEM.

Assuming that publications in magazines have been exposed to a critical review and favorable assessment, these are representative of research generated in a certain discipline. This work is delimited to articles and journals in English that address the issue of SM for the period 1980-2014 and aims to present an overview of what has happened in the last three decades in this field.

When analyzing the evidence of the database available in Google Scholar and Web of Knowledge to identify the major journals of higher impact, it is present an overview of what has been the trend in the number of publications per year in the area, as is the relationship between the most important authors through co-citation analysis, the authors who are producing more goods and what is the link of the sub areas of the SM through a study of co-relation of the keywords more used.

IV. CONCEPTUAL THEORETICAL BACKGROUND

According to Furrer, Thomas and Goussevskai, (2008), SM is a discipline that had its origins in studies of economic organization. At this stage, previous authors as Taylor (1947), Barnard (1938), Simon (1947) and Selznick (1957) initiated the study of enterprises through economic ideas, but it was not until the sixties with works such as: Strategy and structure of Chandler (1962), corporate strategy of Ansoff (1965) and the book Business Policy: Text and cases attributed to Andrews (1965) that the birth of the SM was marked. The works of that time are mainly case studies that their very specific nature resulted difficult to apply to other types of organizations.

Due to the problem of generalization, in the seventies began a new phase where the analysis and

research is more weighted. In this period two main perspectives, one focused on the process of how they generated and implemented strategies, and the other focused on understanding the relationship between strategy and performance are observed. Among the most outstanding works in this period is that of Michael Porter with his contributions in 1979, 1980 and 1985, in which he suggested a framework for analyzing the structure of an industry and competitors.

Also in the decade of the 80s a change of direction is observed in the study of the resources and capabilities that differentiate companies. With this SM researchers resumed studies of organizational economics as transaction costs of Williamson 1975 and 1985 and the agency theory resulted of the work of Fama in 1980, Jensen and Meckling of 1976. With this were developed and conducted some works regarding the relationship between organizational structure and firm performance, functionality of hybrid ventures, strategic alliances and joint ventures, also to explain how companies choose their mode of market entry.

Alongside, it was developed the theory of resources and capabilities that tries to explain the performance of a company compared to the resources they have. Works like Wernerfelt of 1984, Barney of 1991, dynamic capabilities of Stuart and Podolny of 1996, Teece (1997). The knowledge approach was developed by Grant in 1996, Powell and Dent-Micallef, 1997, which are considered among the most important works in the discipline.

V. CONTEXTUAL FRAMEWORK

According to Broadus (1987), bibliometrics is the quantitative study of the physical unities published or bibliographic units and according to Garfield (1973) citing a document with intention to aim their relevance to the discipline in question. The documents cited most frequently, are likely to have exerted a major influence on the discipline than the ones cited less often...the more frequently cited a particular work, the greater its influence on the scientific development of the field analyzed (Soriano, Pinillos, 2011).

Therefore, the criteria used to define which articles, publications and authors have had more impact on the development of SM is the number of citations, then an article with more cites will be considered more important than another with less. The co-citation is a bond of co-occurrence and occurs when two literary elements as articles or authors are cited by a third party. It is expected that a higher frequency of co-citation there is a greater affinity between the elements (Miguel Moya-Anegón and Herrero-Solana, 2006).

The activity metrics provide information on the number and impact of scientific production indicators such

as the impact factor or the number of items as examples of such metrics. On the other hand, metrics or relational indicators provide insight as a discipline is made. The study of co-citations or also called first generation and the relationship of associated words or second generation are the two types of analysis that allow reaching the relational indicators (Ruiz-Baños and Bailón-Moreno, 1998).

VI. METHOD

The methodological approach is based on a bibliometric study of 1,882 items obtained from the Web of Knowledge (2015) and published in the twelve most important magazines of Strategic Management at the page of Google Scholar (2015). This allows seeing which has been the impact of major journals, authors and themes of the SM for the period 1980-2014.

Starting to search Google Scholar major publications listing SM it was obtained the first twelve magazines considered the greatest impact on the discipline, according to the h index proposed by Hirsch (2005), which seeks to establish simultaneously the quality and quantity of scientific production. A magazine or author has index h if h has published articles with at least h citations each number.

