

Invited paper

Industrial marketing management: Bibliometric overview since its foundation



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ABSTRACT

Industrial Marketing Management (IMM) is an outstanding journal in the field of business-to-business marketing. This paper focuses on this journal, with an extensive bibliometric analysis of IMM from its foundation in 1971 to 2017, the last year analyzed in this study. It identifies, among others, the annual evolution of publications, the most influential countries, the most relevant authors, the most prominent institutions supporting research, as well as the citations of IMM papers in major marketing, but also other, business and management journals. To do so, this research uses the Web of Science Core Collection and Scopus databases, and analyzes a wide range of bibliometric indicators, including the total number of publications and citations, citations per paper, the h-index, m-value and citation thresholds, and also develops a graphical analysis of the bibliographical material using the visualization of similarities (VOS) viewer software. Finally, by applying a cluster analysis by fractional accounting, this research identifies trends and proposes future topics and research lines, such as: trust, innovation, performance, relationship marketing, the future role of new technologies in industrial marketing research, online marketing and corporate image.

1. Introduction

Industrial Marketing Management (IMM) is the first journal to focus on the field of business-to-business marketing (Lindgreen & Di Benedetto, 2018). The journal published its first issue in September 1971 and the first editor-in-chief was R. Derek Medford. In 1994, Peter LaPlaca stepped down as editor-in-chief of the Journal of Business & Industrial Marketing and became the editor-in-chief of IMM; his tenure has been key to strengthening its international image and position in the most prestigious journals rankings (Beverland, 2018). In 2015, Adam Lindgreen from Copenhagen Business School became co-editor of the journal, and in 2017 Anthony Di Benedetto, from Temple University (USA), was appointed co-editor-in-chief, replacing LaPlaca (LaPlaca & Lindgreen, 2016).

The journal has grown significantly over time, and today, it

publishes more than 100 articles per year. The journal is well-recognized as one of the leading journals in marketing, especially in the context of B2B marketing (Di Benedetto & Lindgreen, 2018). According to the Journal Citation Reports of the Web of Science Core Collection of Clarivate Analytics, the journal has a 2-year impact factor of 3.678 and a 5-year impact factor of 4.488. Examining the results of the 2-year impact factor, the journal ranks 30th out of 140 journals in the field of Business, and 37th out of 210 journals in Management, which demonstrates the relevance of this journal in the field of Business and Industrial Marketing. In fact, IMM's position as measured by Thomson's JCR Impact Factor has strengthened steadily in recent years, from 1.930 (2015) to 3.166 (2016), 3.678 (2017) and 4.779 (2018), which confirms the increasing influence of the journal during the tenure of Lindgreen and Di Benedetto.

This prominent role in the areas of business and marketing is even

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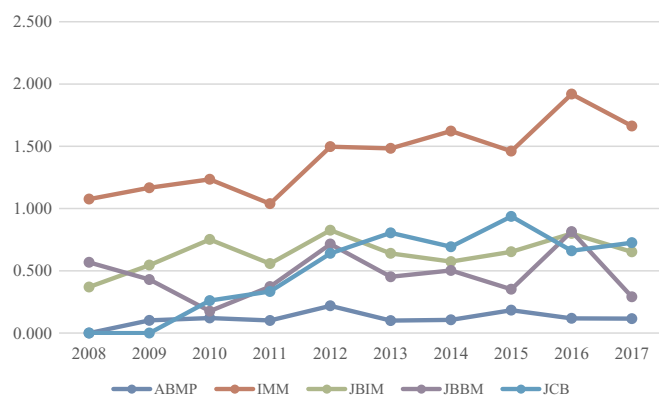


Fig. 1. Evolution of Impact Factor in Scopus (2008–17).

more evident in other search engines, such as Google Scholar, or in the evolution of the number of citations of IMM. Considering the impact factor in Scopus, a comparative analysis with some of the most relevant journals in this area of research, as identified in LaPlaca and Katrichis (2009), shows IMM's prominent position (see Fig. 1) with respect to journals such as: *Advances in Business Marketing & Purchasing* (ABMP), the *Journal of Business and Industrial Marketing* (JBIM), the *Journal of Business-to-Business Marketing* (JBBM), and the *Journal of Customer Behavior* (JCB), all of which have grown modestly, with the exception in recent years of the latter.

Considering that IMM is approaching its 50th anniversary, it seems reasonable to develop some retrospective evaluation of the journal (Schwert, 1993). Therefore, the aim of this study is to present a full bibliometric overview of IMM, from its foundation, in order to identify the leading actors in the journal in terms of authors, institutions, countries and documents. Moreover, the work also aims to analyze how IMM connects with other journals in terms of citations and determine the most popular topics. Additionally, the article also develops a graphical mapping of the bibliographic data by using co-citation analysis (Small, 1973), co-occurrence of author keywords (Wang et al., 2018) and bibliographic coupling (Kessler, 1963). The work builds these maps by using the visualization of similarities (VOS) viewer software (Van Eck & Waltman, 2010). This paper offers a complementary and incremental contribution to others providing some bibliometric data and previously published in IMM, many of them published in 2018 to pay tribute to Peter LaPlaca's tenure as Editor-in-Chief of the journal (see next section).

The remainder of this article is structured as follows. First, we provide a brief recap of the main papers using bibliometric data in marketing-related topics. Then we briefly describe relevant bibliometric-related papers published in IMM and in other business marketing journals, some of them written by editors of IMM, to show the interestingness of this paper in closing the loop in terms of detailed bibliometric data and full lifespan of the journal. Section 3 briefly reviews the bibliometric methods used in the analysis. Section 4 presents the bibliometric results available in Web of Science Core Collection database, identifying key authors, institutions, countries and documents. Section 5 develops a graphical visualization of the results focusing on journals and keywords. Section 6 summarizes the main findings and conclusions of the article. Finally, we acknowledge some limitations.

2. Background

2.1. General considerations on bibliometric studies in marketing-related topics

Bibliometrics is the research field of information and library science that studies bibliographic material by using quantitative and statistical

methods (Broadus, 1987; Pritchard, 1969). Bibliometrics is a highly useful approach for developing an overview of a research field as it identifies the leading trends by using different bibliometric indicators such as the number of publications and citations. In the marketing literature, there are several bibliometric studies. Some of them focus on the analysis of journals, including the work of Tellis, Chandy, and Ackerman (1999), which analyzes diversity between marketing journals. Theoharakis and Hirst (2002) study the perceptions of leading marketing journals. Moussa and Touzani (2010) rank marketing journals by using Google Scholar. Svensson and Wood (2007, 2008) develop a method for distinguishing between leading and top journals in the field of marketing. Theubl, Reutterer, and Hornik (2014) consider methods for reaching consensus in rankings of marketing journals. Di Benedetto, Sarin, Belkhouja, and Haon (2018) study how IMM influences other marketing journals. Other works analyze the leading scholars and institutions in marketing, including Bakir, Vitell, and Rose (2000), Chan, Lai, and Liano (2012) and Saad (2010). Other studies analyze a specific marketing topic (Coombes & Nicholson, 2013; Sinkovics, 2016), such as consumer research (Baumgartner, 2010; Jia, Zhou, & Allaway, 2018; Zuschke, 2019), brand personality (Radler, 2018), international marketing (Samiee & Chabowski, 2012), sustainability research in marketing (Chabowski, Mena, & Gonzalez-Padron, T.L., 2011), business-to-business (Backhaus, Lugger, & Koch, 2011; Kumar, Sharma, & Salo, 2019; Moller & Halinen, 2018), business capabilities (Kouropalatis, Giudici, & Acar, 2019), financial marketing (Munoz-Leiva, Sanchez-Fernandez, Liebana-Cabanillas, & Martinez-Fiestas, 2013) and global branding (Chabowski, Samiee, & Hult, 2013).

In the field of marketing, several journals have published bibliometric analyzes of themselves, including the *Journal of Consumer Research* (Hoffman & Holbrook, 1993), *Journal of Advertising* (Zinkhan & Leigh, 1999), *Journal of Public Policy & Marketing* (Sprott & Miyazaki, 2002), *International Marketing Review* (Malhotra, Wu, & Whitelock, 2005, 2013), *Journal of Food Products Marketing* (Dabirian, Diba, Tareh, & Treen, 2016), *Journal of Business & Industrial Marketing* (Valenzuela, Merigó, Johnston, Nicolás, & Jaramillo, 2017) and the *European Journal of Marketing* (Martínez-López, Merigó, Valenzuela, & Nicolás, 2018). Moreover, other journals have published particular discussions on themselves motivated by a significant anniversary; some examples include the *Journal of Marketing* for its 75th anniversary (Bolton, 2011), the *Journal of Management* for its 30th anniversary (Van Fleet et al. 2006) and *Marketing Science* (Shugan, 2006) and the *Journal of Marketing Research* (Meyer & Winer, 2014) for their 50th anniversary.

2.2. Main bibliometric-related works

There are previous works reviewing the existing literature on industrial marketing; six articles with a specific bibliometric approach, related to industrial marketing, have been identified (see Table 1). However, this paper provides several incremental contributions.

Two of these works do not focus on IMM, but on identifying the main research areas and topics within industrial marketing. LaPlaca and Katrichis (2009) evaluated 31 journals – 24 general marketing journals and 7 journals focusing specifically on industrial or B2B marketing–, beginning in 1936 with the publication of *Journal of Marketing*; it was not until 1972, with the introduction of IMM, when a continuous stream of industrial marketing research began. Lichtenthal, Tzempelikos, and Tellefsen (2018) analyzed the proliferation of related journals and associated titles within the subfields related to industrial marketing. They observed societal forces driving the creation of this type of publication. These authors showed the evolution of this kind of journal, provided a retrospective and qualitative analysis, and described the impact of industrial forces on publishing this type of journal between 1971 and 2016.

The other four works focused on IMM, but with quite different perspectives. LaPlaca (1997), published in the *Journal of Business*

Table 1
Bibliometric-related papers on industrial marketing published in IMM and other journals.

Paper	Analyzed journals	Key statement
LaPlaca (1997)	Industrial Marketing Management (IMM) (1971–1994).	Major research areas in IMM: marketing management, market segmentation, strategic marketing planning, selling and sales management, purchasing and industrial buying behavior, global and international, researching industrial markets, innovation and new product development, distribution, pricing, and promotions and advertising.
LaPlaca and Katrichis (2009)	31 marketing journals (1936–2006).	Main trends in industrial marketing research: buyer behavior, sales management, marketing relationships, innovation and new product development, marketing strategy, and channels of distribution.
Lindgreen and Di Benedetto (2018)	Top 30 citation classics from IMM (1971–2016).	Topics in which 30 citation classics are framed: firm performance, goods-dominant and service-dominant logics, Internet and high-technology markets, product innovation, relationships and business networks, supply chains, system sellers and systems integrator, third-party logistics providers, and value.
Di Benedetto and Lindgreen (2018)	IMM (1994–2016).	Analysis of statistics and content in IMM, 1994–2016.
Lichtenthal et al. (2018)	Journals within subfields related to industrial marketing (1971–2016).	Analysis of the proliferation of journals within subfields related to industrial marketing. Description of the associated impact of industrial forces in the last 45 years (1971–2016) for the publication of journals.
Di Benedetto et al. (2018)	Tracing the impact that IMM has had on marketing literature (1999–2013), considering self- and cross-citation rates in top tier, second tier and specialized marketing journals.	The results showed relatively low citation patterns for IMM in some of the top-tier marketing journals. IMM has retained a strong and growing presence in the second-tier and specialized B2B marketing journals.