On the Web of Science it is obtained a list of all articles related with the word Strategic Management (GE) published in the period 1980-2014 was obtained, then the data is refined to work only with the articles published in twelve journals mentioned before, generated text file of this search and through Sitkis were exported data to a Microsoft Access file in which it is obtained the information as abstracts, authors, keywords, publication dates among others and from which can be analyzed and graph corresponding to 1,882 items resulting values.

The program Sitkis generates files on co-citation networks and relationships between keywords, which can be interpreted with VOSviewer Ucinet and software, by generating matrices and relational maps (Tarrats, 2012).

VII. ANALYSIS OF RESULTS

Below is a list of the twelve major journals in the discipline of SM is presented, according to the results obtained with statistics tool Google Scholar.

Table 1. List of major journals in Strategic Management.

Journal	Índice h5
Academy of Management Journal	72
Strategic Management Journal	70
Organization Science	68
Journal of Management	67
Journal of Marketing	65
Management Science	62
Journal of Business Research	62
Journal of International Business Studies	60
Journal of Business Venturing	58
Journal of Management Studies	58
Academy of Management Review	57
Harvard Business Review	56

Source: Based on data from Google Scholar

Out of the 1,882 articles resulting it is seen an increasing trend in the number of items every year. This reflects the maturity of the discipline and the development of their sub areas of study.

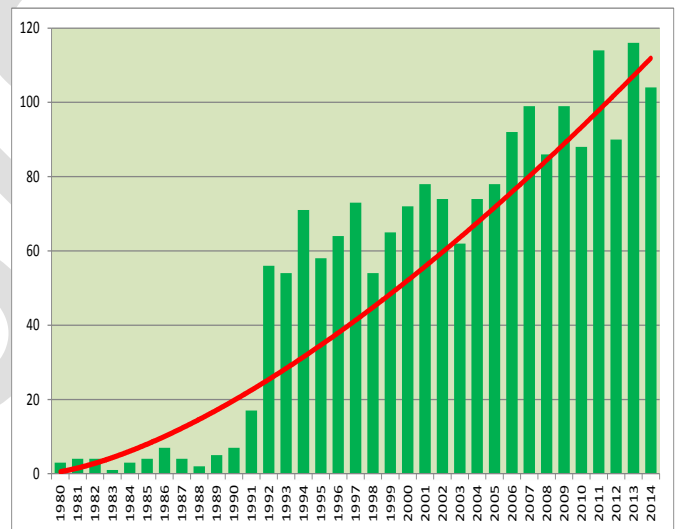


Figure 1. Number of articles per year.

Source: Based on data from the Web of Knowledge

Table 2. Number of articles per year.

Año de publicación	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
registros	3	4	4	1	3	4	7	4	2	5	7	17	56	54	71	58	64	73
Año de publicación	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	
registros	54	65	72	78	74	62	74	78	92	99	86	99	88	114	90	116	104	

Source: Based on data from the Web of Knowledge.

Of all the items it can be seen that the five journals that provide more elements are, from most to least: 1. Strategic Management Journal, 2. Journal of Management Studies, 3. Journal of Business Research, 4. Journal of Management and 5. Organization Science.