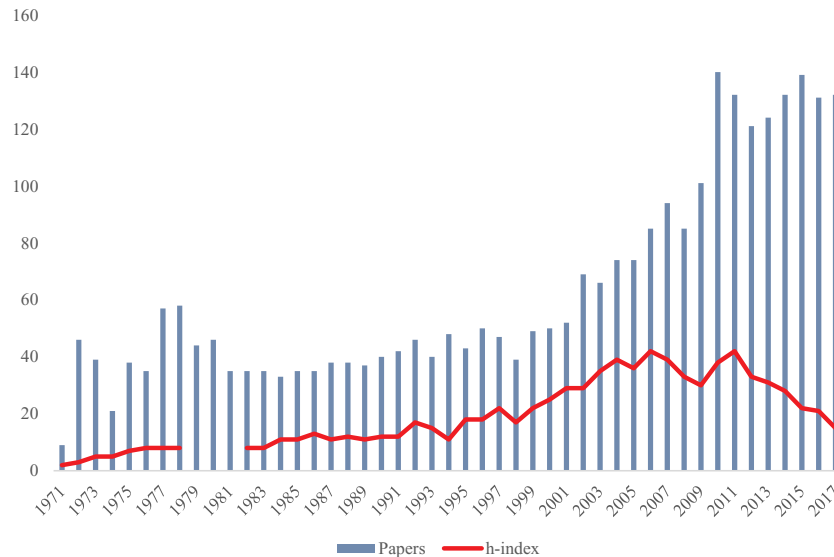


Fig. 2. Annual number of papers published in IMM and h-index. 1979, 1980 and 1981 do not have h-index because WoS do not provide them during these years.

Research, analyzes the first years of IMM and aimed to identify its contribution to the field of marketing applied to the industry. This articles provided information about the major topical areas in IMM; LaPlaca found that > 30% of IMM's articles focused on the management of marketing and sales functions. Logically, this work focused on the first stage of the journal (1971–1994). In more recent works, Lindgreen and Di Benedetto (2018) have also studied IMM, but focused on the top 30 citation classics from this journal, from 1971 to 2016. They have analyzed several aspects and classified them according to the topics in which they are framed (i.e., firm performance, goods-dominant/service-dominant logics, Internet and high-technology markets, product innovation, relationships and networks, supply chains, system sellers and systems integrator, third-party logistics providers, and value), and fields related to (e.g., supply chain management, strategic management, and innovation).

Di Benedetto et al. (2018) have provided a citation analysis of the impact of IMM on marketing literature (1999–2013). This research has analyzed the evolution that IMM has had in terms of its Impact Factor (JCR, SSCI), and citations in major industrial/business marketing

journals. They provided article-by-article citation data from 336 journals in major business disciplines from the Web of Science, considering self-and cross-citation rates in top tier, second tier and specialized marketing journals. Finally, Di Benedetto and Lindgreen (2018) have studied in depth the evolution of business-to-business marketing, not only looking at the statistics, but also at the content of IMM publications, although this study was limited to the period in which Peter J. LaPlaca was editor-in-chief of the journal (1994–2016).

Our paper expands and enriches the view of both industrial/business marketing, and especially of IMM itself, provided by the above papers. It covers the lifespan of IMM and all the articles published within, from its foundation to 2017, the last year of the bibliometric analyses. Among other fields, it shows the annual evolution of publications in the journal, the most influential countries publishing in it, the most relevant authors, institutions supporting research, and citations in relevant major marketing journals focusing on industrial/business-to-business marketing. Finally, by using a bibliometric analysis and a cluster analysis by fractional accounting, this research identifies trends and proposes future topics and research lines.

Table 2
The 50 most frequently cited documents in IMM.

R	TC	Title	Author/s	Year	C/Y
1	833	Issues in supply chain management	Lambert, DM; Cooper, MC	2000	49.00
2	756	Learning orientation, firm innovation capability, and firm performance	Calantone, RJ; Cavusgil, ST; Zhao, YS	2002	50.40
3	563	The agile supply chain – Competing in volatile markets	Christopher, M	2000	33.12
4	530	Innovativeness: Its antecedents and impact on business performance	Hult, GTM; Hurley, RF; Knight, GA	2004	40.77
5	475	“Coopetition” in business networks – To cooperate and compete simultaneously	Bengtsson, M; Kock, S	2000	27.94
6	342	It's all B2B ... and beyond: Towards a systems perspective of the market	Vargo, SL; Lusch, RF.	2011	57.00
7	333	The role of trust and relationship structure in improving supply chain responsiveness	Handfield, RB; Bechtel, C	2002	22.20
8	330	Value creation in buyer-seller relationships – Theoretical considerations and empirical results from a supplier's perspective	Walter, A; Ritter, T; Gemunden, HG	2001	20.63
9	285	From goods to service(s): Divergences and convergences of logics	Vargo, SL; Lusch, RF.	2008	31.67
10	260	Managing in complex business networks	Ritter, T; Wilkinson, IF; Johnston, WJ	2004	20.00
11	252	The asymmetric relationship between attribute-level performance and overall customer satisfaction: a reconsideration of the importance-performance analysis	Matzler, K; Bailom, F; Hinterhuber, HH; et ál.	2004	19.38
12	246	Capturing value creation in business relationships: A customer perspective	Ulaga, W	2003	17.57
13	245	Value in business markets: What do we know? Where are we going?	Lindgreen, A; Wynstra, F	2005	20.42
14	238	The benefits of Guanxi – The value of relationships in developing the Chinese market	Davies, H; Leung, TKP; Luk, STK	1995	10.82
15	231	The impact of information technology on supply chain capabilities and firm performance: A resource-based view	Wu, F; Yenyurt, S; Kim, D	2006	21.00
16	228	A portfolio approach to supplier relationships	Olsen, RF; Ellram, LM	1997	11.40
17	212	Business relationships and networks: Managerial challenge of network era	Moller, KK; Halinen, A	1999	11.78
18	210	Business suppliers' value creation potential – A capability-based analysis	Moller, KEK; Torronen, P	2003	15.00
19	208	Measuring customer-perceived value in business markets – A prerequisite for marketing strategy development and implementation	Ulaga, W; Chacour, S	2001	13.00
20	200	Organizing for solutions: Systems seller vs. systems integrator	Davies, A; Brady, T; Hobday, M	2007	20.00
21	198	Success factors in product innovation	Cooper, RG; Kleinschmidt, EJ	1987	6.60
22	193	The influence of brand image and company reputation where manufacturers market to small firms: A customer value perspective	Cretu, Anca E.; Brodie, Roderick J.	2007	19.30
23	191	Strategic development of third party logistics providers	Hertz, S; Alfredsson, M	2003	13.64
24	190	A service perspective on business relationships: The value creation, interaction and marketing interface	Gronroos, C	2011	31.67
25	189	Critical realism in case study research	Easton, Geoff	2010	27.00
26	185	Functions of industrial supplier relationships and their impact on relationship quality	Walter, A; Muller, TA; Helfert, G; et ál.	2003	13.21
27	178	Strategizing in industrial networks	Gadde, LE; Huemer, L; Hakansson, H	2003	12.71
28	177	An evaluation of divergent perspectives on customer relationship management: Towards a common understanding of an emerging phenomenon	Zablah, AR; Bellenger, DN; Johnston, WJ	2004	13.62
29	176	Marketing solutions in accordance with the S-D logic: Co-creating value with customer network actors	Cova, B; Salle, R	2008	19.56
30	173	Making the most of supplier relationships	Gadde, LE; Snehota, I	2000	10.18
31	169	Rise of strategic nets – New modes of value creation	Moller, K; Rajala, A	2007	16.90
32	169	Leadership and organizational learning's role on innovation and performance: Lessons from Spain	Aragon-Correa, JA; Garcia-Morales, VJ; Cordon-Pozo, E	2007	16.90
33	167	Deconstructing the relationship between entrepreneurial orientation and business performance at the embryonic stage of firm growth	Hughes, M; Morgan, RE.	2007	16.70
34	162	Modeling agility of supply	Agarwal, A; Shankar, R; Tiwari, M. K.	2007	16.20
35	161	Identifying industrial new product success: Project NewProd	Cooper, RG		
36	159	Removing the fuzziness from the fuzzy front-end of service innovations through customer interactions	Alam, I	2006	14.45
37	157	Antecedents of commitment and trust in customer-supplier relationships in high technology markets	de Ruyter, K; Moorman, L; Lemmink, J	2001	9.81
38	156	Managing your corporate images	Dowling, GR	1986	5.03
39	153	Guanxi vs. relationship marketing: Exploring underlying differences	Wang, CL	2007	15.30
40	152	Branding importance in business-to-business markets – Three buyer clusters	Mudambi, S	2002	10.13
41	151	Demand chain management-integrating marketing and supply chain management	Juttner, U; Christopher, M; Baker, S	2007	15.10
42	150	Value co-creation in knowledge intensive business services: A dyadic perspective on the joint problem solving process	Aarikka-Stenroos, L; Jaakkola, E	2012	30.00
43	150	Global sourcing strategy and sustainable competitive advantage	Kotabe, M; Murray, JY	2004	11.54
44	147	Predevelopment activities determine new product success	Cooper, RG	1988	5.07
45	146	New managerial challenges from supply chain opportunities	Ballou, RH; Gilbert, SM; Mukherjee, A	2000	8.59
46	146	Supplier relationships – Emerging issues and challenges	Sheth, JN; Sharma, A	1997	7.30
47	145	Usage, barriers and measurement of social media marketing: An exploratory investigation of small and medium B2B brands	Sheth, JN; Sharma, A	2011	24.17
48	145	Moving from basic offerings to value-added solutions: Strategies, barriers and alignment	Matthyssens, P; Vandenbempt, K	2008	16.11
49	144	Multiple versions of markets: Multiplicity and performativity in market practice	Kjellberg, H; Helgesson, CF	2006	13.09
50	144	Developing integrated solutions: The importance of relationships within the network	Windahl, C; Lakemond, N	2006	13.09

Abbreviations: R = Rank; TC = Total citations; C/Y = Citations per year.

3. Methodology

Bibliometrics is a research field of information and library sciences that analyzes bibliographic data with quantitative methods (Broadus, 1987; Pritchard, 1969). To develop a bibliometric analysis, it is important to select the bibliometric indicators that will be used in the study (Bar-Ilan, 2008; Ding, Rousseau, & Wolfram, 2014). The objective is to choose those indicators that best represent the information considered in the problem. This issue has several complexities because today there is a lack of consensus regarding the optimal bibliometric

indicator that represents the information. The two main directions concern the number of publications that measure productivity and the number of citations that measure popularity and influence (Blanco-Mesa, Merigó, & Gil-Lafuente, 2017; Merigó, Mas-Tur, Roig-Tierno, & Ribeiro-Soriano, 2015). From a general point of view, it is clear that both indicators are relevant, for example, for the analysis of authors, universities or countries. However, the importance of each case in the problem is not clear because sometimes we may assign more importance to productivity and sometimes to the number of citations. Therefore, each decision maker may assign different importance to

Table 3
Top 40 most frequently cited documents in IMM publications.

Rank	Year	First author	Reference	Vol	Page	Type	TC	Co-citations
1	1994	Morgan RM	J Marketing	v58	p20	A	358	352
2	1981	Fornell C	J Marketing Res	v18	p39	A	272	269
3	1977	Armstrong JS	J Marketing Res	v14	p396	A	268	250
4	1987	Dwyer FR	J Marketing	v51	p11	A	263	253
5	1995	Hakansson H	Dev Relationships in Business Networks			B	247	244
6	1989	Eisenhardt KM	Acad Manage Rev	v14	p532	A	207	204
7	1988	Anderson JC	Psychol Bull	v103	p411	A	198	197
8	1990	Anderson JC	J Marketing	v54	p42	A	197	194
9	1991	Barney J	J Manage	v17	p99	A	192	191
10	1994	Ganesan S	J Marketing	v58	p1	A	187	185
11	1982	Hakansson H	Int Marketing and Purchasing of Industrial Goods			B	186	181
12	2003	Podsakoff PM	J ApplPsychol	v88	p879	A	179	175
13	1994	Anderson JC	J Marketing	v58	p1	A	165	161
14	1990	Kohli AK	J Marketing	v54	p1	A	158	155
15	2004	Vargo SL	J Marketing	v68	p1	A	155	150
16	2002	Hakansson H	J Bus Res	v55	p133	A	150	149
17	1994	Day GS	J Marketing	v58	p37	A	149	146
18	1997	Doney PM	J Marketing	v61	p35	A	149	149
19	1998	Dyer JH	Acad Manage Rev	v23	p660	A	144	143
20	1993	Jaworski BJ	J Marketing	v57	p53	A	144	141
21	1979	Churchill GA	J Marketing Res	v16	p64	A	143	140
22	2002	Dubois A	J Bus Res	v55	p553	A	141	139
23	1978	Nunnally J	Psychometric Theory			B	137	126
24	1990	Narver JC	J Marketing	v54	p20	A	135	131
25	1994	Miles MB	Qualitative Data Analysis			B	131	128
26	1992	Anderson E	J Marketing Res	v29	p18	A	121	121
27	1997	Teece DJ	Strategic Manage J	v18	p509	A	116	116
28	1986	Podsakoff PM	J Manage	v12	p531	A	107	106
29	2003	Ford D	Managing Business Relationships			B	104	103
30	2009	Hakansson H	Business in Networks			B	102	100
31	1988	Bagozzi RP	J Acad Market Sci	v16	p74	A	101	100
32	1978	Pfeffer J	External Control of Organizations			B	99	96
33	1999	Cannon JP	J Marketing Res	v36	p439	A	98	94
34	1994	Yin RK	Case Study Research Design			B	97	92
35	1980	Ford D	Eur J Marketing	v14	p339	A	96	94
36	1985	Granovetter M	Am J Sociol	v91	p481	A	96	96
37	2005	Halinen A	J Bus Res	v58	p1285	A	96	96
38	1995	Wilson D	J Acad Market Sci	v23	p335	A	95	95
39	1980	Porter ME	Competitive Strategy			B	94	83
40	1992	Heide JB	J Marketing	v56	p32	A	92	92

Abbreviations: TC = Total citations; A = Article; B = Book.

these variables and obtain different interpretations of the results according to their attitude and interests. For this reason, this work presents the results considering different bibliometric indicators for the same problem, with the objective of providing a complete picture of the problem but also allowing readers to focus more on those variables that are more relevant for them.