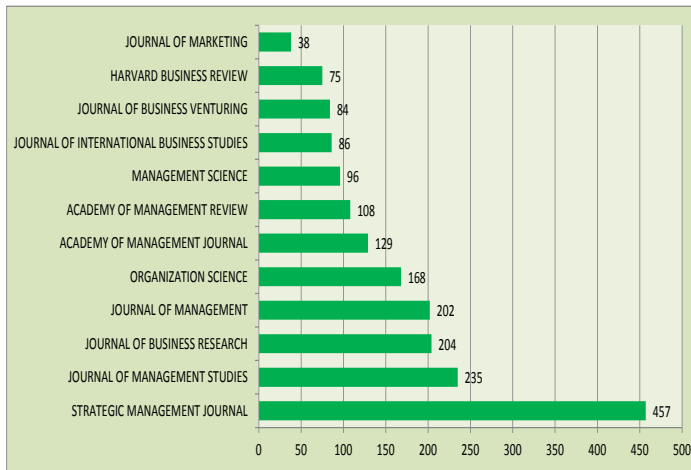


Figure 2. Number of articles per journal

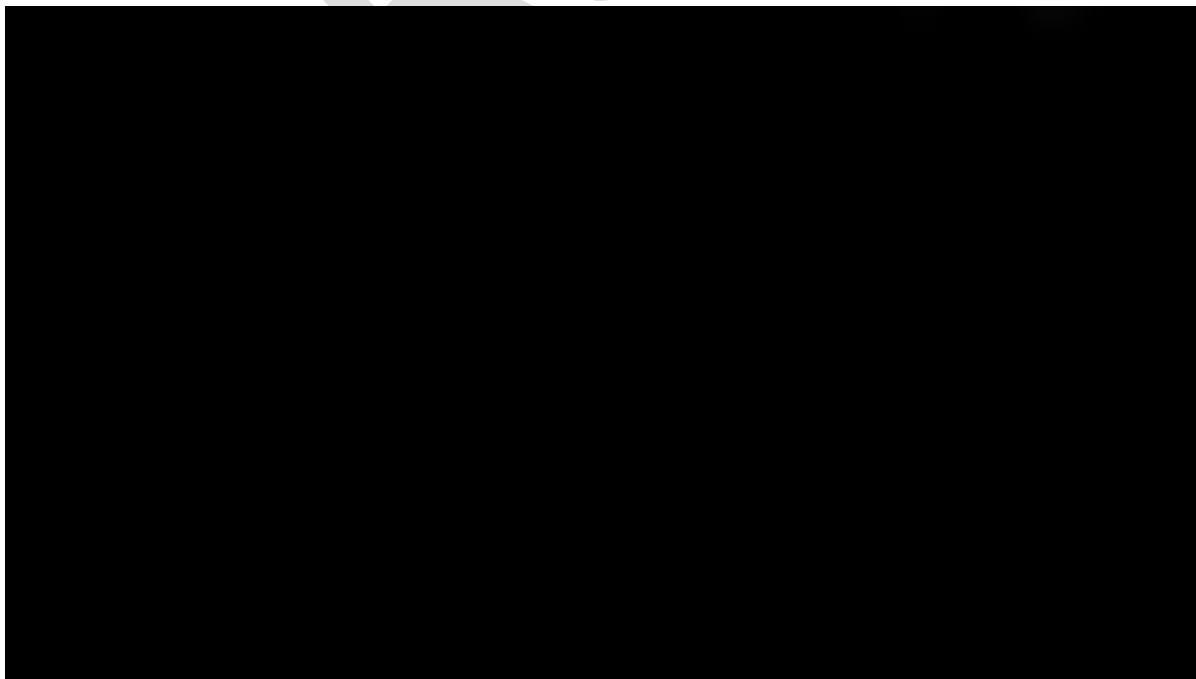
Source: Based on data from the Web of Knowledge

For the study of major authors, first, it is presented the 50 researchers who have published more articles after the analysis of co-citations that can observe the relationship between authors independently year of publication. The VOSviewer tool allows interpreting the results of these relationships grouping into segments to those elements that are related. In this case four groups were generated, then the graph corresponding to these groups is presented and as Annex is incorporated table 3. Co-citations are incorporated by author by group, where can be consulted the results of the groups, number of occurrences and more important authors for each group.

Table 3. The 50 authors with more published papers

Autor	Registros	Autor	Registros	Autor	Registros	Autor	Registros	Autor	Registros
KETCHEN DJ	29	VERBEKE A	10	ZAHRA SA	8	SHORT JC	7	BARR PS	7
HITT MA	29	THOMAS JB	10	WRIGHT M	8	SHENKAR O	7	ZAJAC EJ	6
HAMBRICK DC	14	VOLBERDA HW	9	VAN DEN BOSC.	8	RUGMAN AM	7	WRIGHT PM	6
MAHONEY JT	12	SNELL SA	9	POWELL TC	8	RAJAGOPALAN N	7	WERNER S	6
CANNELLA AA	12	MCDUGALL P.	9	MACMILLAN IC	8	OVIATT BM	7	WALTER J	6
BOYD BK	12	IRELAND RD	9	LYLES MA	8	MCGRATH RG	7	STEENSMA HK	6
PRIEM RL	11	HOSKISSON RE	9	KELLERMANN S	8	KAPLAN RS	7	SLEVIN DP	6
HULT GTM	11	COVIN JG	9	WESTPHAL JD	7	GREENWOOD R	7	SIMSEK Z	6
FLOYD SW	11	CARPENTER M.	9	THOMAS H	7	COMBS JG	7	SHIMIZU K	6
WIERSEMA MF	10	BERGH DD	9	SIRMON DG	7	BETTIS RA	7	SAPIENZA HJ	6

Source: Own elaboration with data of Web of Knowledge



Grupo	1	2	3	4
Color	Rojo	Verde	Azul	Amarillo

Figure 3. Density map of co-citation by author

Source: Based on data from ISI Web of Knowledge and software VOSviewer

Table 4. Co-citations per author per group

Grupo	No. de ocurrencias	Autor
1	68	Nelson RR-EVOLUTIONARY THEORY-1982-0
1	65	AMIT R-STRATEGIC MANAGE J-1993-14
1	64	LEONARDBARTON D-STRATEGIC MANAGE J-1992-13
1	64	WERNERFELT B-STRATEGIC MANAGE J-1984-5
1	63	MAHONEY JT-STRATEGIC MANAGE J-1992-13
1	62	Coase RH-ECONOMICA-NEW SER-1937-4
1	62	Schumpeter J. A.-THEORY EC DEV-1934-0
1	62	BARNEY J-J MANAGE-1991-17
1	62	Teece DJ-STRATEGIC MANAGE J-1997-18
1	61	HENDERSON R-STRATEGIC MANAGE J-1994-15
1	61	Cyert R.-BEHAV THEORY FIRM-1963-0
1	59	Rumelt R. P.-COMPETITIVE STRATEGI-1984-0
1	59	Itami Hiroyuki-MOBILIZING INVISIBLE-1987-0
1	59	Grant RM-STRATEGIC MANAGE J-1996-17
1	59	NELSON RR-STRATEGIC MANAGE J-1991-12
1	58	ZANDER U-ORGAN SCI-1995-6
1	58	TEECE DJ-RES POLICY-1986-15
1	57	Clark K. B.-PRODUCT DEV PERFORMA-1991-0
1	57	Leonard-Barton D.-WELLSPRINGS KNOWLEDG-1995-0
1	57	Szulanski G-STRATEGIC MANAGE J-1996-17
1	56	Kogut B-ORGAN SCI-1996-7
1	54	FREDRICKSON JW-ACAD MANAGE J-1984-27
1	54	WERNERFELT B-AM ECON REV-1988-78
1	54	MILGROM P-AM ECON REV-1990-80
1	53	Rosenberg Nathan-INSIDE BLACK BOX TEC-1982-0
1	52	Baumol W.J.-CONTESTABLE MARKETS-1982-0
1	50	FAMA EF-J POLIT ECON-1980-88
1	46	Womack J. P.-MACHINE CHANGED WORL-1991-0
1	44	Helfat CE-STRATEGIC MANAGE J-2000-21
1	42	Kim L-ORGAN SCI-1998-9
2	67	LEVITT B-ANNU REV SOCIOL-1988-14
2	66	DIERICKX I-MANAGE SCI-1989-35

Grupo	No. de ocurrencias	Autor
2	65	Williamson O.E.-MARKETS HIERARCHIES-1975-0
2	65	PRAHALAD CK-HARVARD BUS REV-1990-68
2	64	COHEN WM-ADMIN SCI QUART-1990-35
2	63	HANNAN MT-AM SOCIOL REV-1984-49
2	63	Thompson J.-ORG ACTION-1967-0
2	62	Argyris C.-ORG LEARNING-1978-0
2	62	March JG-ORGAN SCI-1991-2
2	61	LEVINTHAL D-J ECON BEHAV ORGAN-1981-2
2	60	Weick K.E.-SOCIAL PSYCHOL ORG-1979-0
2	59	Huber GP-ORGAN SCI-1991-2
2	56	DAVID PA-AM ECON REV-1985-75
2	54	COHEN WM-ECON J-1989-99
2	51	STALK G-HARVARD BUS REV-1992-70
2	45	HERRIOTT SR-AM ECON REV-1985-75
2	42	SENGE P-5TH DISCIPLINE ART P-1990-0
2	39	Lorange P-CORPORATE PLANNINGE-1980-0
2	37	Simon Herbert A.-ORGANIZATIONS-1993-0
2	35	Schonberger R.-BUILDING CHAIN CUSTO-1990-0
2	33	Wehrung D.A.-TAKING RISKS MANAGEM-1986-0
3	92	BARNEY JB-ACAD MANAGE REV-1990-15
3	68	Penrose E.-THEORY GROWTH FIRM-1959-0
3	67	BARNEY JB-ACAD MANAGE REV-1986-11
3	67	PETERAF MA-STRATEGIC MANAGE J-1993-14
3	67	Porter ME-COMPETITIVE STRATEGY-1980-0
3	64	RUMELT RP-STRATEGIC MANAGE J-1991-12
3	64	Williamson O. E.-EC I CAPITALISM-1985-0
3	62	Pfeffer J.-EXTERNAL CONTROL ORG-1978-0
3	62	Miles R.-ORG STRATEGY STRUCTU-1978-0
3	53	Stinchcombe A.-HDB ORG-1965-0
3	30	Zucker L.G.-RES ORGAN BEHAV-1986-8
3	21	DiMaggio P.-NEW I ORG ANAL-1991-0
4	56	PISANO GP-STRATEGIC MANAGE J-1994-15