Apart from the number of publications and citations, the study also considers the average number of citations per paper, the *h*-index (Hirsch, 2005) and several citation thresholds. Recall that the *h*-index is a measure that is intended to integrate productivity and influence in the same indicator (Alonso, Cabrerizo, Herrera-Viedma, & Herrera, 2009; Martínez, Herrera, Lopez-Gijón, & Herrera-Viedma, 2014). If an author has an *h*-index of *X*, of the set of papers that he/she has published, he/she has *X* papers that have received *X* or more citations. At the same time, the author does not have *X* + 1 articles that have received *X* + 1 citations or more.

Moreover, this work also presents several additional specific bibliometric indicators in order to analyze specific variables, including the average number of citations per year, general university rankings and the average number of papers and citations per person. The average number of citations per year is an indicator that aims to normalize the results according to time, because it is more difficult for newer documents to be highly cited than older ones. The general university rankings provide a global picture of the universities that lead in IMM. The objective is to see the current general ranking of the leading universities in IMM. This study uses the Academic Ranking of World Universities

(ARWU) (<http://www.shanghairanking.com/ARWU2017.html>) and the Quacquarely & Symonds (QS) University Ranking (<https://www.topuniversities.com/university-rankings/world-university-rankings/2019>). The number of articles and citations per person normalizes the size of the countries. Otherwise, bigger countries would perform much better than smaller ones. Since the number of publications and citations in one journal is a very low number compared to the total population of a country, this work considers the number of publications and citations per million inhabitants.

To analyze the information, the work uses the Web of Science Core Collection database, a leading database for academic research. The search process uses the journal name “Industrial Marketing Management” and selects the option of “Publication Name” in the basic search of the Web of Science Core Collection. The search finds all documents published in the journal since its origin in 1971. Accounting for the journal's publications up to 31 December 2017, the search obtains 3122 documents. However, many of the documents are not strictly scientific contributions; therefore, we have filtered this result considering only articles, reviews, letters and notes. We obtained 2834 documents published in IMM between 1971 and 2017. Note that the journal has been indexed in Web of Science since 1971, but the documents published in 1979, 1980 and 1981 are not indexed. Therefore, for the documents of these years, the search employs manual search by using the Cited Reference Search of Web of Science Core Collection, which identifies all the documents that have received at least one citation in the database, and the webpage of the journal for those

Table 4
Citing articles of IMM: universities, countries and journals.

R	University	TP	Country	TP	Journal	TP
1	Aalto U	313	USA	5934	Industrial Marketing Management	1950
2	U of Manchester	282	United Kingdom	3665	J Business Research	671
3	Michigan State U	264	Peoples R China	2937	J Business Industrial Marketing	522
4	Hong Kong Polytechnic U	260	Taiwan	1740	Int J Production Economics	391
5	U of North Carolina	233	Australia	1490	J Product Innovation Management	375
6	Lappeenranta U of Technology	207	Spain	1365	European J Marketing	263
7	City U of Hong Kong	196	Germany	1263	Int J Production Research	258
8	National Cheng Kung U	163	Finland	1242	Int J Operations Production Management	253
9	Xi An Jiaotong U	163	Sweden	1030	Industrial Management Data Systems	218
10	Cranfield U	157	Italy	953	Supply Chain Management Int J	212
11	Cardiff U	156	Canada	907	Service Industries Journal	190
12	U of Leeds	151	Netherlands	881	Procedia Social and Behavioral Sciences	187
13	U of Nottingham	151	France	762	Expert Systems with Applications	182
14	Georgia State U	148	South Korea	690	J Marketing	173
15	U of Southern Denmark	148	India	534	J Business Ethics	172
16	Lancaster U	146	Denmark	508	J Cleaner Production	161
17	Monash U	145	Turkey	496	J The Academy of Marketing Science	158
18	Loughborough U	143	Malaysia	489	International Business Review	157
19	Copenhagen Business School	141	Iran	418	Management Decision	154
20	Arizona State U	138	Norway	409	Int J Physical Distribution LogisManag	151
21	U of Turku	138	Brazil	368	J Business To Business Marketing	151
22	Linköping U	135	Switzerland	362	Production Planning Control	150
23	Penn State U	135	New Zealand	352	Int J Technology Management	135
24	Polytechnic U of Milan	134	Portugal	346	International Marketing Review	135
25	U of Cambridge	134	Greece	313	J Purchasing And Supply Management	135
26	U of Oulu	132	Belgium	284	Technovation	134
27	U of Warwick	132	Ireland	208	J Operations Management	132
28	Erasmus U Rotterdam	130	Austria	197	R&D Management	130
29	Univ Vaasa	126	Poland	193	Tech Forecasting Social Change	119
30	Aston U	123	Singapore	189	J Service Management	117
31	U of Tennessee Knoxville	123	Japan	182	African J Business Management	114
32	HankenSch Econ	121	South Africa	173	Int J Logistics Management	114
33	U of Granada	118	Thailand	145	IEEE Trans Engineering Management	110
34	BI Norwegian Business School	116	Slovenia	141	Sustainability	110
35	U of Birmingham	116	Czech Republic	128	J International Marketing	109
36	U of New South Wales Sydney	116	U Arab Emirates	120	Total Quality Manag Business Excellence	103
37	Wageningen U Research	115	Indonesia	118	European J Operational Research	97
38	Zhejiang U	115	Israel	110	British Food Journal	96
39	Florida State U	112	Romania	104	Tourism Management	94
40	Lund U	112	Saudi Arabia	91	J Supply Chain Management	91

Abbreviations available in previous tables.

documents that still have zero citations in Web of Science. The results of these 3 years are manually added into the tables in order to obtain the complete results of IMM between 1971 and 2017.

To develop a graphical mapping of the bibliographic data, the work uses the VOS viewer software (Van Eck & Waltman, 2010). VOS viewer collects the data and builds graphical maps by using different bibliometric techniques, including co-citation (Small, 1973), bibliographic coupling (Kessler, 1963) and co-occurrence of author keywords (Wang et al., 2018). Recall that co-citation occurs when two documents receive a citation from the same third publication. Bibliographic coupling analyzes those documents that cite the same documents, and co-occurrence of author keywords presents those keywords that appear more frequently in the same documents.

4. Results

This section presents the results of the Web of Science Core Collection database. First, the analysis focuses on the publication and citation structure of IMM. In the second subsection, the work identifies the leading authors, institutions and countries of IMM in terms of publications and citations.

4.1. Publication and citation structure of IMM

In this subsection, the work analyzes the bibliometric results of IMM according to the data available in Web of Science Core Collection. First,

we look at the annual number of documents published by the journal since 1971, as well as the h-index (Fig. 2).

During the first 3 years, the journal published a stable number of documents, approximately 40 every year. Since 2002, the journal has been growing significantly, and since 2010, IMM has been publishing more than 100 articles per year. Currently, the number is close to 130 documents published annually.

Next, we analyze the citations of these documents by developing an annual citation threshold analysis. The work considers the minimum citation threshold of 1, 5, 10, 25, 50 and 100 citations. Additionally, it also considers the citations that the documents published in one specific year obtained until March 2018, and according to the Web of Science Core Collection.

The documents published in IMM during the seventies and eighties are less frequently cited than those published in the nineties, especially since the beginning of the new millennium. The main reason for this is that the scope of old papers is often quite obsolete, as topics such as modern technologies and internet were not available at that time. Moreover, the growth of research worldwide has increased the number of documents published about marketing, generating a higher volume of citations that usually cite more recent papers than older ones. Note that the majority of documents above the 100 citation threshold are published between 1999 and 2011. Currently, approximately 3% of the articles have received more than 100 citations, 25% > 25 citations, and 90% at least have been cited once, according to the Web of Science Core Collections.

Table 5
Top 50 leading authors in IMM.

R	Full name	University	Country	TP	TC	H	m-Value	C/P	> 50	> 10
1	Naude P	U of Manchester	UK	42	788	16	0.593	18.76	4	23
2	Henneberg SC	U of Manchester	UK	30	501	14	1.273	16.70	1	16
3	Sharma A	U of Miami	USA	24	865	16	0.593	36.04	4	20
4	Johnston WJ	Georgia State U	USA	22	844	13	0.325	38.36	3	14
5	Cooper RG	McMaster U	Canada	18	1264	15	0.366	70.22	9	15
6	Mouzas S	Lancaster U	UK	18	396	10	0.625	22.00	2	10
7	Matthyssens P	U of Antwerp	Belgium	17	554	12	0.375	32.59	3	13
8	Ford D	Kedge Business School	UK	17	546	14	0.483	32.12	4	15
9	Honeycutt ED	Old Dominion U	USA	17	220	10	0.526	12.94	0	10
10	Laplaca PJ	U of Connecticut	USA	17	66	2	0.056	3.88	1	2
11	Moller K	Aalto U	Finland	16	770	14	0.778	48.13	6	14
12	Woodside AG	Boston College	USA	14	182	7	0.179	13.00	1	6
13	Ritter T	Copenhagen Business School	Denmark	13	1124	10	0.667	86.46	5	10
14	Uлага W	EDHEC Business School	France	13	987	11	0.688	75.92	6	11
15	Hakansson H	BI Norwegian Business School	Norway	13	532	9	0.225	40.92	4	9
16	Araujo L	Lancaster U	UK	13	408	9	0.500	31.38	2	8
17	Pardo C	Emlyon Business Sch	France	13	250	7	0.304	19.23	2	7
18	Morris MH	U of Central Florida	USA	13	167	8	0.533	12.85	0	6
19	Bellizzi JA	Colorado State U	USA	13	90	6	0.500	6.92	0	4
20	Hult GTM	Michigan State U	USA	12	796	10	0.714	66.33	1	11
21	Lindgreen A	Cardiff U	UK	11	524	9	0.818	47.64	2	9
22	Snehota I	U of Lugano	Switzerland	11	414	9	0.563	37.64	2	9
23	Avlonitis GJ	Athens U Economics Business	Greece	11	319	7	0.259	29.00	3	6
24	Leek S	U of Birmingham	UK	11	223	8	1.333	20.27	1	8
25	Ivens BS	Otto Friedrich U Bamberg	Germany	11	198	6	0.500	18.00	1	6
26	Dubinsky AJ	U of Kentucky	USA	11	127	7	0.250	11.55	0	7
27	Calantone RJ	Michigan State U	USA	10	905	8	0.400	90.50	2	5
28	Cova B	Kedge Business School	France	10	343	8	0.889	34.30	2	7
29	Salle R	Emlyon Business School	France	10	341	8	0.381	34.10	2	8
30	Eggert A	U of Paderborn	Germany	10	321	7	0.500	32.10	2	6
31	Andersen PH	Aarhus U	Denmark	10	304	7	0.636	30.40	2	7
32	Corsaro D	U of Lugano	Switzerland	10	295	9	1.800	29.50	1	8
33	Moncrief WC	Texas Christian U	USA	10	227	6	0.188	22.70	3	4
34	Ingram TN	Colorado State U	USA	10	174	7	0.226	17.40	1	6
35	Purchase S	U of Western Australia	Australia	10	130	6	0.462	13.00	1	3
36	Cavusgil ST	Michigan State U	USA	9	1171	8	0.348	130.11	3	8
37	Gadde LE	Chalmers U of Technology	Sweden	9	574	8	0.500	63.78	3	7
38	Vandenbempt K	U of Antwerp	Belgium	9	418	8	0.533	46.44	3	8
39	O'Cass A	U of Tasmania	Australia	9	349	8	0.667	38.78	2	8
40	Lancioni RA	Temple U	USA	9	342	8	0.615	38.00	3	8
41	Smith MF	Temple U	USA	9	312	7	0.333	34.67	3	6
42	Dion PA	McMaster U	Canada	9	223	6	0.375	24.78	2	4
43	Medlin CJ	U of Adelaide	Australia	9	204	6	0.462	22.67	2	5
44	Ramos C	U of Manchester	UK	9	173	6	1.000	19.22	0	5
45	Kohtamaki M	U Vaasa	Finland	9	172	6	1.200	19.11	1	5
46	Tanner JF	Baylor U	USA	9	170	8	0.727	18.89	0	7
47	Banting PM	McMaster U	Canada	9	97	5	0.192	10.78	0	4
48	Stevenson TH	U of North Carolina	USA	9	92	6	0.250	10.22	0	3
49	Lambert DM	Ohio State U	USA	8	1003	6	0.200	125.38	2	6
50	Bengtsson M	Umea U	Sweden	8	645	7	0.438	80.63	2	5

Abbreviations are available in previous tables except for: H = H-index; C/P = Citations per paper.

To identify more specifically the documents published in IMM with the highest number of citations according to the Web of Science database, Table 2 shows a list with the 50 most frequently cited documents.

The most frequently cited article of IMM, with 833 citations, is an article about supply chain management written by Douglas M. Lambert and Martha C. Cooper and published in 2000. The second most frequently cited paper has 756 citations and is about learning organization, firm innovation capability and firm performance; this article, published in 2002, was written by Roger J. Calantone, S. Tamer Cavusgil and Yushan Zhao. These two papers receive approximately 50 citations per year on average. However, the article with the highest number of citations per year places sixth in the ranking and was published in 2011. This paper focuses on issues related to business-to-business. Note that only four papers published before 1990 appear in the Top 50. However, only one article was published before 1985.

Another interesting issue is to analyze the most frequently cited documents in IMM. To do so, the analysis looks into the references of the articles published in IMM. Table 3 presents the 40 most frequently

cited documents in IMM. Note that any document is considered regardless of whether it is an article, book or conference article.

The list of documents in Table 3 includes 31 articles and nine books. The most frequently cited document is an article by Rob M. Morgan and Shelby D. Hunt entitled “The commitment-trust theory of relationship marketing” published in the Journal of Marketing in 1994. The Journal of Marketing has 11 articles on the list and the Journal of Marketing Research has five. Hakan Hakansson has four documents on the list, including three books.

A further interesting issue is to analyze who cites the journal more frequently. To do so, Table 4 shows the citing articles of IMM, ordered by universities, countries and journals that give more citations to IMM.

Aalto University (Finland) and the University of Manchester (UK) are the universities that cite the journal most frequently. European institutions dominate the university list although there are also universities from the USA and the Asia-Pacific region. The USA, the UK and China are the countries that give more citations to IMM. Considering country size, it is worth mentioning Taiwan, Finland and Sweden,

Table 6
The most productive and influential institutions in IMM.

R	University	Country	TP	TC	H	C/P	> 100	> 10	88–97	98–07	08–17	ARWU	QS
1	U of Manchester	UK	77	1525	22	19.81	1	45	8	14	47	38	29
2	Aalto U	FIN	63	2082	24	33.05	5	39	1	13	49	401–500	133
3	Lancaster U	UK	55	1257	19	22.85	3	29	1	7	46	301–400	129
4	Michigan State U	USA	47	2593	25	55.17	3	36	12	21	11	101–150	160
5	Georgia State U	USA	41	1130	16	27.56	3	25	5	10	23	501–600	701+
6	Temple U	USA	38	1172	17	30.84	3	24	2	5	31	301–400	651–700
7	BI Norwegian Business School	NOR	38	792	16	20.84	1	20	4	18	15	–	–
8	U of North Carolina	USA	35	914	15	26.11	1	19	11	10	7	33	78
9	Kedge Business School	FRA	30	602	14	20.07	1	15	0	2	28	–	–
10	U of Strathclyde	UK	30	436	13	14.53	0	19	2	6	16	501–600	272
11	U of Bath	UK	28	997	17	35.61	2	21	1	12	12	501–600	159
12	Cardiff U	UK	28	762	14	27.21	1	17	2	12	14	99	140
13	U of Miami	USA	27	891	17	33.00	1	21	6	11	10	151–200	252
14	U of Birmingham	UK	27	579	12	21.44	2	15	0	5	22	101–150	82
15	U of Leeds	UK	27	579	11	21.44	0	11	2	5	20	101–150	93
16	U of Oulu	FIN	27	355	13	13.15	0	15	0	4	23	401–500	411–420
17	Florida State U	USA	26	1318	15	50.69	2	20	5	12	7	201–300	431–440
18	Cranfield U	UK	26	1209	14	46.50	2	15	1	10	15	–	–
19	Uppsala U	SWE	26	652	14	25.08	1	17	1	7	16	63	98
20	McMaster U	CAN	25	1151	16	46.04	3	17	13	3	2	66	149
21	U of Turku	FIN	25	769	12	30.76	2	12	0	2	23	401–500	234
22	HankenSch Econ	FIN	25	681	10	27.24	2	10	0	0	25	–	–
23	U of Warwick	UK	25	602	12	24.08	1	16	3	7	14	101–150	51
24	Monash U	AUS	25	478	14	19.12	0	15	0	8	16	78	65
25	City U of Hong Kong	CHN	24	423	13	17.63	0	14	1	6	17	201–300	55
26	Copenhagen Business School	DEN	23	1197	13	52.04	3	14	0	9	11	601–700	–
27	U of New South Wales Sydney	AUS	23	936	13	40.70	3	15	2	7	12	101–150	49
28	Colorado State U	USA	23	351	11	15.26	0	11	0	9	7	201–300	386
29	Stockholm School of Economics	SWE	21	861	13	41.00	3	14	0	7	14	401–500	–
30	Bocconi U	ITA	21	514	14	24.48	0	15	0	8	13	–	–
31	U Vaasa	FIN	21	316	9	15.05	0	8	0	1	20	–	–
32	U of Southern Denmark	DEN	21	272	9	12.95	0	9	0	3	18	301–400	390
33	Virginia Polytech Inst State U	USA	20	252	9	12.60	0	7	6	2	4	301–400	361
34	Texas Christian U	USA	19	353	10	18.58	0	10	4	6	3	–	–
35	Texas A M U College Station	USA	19	176	7	9.26	0	5	1	1	3	101–150	160
36	Hong Kong Polytechnic U	CHN	18	579	11	32.17	1	11	1	4	13	201–300	111
37	Linköping U	SWE	18	555	10	30.83	1	11	0	3	14	201–300	282
38	Penn State U	USA	18	550	13	30.56	2	13	5	5	4	–	–
39	U of Houston	USA	18	533	10	29.61	1	12	0	9	4	201–300	601–650
40	U of Bradford	UK	18	380	10	21.11	1	10	3	4	0	–	551–600
41	U of North Texas Denton	USA	18	373	9	20.72	0	9	3	3	9	–	–
42	Chalmers U of Technology	SWE	17	699	11	41.12	3	11	0	5	12	201–300	139
43	U of Antwerp	BEL	17	546	12	32.12	1	12	0	5	12	201–300	209
44	Aston U	UK	17	255	9	15.00	0	9	0	3	13	–	358
45	Baruch College	USA	17	248	8	14.59	0	7	4	6	1	–	–
46	Oklahoma State U Stillwater	USA	17	218	10	12.82	0	10	1	4	9	401–500	461–470
47	U of Nottingham	UK	16	393	8	24.56	1	8	0	2	14	101–150	75
48	Florida Atlantic U	USA	16	352	9	22.00	0	9	4	3	6	–	–
49	Baylor U	USA	16	345	11	21.56	0	12	7	7	2	–	701+
50	Loughborough U	UK	16	192	7	12.00	0	7	0	4	9	601–700	237

Abbreviations are available in previous tables except for: ARWU and QS = Academic Ranking of World Universities and QS University Ranking.

which give many citations to IMM, taking into account the fact that their publication volume is much lower than the previous three countries. From the journal point of view, the self-citations of IMM are the most remarkable result. This is a very common result because publications of the same journal usually represent the most influential documents for future documents published in the journal (Merigó, Gil-Lafuente, & Yager, 2015; Merigó, Mas-Tur, et al., 2015). Other journals that give many citations to IMM are the Journal of Business Research and the Journal of Business & Industrial Marketing. Most of the journals in the list come from the field of marketing and operations management.

4.2. Leading authors, institutions and countries

In this section, we analyze the leading actors of IMM in terms of authors, universities and countries. First, we focus on the authors that have published the highest number of articles in IMM. Table 5 presents the results considering a wide range of bibliometric indicators,

although the ranking is according to the number of documents. Note that in the case of a tie in the number of articles, the ranking is according to the number of citations.

Peter Naude from the University of Manchester is the most productive author in IMM, followed by Stephan C. Hennenberg, from Queen Mary University of London. However, when looking at the number of citations, other authors in the list have received more citations, such as S. Tamer Cavusgil from Michigan State University, Thomas Ritter from Copenhagen Business School, and Robert G. Cooper from McMaster University. All the authors in the list work at an English-speaking country or in Europe.

The index most-frequently used is the h-index. However, there are other indicators that measure the influence and impact of authors from a different perspective. This is the case of researchers' m-value (Hirsch, 2005), that is, the author's h-index divided by the number of years since his/her first publication. Thus, m-value helps normalize authors' h-index score by considering whether they are in the early or later stages of their careers, and projects their likelihood for future growth. In m-

Table 7
The most productive and influential countries in IMM.

R	Country	TP	TC	H	C/P	> 100	> 10	Population	TP/Pop	TC/Pop
1	USA	1279	25,512	66	20	29	606	323,127,510	3.96	7.90
2	United Kingdom	548	11,301	81	66	15	280	66,500,000	8.24	16.99
3	Finland	182	4921	36	27	10	96	5,495,100	33.12	89.55
4	Australia	167	3885	36	23	4	91	24,127,160	6.92	16.10
5	Sweden	141	4062	33	29	8	86	9,903,120	14.24	41.02
6	Canada	129	3018	33	23	4	70	36,286,430	3.56	8.32
7	China	117	2323	25	20	3	58	1,378,665,000	0.08	0.17
8	France	103	2447	26	24	5	56	66,896,110	1.54	3.66
9	Germany	92	2665	27	29	7	55	82,667,680	1.06	3.20
10	Taiwan	83	1532	23	18	1	56	23,540,000	3.53	6.51
11	Netherlands	73	2319	27	32	7	45	17,018,410	4.29	13.63
12	Italy	70	1141	19	16	0	38	60,600,590	1.16	1.88
13	Denmark	69	2240	23	32	4	36	5,731,120	12.04	39.08
14	Norway	60	1249	19	21	2	33	5,232,930	11.47	23.87
15	Switzerland	51	1323	21	26	2	34	8,372,100	6.09	15.80
16	Spain	46	1292	19	28	2	32	46,443,960	0.99	2.78
17	New Zealand	44	1156	20	26	2	25	4,692,700	9.38	24.63
18	Belgium	37	1150	18	31	3	22	11,348,160	3.26	10.13
19	South Korea	37	860	18	23	0	25	51,245,710	0.72	1.68
20	Ireland	31	464	13	15	0	17	4,773,100	6.49	9.72
21	Greece	22	820	15	37	1	18	10,746,740	2.05	7.63
22	Portugal	21	502	13	24	0	14	10,324,610	2.03	4.86
23	Turkey	16	451	10	28	0	10	79,512,430	0.20	0.57
24	Austria	15	677	11	45	1	12	8,747,360	1.71	7.74
25	Brazil	15	210	9	14	0	7	207,652,860	0.07	0.10
26	Singapore	13	279	8	21	0	7	5,607,280	2.32	4.98
27	South Africa	12	356	8	30	1	8	55,908,860	0.21	0.64
28	India	12	269	7	22	1	6	1,324,171,350	0.01	0.02
29	Poland	10	110	5	11	0	4	37,948,020	0.26	0.29
30	Israel	9	26	3	3	0	0	8,547,100	1.05	0.30
31	Cyprus	8	278	6	35	0	6	1,170,130	6.84	23.76
32	Slovenia	8	188	7	24	0	6	2,064,840	3.87	9.10
33	United Arab Emirates	8	71	5	9	0	2	9,269,610	0.86	0.77
34	Chile	6	87	5	15	0	4	17,909,750	0.34	0.49
35	Russia	5	68	4	14	0	2	144,342,400	0.03	0.05
36	Hungary	5	25	3	5	0	0	9,817,960	0.51	0.25
37	Malaysia	4	122	3	31	0	2	31,187,260	0.13	0.39
38	Japan	3	14	2	5	0	0	126,994,510	0.02	0.01
39	Croatia	2	92	2	46	0	2	4,170,600	0.48	2.21
40	Iran	2	43	2	22	0	1	80,277,430	0.02	0.05