Source: Own elaboration with data from software VOSviewer

With regard to the main issues discussed at SM during the period of this study in the following graph it can be seen what are these and its interface based on the analysis of

keywords, the red areas being those where the greatest impact is concentrated. Further presents the corresponding correlation matrix.

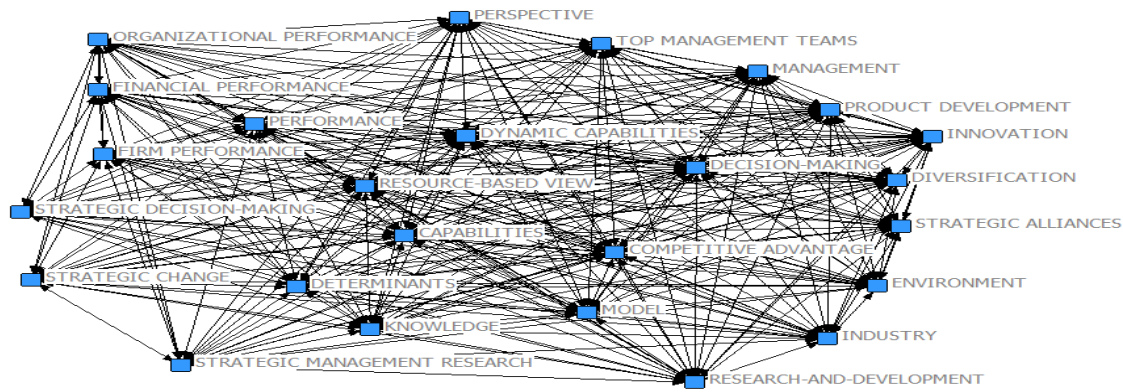


Figure 4. Network keywords used most frequently

Source: Based on data from software Sitkis and Net draw.



Figure 5. Map of density of keywords used most frequently.

Source: Based on data Ucitec- Netdraw and VOSviewer software.