Abbreviations are available in previous tables except for: TP/Pop and TC/Pop = Total papers and citations per million inhabitants. Note that the population is given in thousands.

value, the author with the strongest projection, or highest m-value ranking, is Professor D. Corsaro, of the University of Lugano (Switzerland). However, the top spots also include three professors at British universities: S. Leek (University of Birmingham), S.C. Henneberg and C. Ramos (University of Manchester), which reveals the growing interest in these topics in British academia. Also prominent in the m-value listing is Professor M. Kohtamaki, of the University of Vaasa (Finland). Of the top 20 hi-index authors, only S.C. Henneberg also figures as a top h-value academic.

Next, we analyze the most productive institutions in IMM. Recall that by institution we refer to the author affiliation at the time of publication in IMM. Table 6 presents the 50 institutions with the highest number of publications in IMM.

The University of Manchester (UK) is the most productive institution in IMM, followed by Aalto University (Finland) and Lancaster University (UK). Eight of the Top 20 universities are from the UK and six from the USA. Twelve institutions from Scandinavian countries appear in the Top 50. All of the universities on the list are from English-speaking countries or Europe with the exception of two Chinese universities: City University of Hong Kong and Hong Kong Polytechnic University. Looking at the temporal evolution, it should be noted that Aalto University and Lancaster University have greatly grown their number of publications in IMM during the last decade.

It is also interesting to generalize these results at a country level. For doing so, Table 7 shows the 40 countries with the highest number of

publications in the journal. Note that in the case of a tie, the ranking is according to the number of citations.

The USA is by far the country with the highest number of publications followed by the UK. However, when normalizing per capita, the countries with the best performance are the Scandinavian countries, especially Finland. Most of the leading countries are English-speaking or from Europe, although some Asian countries also achieve noteworthy results, including China, Taiwan and South Korea, all of them in the top 20. Some developing countries also appear in the list although far from the top; e.g., Turkey, Brazil and India.

The USA and the UK have always been the main leaders of the journal, although the influence of the latter is growing over time, while the USA is losing ground if we consider the percentage of documents from the total of each year. Scandinavian countries and China are also growing their publications over time. Most of the publications from developing countries are from recent years, which indicates that research in marketing is growing over time, although still they have to improve in order to reach the standards of European and English-speaking countries.

5. Mapping IMM citations

In this section, we graphically map the bibliographic data of IMM by using co-citation analysis, bibliographic coupling and co-occurrence of author keywords. For doing so, the work uses the VOS viewer software

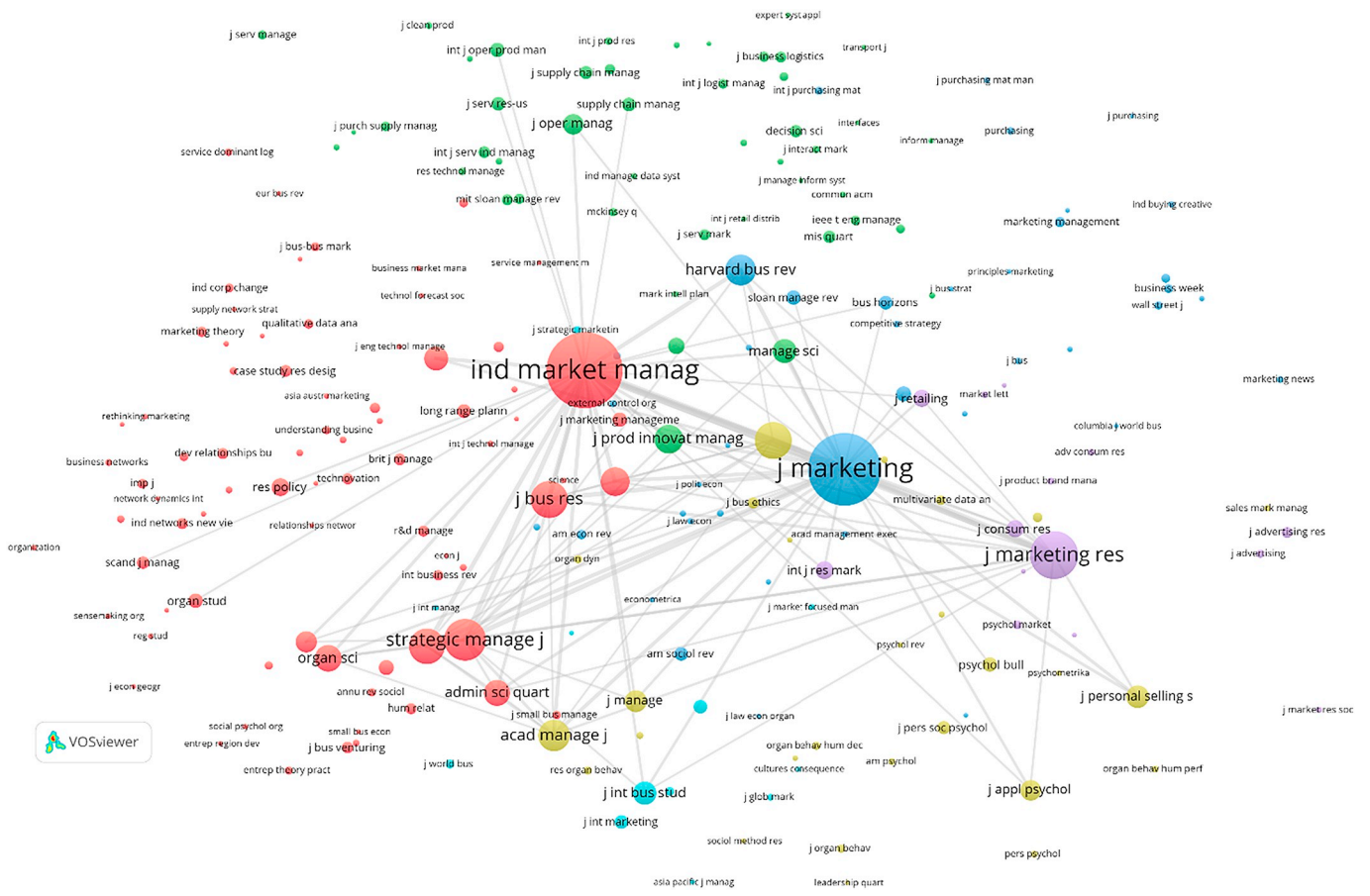


Fig. 3. Co-citation of journals in IMM for its lifespan (minimum citation threshold of 50 and 100 links).

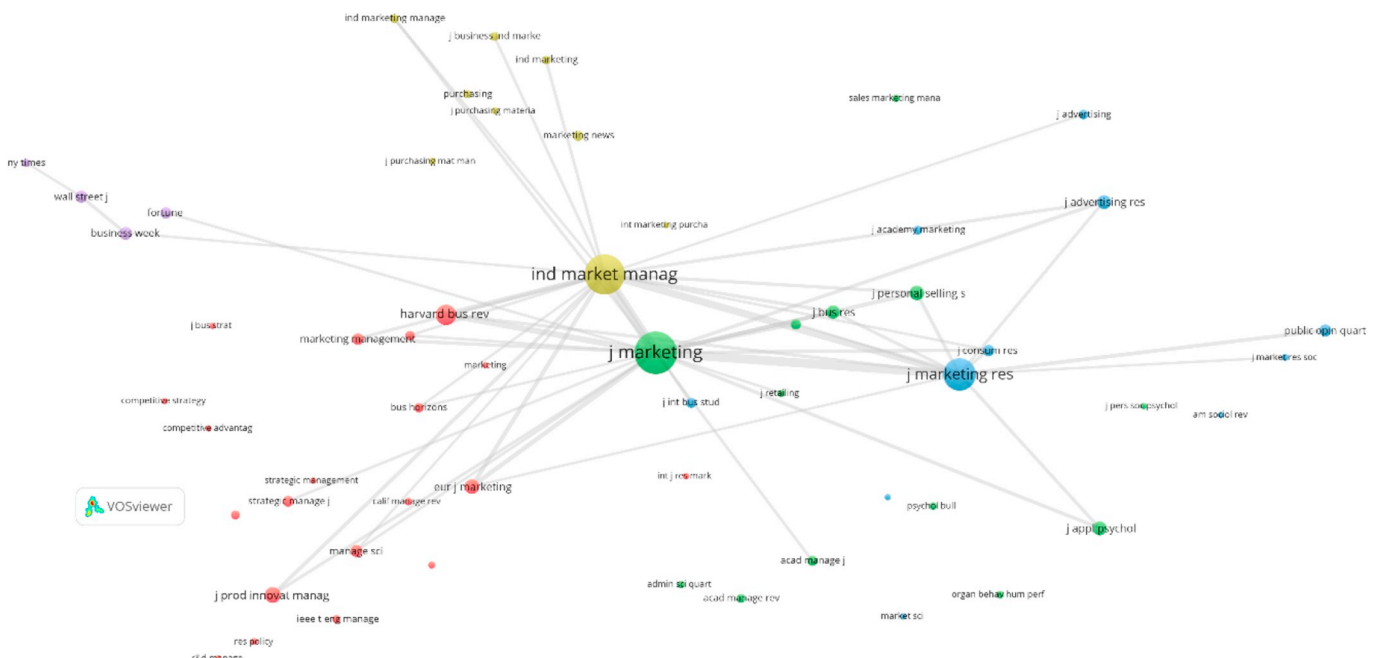


Fig. 4. Co-citation of journals in IMM: 1988–1997 (minimum citation threshold of 20 and 100 links).

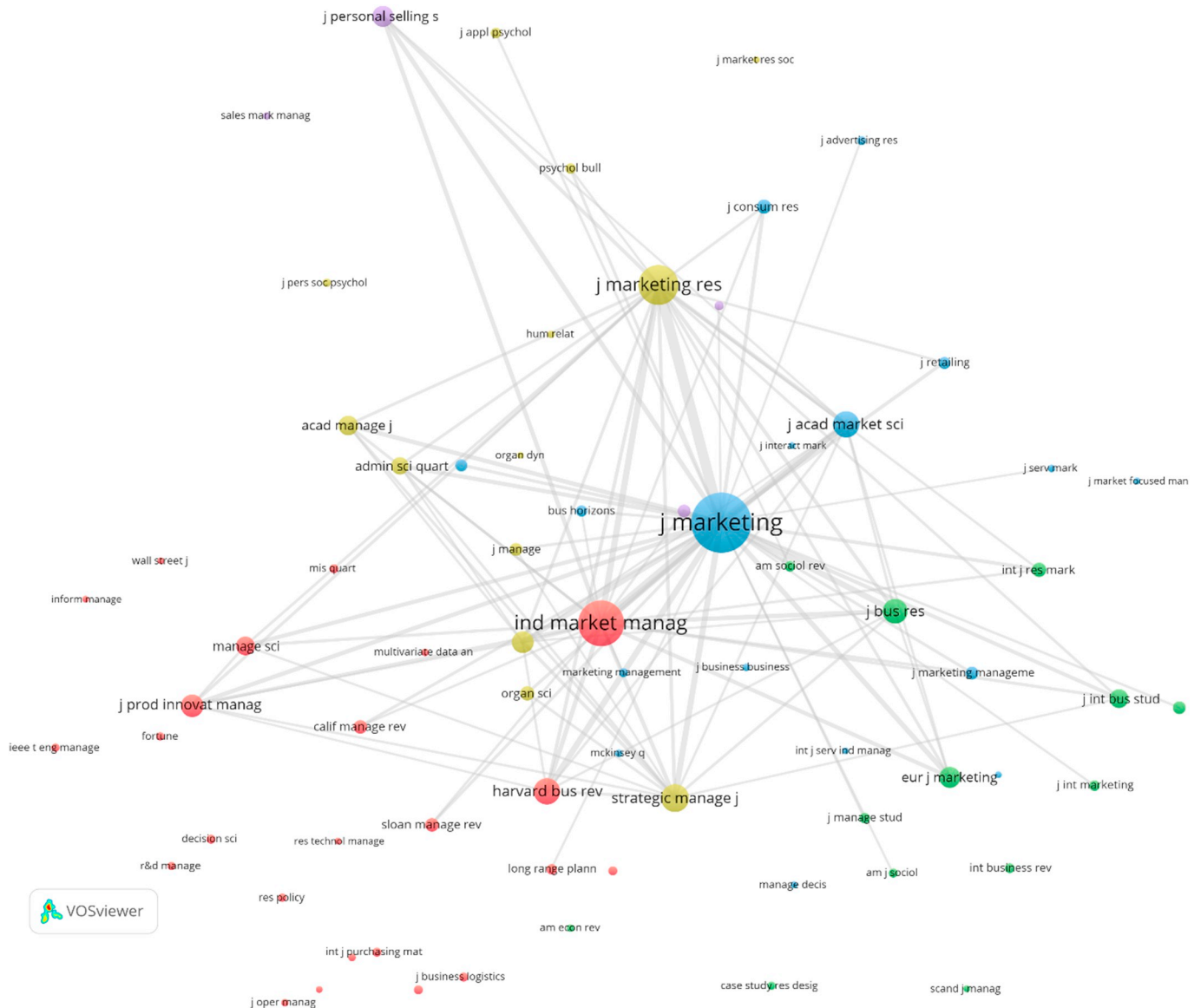


Fig. 5. Co-citation of journals in IMM: 1998–2007 (minimum citation threshold of 40 and 100 links).

(Van Eck & Waltman, 2010). However, note that in the literature there is other software for mapping the bibliographic data (Cobo, Lopez-Herrera, Herrera-Viedma, & Herrera, 2011).

5.1. Connections between journals cited in IMM

Here we develop a co-citation analysis of journals. Fig. 3 shows the results, considering a minimum citation threshold of 50 citations and the 100 most representative co-citation links, for the journal's lifespan. Note that the size of the circles measures the number of citations received by every journal in IMM, and the nodes visualize the co-citations.

The self-citations of IMM are the most significant, followed closely by those received by the Journal of Marketing. Together with the Journal of Marketing Research, Strategic Management Journal and the Journal of Business Research, they form the main core of citations of the journal. However, it should be noted that IMM also cites journals in other neighbouring areas, including the Academy of Management Review and Journal, Organization Science, the Journal of Operations Management and the Journal of Applied Psychology.

To dive more deeply into these results, we have analyzed their

temporal evolution by considering the last three decades of IMM: 1988–1997, 1998–2007 and 2008–2017. Fig. 4 presents the results between 1988 and 1997 with a citation threshold of 20 citations and 100 co-citation links.

In this period, IMM cited the Journal of Marketing more than itself. The Journal of Marketing Research and Harvard Business Review were also significantly cited in the journal. This trend also appears between 1998 and 2007, where the Journal of Marketing achieved even more importance. Fig. 5 shows the results considering a threshold of 40 citations and 100 co-citation links.

For this timespan, the influence of the Journal of Marketing is higher, and now more journals are increasing their influence in the journal, including the Strategic Management Journal, the Journal of the Academy of Marketing Science and the Journal of Business Research.

For the last 10 years, from 2008 until 2017, Fig. 6 shows the co-citation results, with a threshold of 50 citations and the 100 most representative co-citation links.

Over time, the journal has greatly grown its number of publications per year. Therefore, the number of citations generated in IMM has also grown considerably. This is the reason for the much bigger co-citation structure in Fig. 5 than in Figs. 3 and 4. However, the trend is similar,

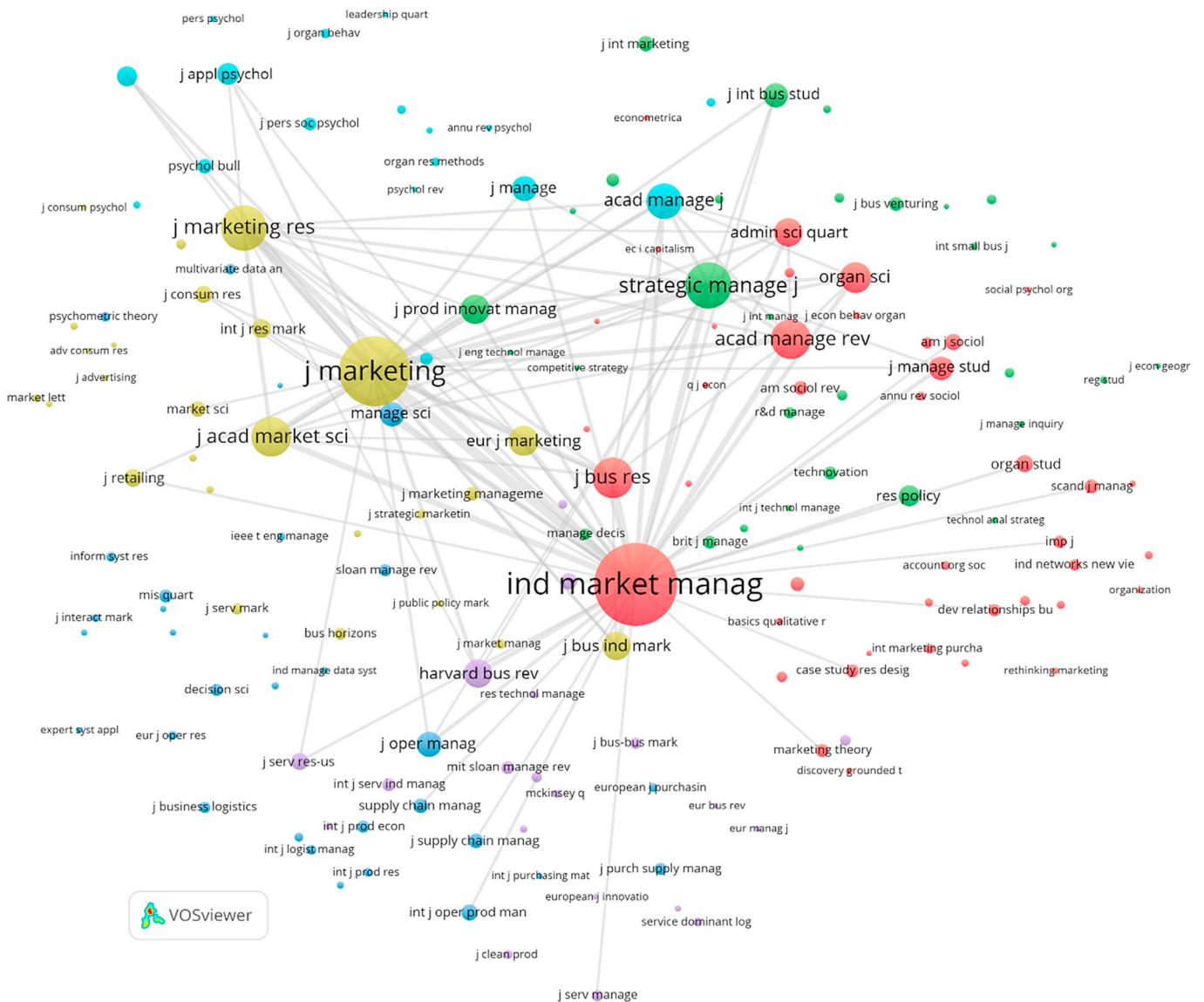


Fig. 6. Co-citation of journals in IMM: 2008–2017 (minimum citation threshold of 50 and 100 links).

although now the self-citations of IMM are more significant, which reflects the consolidation of IMM as an influential journal in marketing. Note that Fig. 5 primarily visualizes journals from three areas. The first is marketing, which is the most significant one, with IMM and the Journal of Marketing. The second is journals in management, such as the Strategic Management Journal, Harvard Business Review and the Academy of Management Review. Although the number of citations is lower, it is also worth mentioning the third group of journals, which are those connected to operations management such as the Journal of Operations Management and the Journal of Supply Chain Management.

To more clearly specify the most frequently cited journals in IMM, Table 8 shows the Top 40 from a global perspective, also considering the periods mentioned above: 1988–1997, 1998–2007 and 2008–2017.

Finally, Table 9 measures the number of other journals' citations of IMM each year, including the number of self-citations by IMM. To carry out this analysis, journals with 4 stars in the ABS¹ ranking (2018) in the disciplines of International Business, Innovation, Marketing, Operations & Technology, Organization & Management Science, and Strategy have been considered. The International Journal of Operations and

Production Management, the European Journal of Operations Research, and the Journal of Operations Management are the publications that most cite IMM papers. However, those broadly known as the top marketing journals (i.e., the Journal of Marketing, the Journal of Marketing Research, Marketing Science, the Journal of Consumer Research and the Journal of Consumer Psychology) hardly cite IMM papers; in fact, in the last decade considered here, no paper published in JM, JMR and JCP cited any IMM paper. Finally, the following journals have been also analyzed, though not included in this table due to not citing any IMM paper in the three time periods considered: the Journal of International Business Studies, the Journal of World Business, the Journal of Product Innovation Management, the Journal of the Academy of Marketing Science, the International Journal of Research in Marketing, the Journal of Retailing, and Production and Operations Management.

5.2. Connections between institutions and countries of citations in IMM

Next, we look into the most productive universities and see how they connect in terms of citation profile (Tur-Porcar, Mas-Tur, Merigó, Roig-Tierno, & Watt, 2018). To do so, this work develops a graphical visualization of bibliographic coupling of institutions that publish in IMM. Fig. 7 shows the results considering a minimum publication

¹ Association of Business Schools' Academic Journal Guide.

Table 8
Co-citation of journals in IMM: global and temporal analysis.