Table 5. Correlation matrix of the keywords used most frequently

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1 CAPABILITIES	0	34	1	5	2	7	3	17	15	33	20	23	4	5	30	11	11	7	38	10	5	1	9	4	0
2 COMPETITIVE ADVANTAGE	34	0	9	14	10	71	10	72	47	50	34	62	28	22	90	36	30	26	143	42	11	6	26	4	21
3 DECISION-MAKING	1	9	0	3	5	6	6	21	9	2	2	19	8	11	27	4	2	3	7	2	6	0	6	10	6
4 DETERMINANTS	5	14	3	0	4	1	8	15	13	5	2	18	13	8	28	6	0	4	8	8	2	10	3	6	6
5 DIVERSIFICATION	2	10	5	4	0	2	8	20	14	4	7	18	6	6	34	6	2	4	19	0	4	2	8	3	3
6 DYNAMIC CAPABILITIES	7	71	6	1	2	0	0	35	14	32	31	18	9	11	46	16	24	20	85	19	9	4	14	5	2
7 ENVIRONMENT	3	10	6	8	8	0	0	19	11	14	0	26	10	10	38	7	2	0	4	1	6	10	2	11	9
8 FIRM PERFORMANCE	17	72	21	15	20	35	19	0	36	20	15	43	16	47	12	19	15	9	54	11	25	22	20	33	42
9 INDUSTRY	15	47	9	13	14	14	11	36	0	23	13	48	22	24	64	19	3	2	30	18	16	5	8	9	11
10 INNOVATION	33	50	2	5	4	32	14	20	23	0	30	44	20	10	64	27	24	20	24	31	6	4	10	6	7
11 KNOWLEDGE	20	34	2	2	7	31	0	15	13	30	0	29	15	3	46	11	14	7	32	23	6	3	6	3	1
12 MANAGEMENT	23	62	19	18	18	26	43	48	44	29	0	52	30	139	39	14	13	36	42	34	18	1	2	23	
13 MODEL	4	28	8	13	6	9	10	16	22	20	15	52	0	14	64	12	6	4	16	6	10	9	5	6	3
14 ORGANIZATIONAL PERFORMANCE	5	22	11	8	6	11	10	47	24	10	3	30	14	0	7	5	3	4	16	2	12	17	7	18	23
15 PERFORMANCE	30	90	27	28	34	46	38	12	64	64	46	139	64	7	0	49	25	14	74	53	25	25	22	28	3
16 PERSPECTIVE	11	36	4	6	6	16	7	19	19	27	11	39	12	5	49	0	9	5	24	19	10	6	5	7	8
17 PRODUCT DEVELOPMENT	11	30	2	0	2	24	2	15	3	24	14	14	6	3	25	9	0	19	14	4	2	5	1	2	
18 RESEARCH-AND-DEVELOPMENT	7	26	3	4	4	20	0	9	2	20	7	13	4	4	14	5	19	0	18	13	4	5	4	3	4
19 RESOURCE-BASED VIEW	38	143	7	8	19	85	4	54	30	24	32	36	16	16	74	24	14	18	0	18	2	7	42	3	12
20 STRATEGIC ALLIANCES	10	42	2	8	0	19	1	11	18	31	23	42	6	2	53	19	14	13	18	0	0	0	3	0	
21 STRATEGIC CHANGE	5	11	6	2	4	9	6	25	16	6	6	34	10	12	25	10	4	4	2	0	0	0	1	9	7
22 STRATEGIC DECISION-MAKING	1	6	0	10	2	4	10	22	5	4	3	18	9	17	25	6	2	5	7	0	0	0	0	17	8
23 STRATEGIC MANAGEMENT RESEARCH	9	26	6	3	8	14	2	20	8	10	6	1	5	7	22	5	5	4	42	0	1	0	0	0	8
24 TOP MANAGEMENT TEAMS	4	4	10	6	3	5	11	33	9	6	3	2	6	18	28	7	1	3	3	3	9	17	0	0	6
25 FINANCIAL PERFORMANCE	0	21	6	6	3	2	9	42	11	7	1	23	3	23	3	8	2	4	12	0	7	8	8	6	0

Source: Own elaboration with data from software Sitkis and Ucinet

According to the data presented by the authors observed that the largest number of publications of all articles analyzed is Ketcheb DJ, MA Hitt, Hambrick DC, Mahoney JT, AA Cannella and Boyd BK. Regarding the authors with more citations regardless of publication year, there are four outcome groups of co-citations analysis to group one, it has to authors such as Nelson, Amit, Wernerfelt, Mahoney, Coase, Schumpeter, Barney, Teece, Grant, etc.

To group two: Levitt, Dierickx, Williamson, Prahaladck, Cohen, Hannan; Group Three: Barney, Penrose, Peteraf, Porter, Rumelt and the group four to Peteraf. Among the most popular topics by reviewing key words, there are the organizational and financial performance, decision making, strategic change, industry analysis, resources and capabilities, dynamic capabilities, innovation, knowledge, research and development, study models, top management, diversification and alliances have been objects of study relevant discipline in the period 1980-2014.

For the analysis of results, it is necessary to consider as mentioned Tarrats, (2012) a possible bias because only consider the total corpus of publications on SM to those articles published in English. Besides the analysis is based on a number of citations and co-citations that have the articles. Then, for recent publications is logical to assume that the time until now allow even reflect the true impact, moreover suggests that the study of shorter periods to evaluate the change in SM research, to determine the impact of journals not only by the number of publications but by publishing articles that have really contributed knowledge relevant to the discipline.

VIII. CONCLUSIONS

The development and application of information analysis techniques allow a more concrete vision of the most relevant research, authors and journals, which means a saving of time in the study of the relevant issues of discipline, showing the relationship between authors and lines of research, so it is important to use to accelerate the process of learning and research in a field in which only begins.

REFERENCES

[1] Borgatti, S.P., Everett, M.G. and Freeman, L.C. (2002). *Ucinet 6 for Windows: Software for Social Network Analysis*. Harvard, MA: Analytic Technologies.

[2] Broadus, R.N. (1987b). Toward a definition of bibliometrics. *Scientometrics*, 12, 373-379.

[3] Cabezas-Clavijo, A., y Delgado-López-Cózar, E. (2013). Google Scholar e índice h en biomedicina: la popularización de la evaluación bibliométrica. *Medicina Intensiva*. <http://dx.doi.org/10.1016/j.medin.2013.01.008>

[4] Cortés, J. (2008). Web os Science: termómetro de la producción internacional de conocimiento: Ventajas y limitaciones. *Cultura Científica y Tecnológica*, 5 (29), 5-15.

[5] Frias Pinto, C., Ribeiro Serra, F. y Portugal Ferreira M. (2013). A Bibliometric Study on Culture Research in International Business. *VI Encontro de Estudos em Estratégia*. Bento Gonçalves / RS – 19 a 21 de maio de 2013.

[6] Furrer, O., Thomas, H. y Goussevskaia, A. (2008). The structure and evolution of the strategic management field: A content analysis of 26 years of strategic management research. *International Journal of Management Reviews*, 10, 1-23.

[7] Gardfield, E. (1973). Citation Frequency as a Measure of Research Activity and Performance. *Essays of an Information Scientist*, 1, 406-408.

[8] Google Académico. (2015). Recuperado el 12 de Enero de 2015, de https://scholar.google.es/citations?view_op=top_venues&hl=es&vq=bus_strategicmanagement

[9] Hirsch, J. E. (2005). An index to quantify an individual's scientific research output. *Proceedings of the National Academy of Sciences*, 102 (46), 16569-16572.

[10] Lyman, P.; Varian, H. R. (2000). How much information?. Technical report, *Scholl of Information Management*, UC Berkeley.

[11] Miguel, S., Moya-Anegón, F., y Herrero-Solana, V. (2006). El análisis de co-citas como método de investigación en Bibliotecología y Ciencia de la Información. *Investigación Bibliotecológica*, 21(43), 139-155.

[12] Ruiz-Baños, R. y Bailón-Moreno, R. (1998). El método de las palabras asociadas (I): La estructura de las redes científicas. *Boletín de la Asociación Andaluza de Bibliotecarios*. 53, 43-60.

[13] Soriano, Isabel y Pinillos Ma. José. (2011). *Análisis bibliométrico del corporate entrepreneurship: indicadores de la producción científica*. Universidad Rey Juan Carlos.

[14] Tarrats Pons, E. (2012). Sitkis: una herramienta bibliométrica para el desarrollo del estado en cuestión. *Textos universitarios de biblioteconomía i documentació*, 28, 1-8.

[15] Ramos-Rodríguez, A.-R. y Ruiz-Navarro, J. (2004). Changes in the intellectual structure of strategic management research: a bibliometric study of the Strategic Management Journal, 1980-2000. *Strategic Management Journal*, 25, 981-1004.

[16] Schildt, H.A. 2002. SITKIS: Software for Bibliometric Data Management and Analysis v0.6.1. Helsinki: Institute of Strategy and International Business. [Available at: www.hut.fi/~hschildt/sitkis].

[17] Van Eck, N.J. y Waltman, L. (2010). Software survey: VOSviewer, a computer program for bibliometric mapping. *Scientometrics*, 84(2), 523-538. VOSviewer version 1.5.7. Copyright © 2009-2014 Nees Jan van Eck and Ludo Waltman.

[18] Web of Science by Thompson Reuters. (2015). Última consulta el 20 de Enero de 2015, de http://apps.webofknowledge.com/summary.do?product=WOS&parentProduct=WOS&search_mode=GeneralSearch&qid=4&SID=3EjRJM T21vyhWswMnZz&page=1&action=sort&sortBy=LC.D;PY.D;AU.A.en;SO.A.en;VL.D;PG.A&showFirstPage=1