R	Global		2008–2017			1998–2007			1988–1997			
	Journal	Cit	CLS	Journal	Cit	CLS	Journal	Cit	CLS	Journal	Cit	CLS
1	Ind Market Manag	12,213	9757.4	Ind Market Manag	9398	7474.98	J Marketing	2996	2278.06	J Marketing	863	650.65
2	J Marketing	10,989	9077.1	J Marketing	6760	5713.11	Ind Market Manag	1776	1406.55	Ind Market Manag	764	548.88
3	J Marketing Res	4872	4350.13	Strategic Manage J	2990	2722.04	J Marketing Res	1311	1131.91	J Marketing Res	501	392.54
4	Strategic Manage J	3699	3369.93	J Marketing Res	2805	2588.37	Strategic Manage J	651	576.72	Harvard Bus Rev	202	181.44
5	J Bus Res	2909	2771.55	J Bus Res	2278	2166.4	J Acad Market Sci	597	551.86	J Prod InnovatManag	125	92.59
6	J Acad Market Sci	2867	2703.12	J Acad Market Sci	2218	2092.19	Harvard Bus Rev	579	529.68	J Personal Selling S	109	93.97
7	Acad Manage Rev	2654	2516.37	Acad Manage Rev	2192	2069.17	J Bus Res	522	492.3	Eur J Marketing	107	102.45
8	Acad Manage J	2137	2032.76	Acad Manage J	1742	1656.33	J Prod InnovatManag	432	335.32	J ApplPsychol	95	80.2
9	Harvard Bus Rev	1994	1882.62	Organ Sci	1330	1266.4	Acad Manage Rev	419	399.88	J Advertising Res	94	75.03
10	Eur J Marketing	1773	1706.45	Eur J Marketing	1242	1197.63	Eur J Marketing	386	365.99	J Bus Res	89	84.63
11	J Prod InnovatManag	1736	1482.04	J Prod InnovatManag	1176	1035.76	J Personal Selling S	377	290.98	Business Week	80	68.31
12	Organ Sci	1515	1445.58	Admin Sci Quart	1134	1095.48	Acad Manage J	322	302.54	Manage Sci	71	62.15
13	Admin Sci Quart	1470	1414.63	Harvard Bus Rev	1130	1087.67	Manage Sci	300	278.35	Public Opin Quart	71	56.35
14	J Bus Ind Mark	1249	1195.38	J Bus Ind Mark	1112	1060.62	J Int Bus Stud	293	258.79	Wall Street J	70	53.11
15	Manage Sci	1232	1179.59	J OperManag	872	815.93	Admin Sci Quart	267	257.36	Fortune	69	61.83
16	J Int Bus Stud	1178	1060.34	J Manage	860	840.9	Organ Sci	184	175.4	J Consum Res	69	62.22
17	J Personal Selling S	1072	927.24	Manage Sci	837	808.56	J Consum Res	176	161.52	Strategic Manage J	56	50.89
18	J Manage	1017	995.53	J Manage Stud	828	798.43	Int J Res Mark	170	166.52	J Acad Market Sci	54	50.27
19	J Manage Stud	949	918.28	J Int Bus Stud	825	746.52	Calif Manage Rev	159	156.32	Acad Manage J	52	49.57
20	J ApplPsychol	924	864.91	J ApplPsychol	689	652.67	Sloan Manage Rev	159	155.84	J Int Bus Stud	52	41.04
21	J OperManag	918	862.12	Res Policy	617	584.77	J Bus Ind Mark	141	136.64	Marketing News	51	45.55
22	Res Policy	708	671.51	J Personal Selling S	578	522.53	J Manage	139	135.86	Bus Horizons	48	44.65
23	Int J Res Mark	689	675.62	Int J Res Mark	495	484.71	Int Market Rev	138	128.11	J Advertising	44	37.74
24	J Consum Res	656	625.22	J Retailing	458	440.6	J Marketing Managem	136	131.5	Sloan Manage Rev	44	43.23
25	J Retailing	631	608.23	Organ Stud	429	418.12	J Retailing	134	128.96	Long Range Plann	43	34.78
26	Calif Manage Rev	573	565.14	J Serv Res-US	398	386.06	Market Sci	133	123.28	Acad Manage Rev	38	36.69
27	Market Sci	508	482.31	J Consum Res	396	384.22	Bus Horizons	118	114.18	NY Times	36	24.82
28	Am J Sociol	473	464.05	Int J Oper Prod Man	386	371.7	J Manage Stud	104	101.55	IEEE T Eng Manage	35	32.3
29	Organ Stud	464	452.88	Am J Sociol	384	376.55	Psychol Bull	102	100.38	Organ Behav Hum Perf	32	28.77
30	Psychol Bull	455	450.8	Calif Manage Rev	364	360.31	J Int Marketing	101	96.65	Calif Manage Rev	31	30.24
31	J Marketing Managem	443	434.36	Market Sci	354	336.07	Am Sociol Rev	100	96.14	Admin Sci Quart	30	28.57
32	Sloan Manage Rev	443	436.86	J Int Marketing	328	318.69	J ApplPsychol	93	88.63	J Retailing	30	28.84
33	Int J Oper Prod Man	434	418.22	Supply Chain Manag	319	306.88	Long Range Plann	92	87.9	Psychol Bull	29	28.24
34	J Int Marketing	430	417.66	Psychol Bull	314	311.66	Int Business Rev	86	81.69	J Market Res Soc	27	24.35
35	J Serv Res-US	428	415.16	J Supply Chain Manag	306	293.38	J Business Logistics	78	71.83	J Purchasing Materia	26	23.94
36	Am Sociol Rev	421	412.44	Am Sociol Rev	283	279.48	Decision Sci	77	73.58	Res Policy	26	21.49
37	Bus Horizons	419	408.76	J Marketing Managem	283	278.6	Int J Phys Distrib	77	70.51	J Marketing Managem	24	23.06
38	J Business Ind Marke	402	393.85	Scand J Manag	268	263.6	Supply Chain Manag	77	67.29	Int J Res Mark	23	22.7
39	Long Range Plann	401	386.67	J Bus Venturing	266	256.03	J Advertising Res	76	65.36	Am Sociol Rev	22	21.59
40	Int Market Rev	399	384.55	Long Range Plann	264	258.55	Am J Sociol	74	72.08	J Pers Soc Psychol	22	20.94

Abbreviations: R = Rank; Cit = Citations; CLS = Citation link strength.

Table 9
Citations to IMM in other journals (including IMM).

Citing journal	1971–2017			2008–2017			1998–2007		
	TC	TP	TC/TP	TC	TP	TC/TP	TC	TP	TC/TP
Industrial Marketing Management	3884	2911	1.334	1161	1229	0.945	1552	637	2.436
Int. J. of Operations and Production Management	210	1113	0.189	0	548	0.000	210	498	0.422
European Journal of Operat. Research	127	14,690	0.009	19	6248	0.003	65	4226	0.015
Journal of Operations Management	91	3306	0.028	0	1765	0.000	91	1097	0.083
Journal of Marketing	44	29,480	0.001	0	15,121	0.000	44	7351	0.006
Strategic Management Journal	39	2954	0.013	12	1468	0.008	0	662	0.000
Management Science	28	13,915	0.002	0	7780	0.000	12	3192	0.004
Journal of Marketing Research	22	2517	0.009	0	1522	0.000	22	595	0.037
Marketing Science	16	2575	0.006	2	1080	0.002	7	569	0.012
Journal of Consumer Research	10	1829	0.005	5	998	0.005	3	642	0.005
Journal of Consumer Psychology	3	916	0.003	0	505	0.000	0	312	0.000
Operations Research	2	22,622	0.000	0	9935	0.000	2	5977	0.000

threshold of five documents and the 100 most significant bibliographic coupling links.

The results are consistent with those of Table 6, although the figure provides a picture of how the universities tend to connect between each other. From a general point of view, it is worth mentioning that universities from the same country or region tend to appear close to each other, although there are some exceptions. The left side of the figure

presents a core of universities from the USA, while the right side shows UK institutions with some other European connections.

Again, it should be remembered that this institutional analysis considers the affiliation of authors at the time of publication in IMM. To provide a more general perspective, we have completed a country analysis by using bibliographic coupling of countries. Fig. 8 shows the results considering a minimum publication threshold of five documents

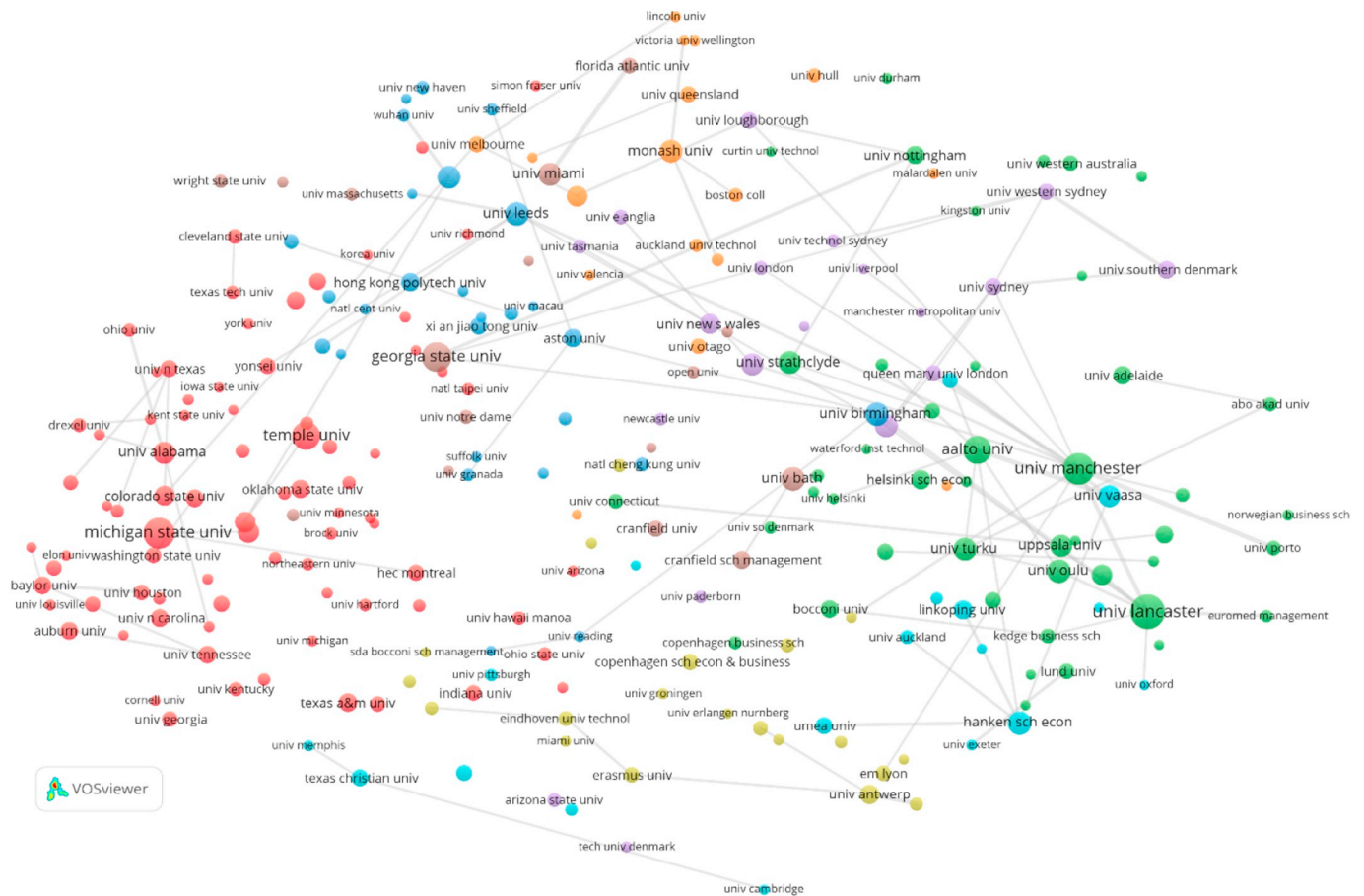


Fig. 7. Bibliographic coupling of institutions publishing in IMM for its lifespan (minimum publication threshold of 5 documents and 100 links).

and the 50 top bibliographic coupling links.

The USA publishes the highest number of documents in IMM, although the UK (particularly England) obtains better results when normalizing according to the population size of the country. Note that the right side of the figure visualizes mostly European countries, while the left side shows some Asian countries.

5.3. Keywords – topics

Another interesting issue is to analyze the most popular keywords of IMM. By doing so, we can identify the most popular topics published in the journal, providing a general idea of the leading themes studied. To carry out the analysis, Fig. 9 shows a co-occurrence of author keywords with a minimum co-occurrence threshold of five appearances and the top 100 co-occurrence links. Note that author keywords are the selected keywords that authors present on the first page of the paper to represent the leading topics of their article. The co-occurrence of keywords appears when two keywords appear in the same document (Cancino, Merigó, Coronado, Dessouky, & Dessouky, 2017).

The most frequent keyword is “Trust” followed by “Innovation”, “Performance” and “Relationship Marketing”. From this perspective, the journal shows significant diversity publishing papers that connect with different issues related to marketing, with a special focus on business-to-business and industrial marketing. Note that the keyword “Business-to-Business” appears under different expressions, including its abbreviation “B2B”.

To analyze these results more deeply, we look into the temporal evolution to see how the popularity of keywords has changed over time (see Figs. 10 and 11); these figures consider a minimum occurrence threshold of five and the 100 most representative co-occurrence links.

Between 1998 and 2007, the most popular keywords were “Relationship Marketing”, “Market Orientation” and “Trust”. However, over time, other keywords have become more popular, such as “Innovation” and “Interaction”. In any case, note that from a general point of view, the journal shows considerable diversity, with many different keywords becoming relevant in the journal. As a comparative example, we note that in other studies, such as Martínez-López et al. (2018) for the European Journal of Marketing and Valenzuela et al. (2017) for the Journal of Business & Industrial Marketing, the authors found that the diversity is lower with some specific keywords strongly leading the journal. In the Journal of Business & Industrial Marketing, the leading keywords were “Business-to-Business Marketing” and “Relationship Marketing” while in the European Journal of Marketing the leading keyword was “Consumer Behaviour” followed by “Marketing”.

To visualize better the most popular keywords of IMM, Table 10 presents the 40 most common keywords in IMM from a global point of view but also shows the two periods mentioned above (1998–2007 and 2008–2017).

Over the years, the main research topics have changed to reflect the main social and business needs, and in response to emerging management models. Some of these topics have disappeared from the highest positions, while others have evolved and are still current. Based on the results of LaPlaca (1997), from 1971 to 1994, over 30% of IMM’s articles focused on the management of marketing and sales functions. Thus, some of the most relevant topics were: management, sales management, global marketing, buyer behavior, marketing research, product development, distribution, promotions, pricing, and other topics, including case stories.

Expanding the period of time analyzed and focusing on the top 30 citation classics of IMM, from 1971 to 2016, Lindgreen and Di

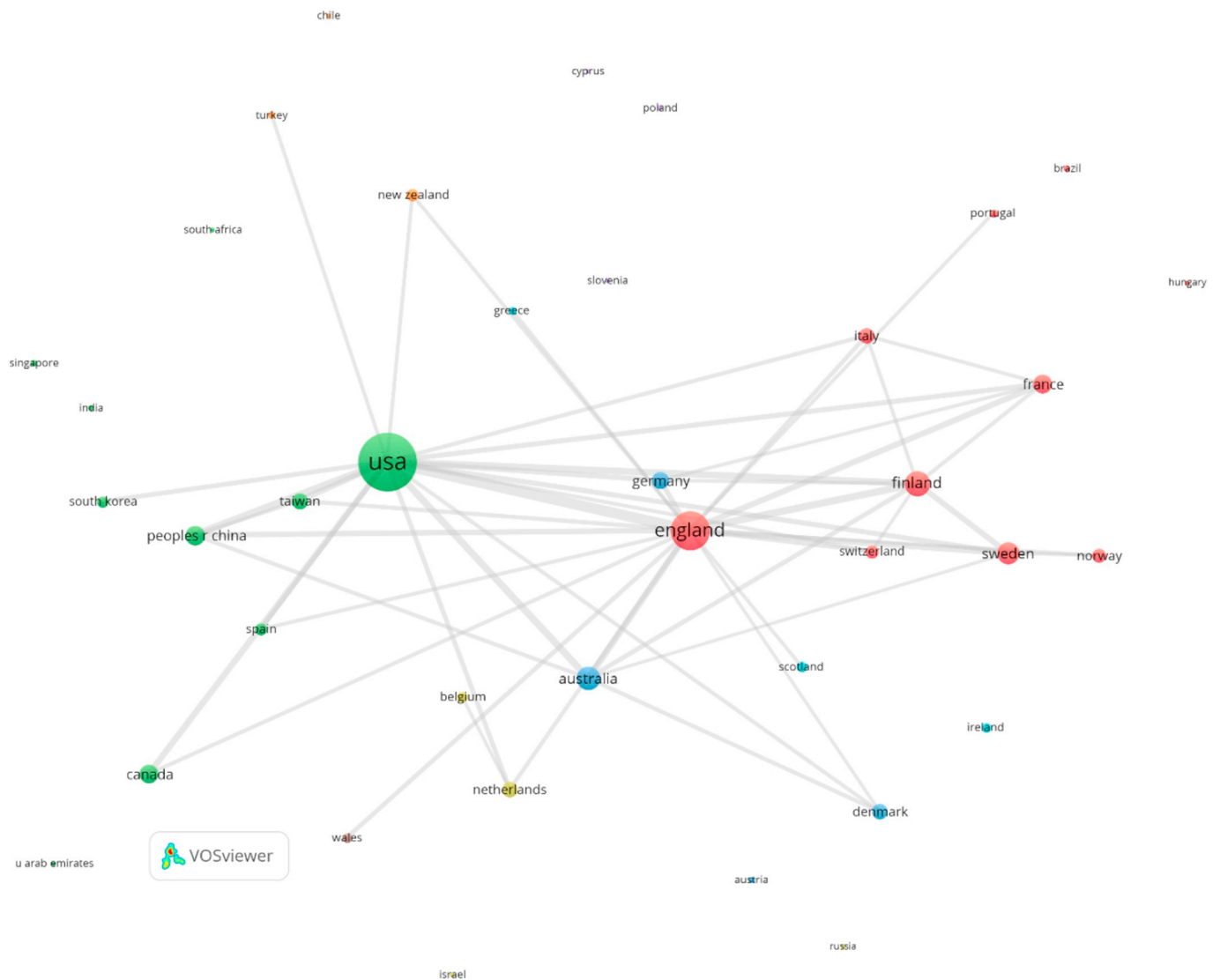


Fig. 8. Bibliographic coupling of countries publishing in IMM: minimum publication threshold of 5 documents and 50 links.

Benedetto (2018) identified eight major categories (supply chains, relationships and business networks, firm performance, value, goods-dominant and service-dominant logic, product innovation, Internet and high-technology markets), and two minor categories (third-party logistics providers, system sellers and systems integrator).

In the evolutionary analysis carried out in this research on the main topics published in IMM and the most important trends, it is observed that only four of the topics in the top 10 during 1998–2007 were still prominent in the last decade (2008–2017), which is a sign of the important changes that have taken place in the journal's field of research in recent years. The topics that are still relevant are: Relationship Marketing, Trust, Performance, and Innovation. Market Orientation does not appear in the top 10 topics of the last decade yet occupies a prominent position (6th) in IMM's global list given its important role during the life of the journal. On the contrary, topics such as Sales Management, New Product Development, and Supply Chain Management have been relegated to less relevant positions, although they continue to be important research areas. It is surprising that “E-Commerce”, in 9th place in 1998–2007, disappeared from the top 40 in the next decade, not appearing in the global list either. Nevertheless, the term “Networks” has entered with more force in the last decade.

Over time, other keywords have also become more popular, such as “Innovation” (leading the ranking during the last decade), “Business

networks”, “Business relationships”, “Case Study”, or “China”. In addition, during 2008–2017 a new topic appears in the list of the most relevant, “Interaction”. Therefore, the 10 most important topics during the last decade have been, in this order: Innovation, Trust, Interaction, Performance, Networks, Business Networks, Business Relationships, Relationship Marketing, Case Study, and China. Although the concepts related to sales, such as “Sales” or “Sales Management”, continue to be important, they have become less prominent in the last few years. On the contrary, terms related to collaboration, cooperation and the establishment of networks have grown strongly, consolidating their positions. Thus, we can find topics such as: Value Co-creation, Coopetition, Relationships, or Industrial Networks.

Considering the period globally and analyzing the most relevant terms in IMM throughout its history (1971–2017), it can be observed that the top 10 most relevant topics are: Trust, Innovation, Performance, Relationship Marketing, Interaction, Market Orientation, Networks, Business Relationships, China, and Business Networks. However, it is important to note that many of these terms overlap and appear in numerous articles.

Trust is the most relevant research topic during IMM's lifespan (309 articles) and has always been among the topics most frequently addressed by the journal. The paper published in IMM about trust with the highest number of citations (379) is Handfield and Bechtel (2002), “The

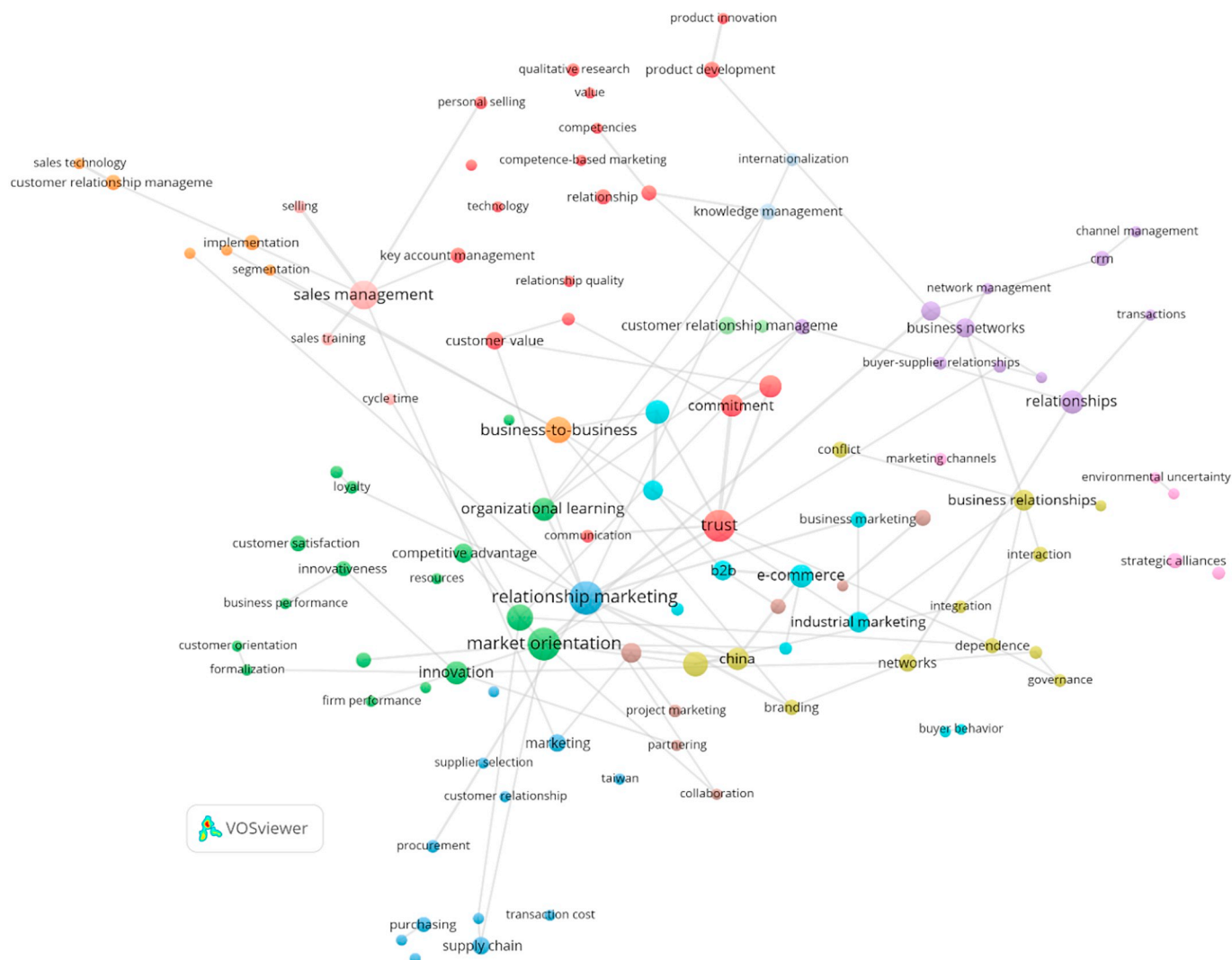


Fig. 10. Co-occurrence of author keywords in IMM: 1998–2007 (minimum occurrence threshold of 5 and 100 links).

enterprises, or focused on the relationship between environmental orientation, green supply chain management activities and corporate performance.

A final caveat: keywords are presented in the original form as the authors used in their article. Therefore, some keywords may appear several times under different denominations. For example, it is worth noting the case of “Business-to-Business”, which appears individually in the global list in its abbreviated form and together with “Marketing”. “Relationship Marketing” also presents this issue with the keywords “Relationship” and “Customer Relationship Marketing”. If these two terms were unified, “Business-to-Business” and “Relationship Marketing” would be the most popular keywords in the journal.

6. Conclusions

This study presents a bibliometric overview of the publications in IMM between 1971 and 2017. The main goal has been to identify the journal's leading actors in terms of documents, journals, authors, universities and countries. IMM is a leading journal in the field of business-to-business and industrial marketing, with publications from all over the world, although Europe is the leading region in the journal. The journal has been growing significantly in recent years, becoming one of the leading international journals in marketing.

The UK is currently publishing the highest number of articles in IMM. The University of Manchester and Lancaster University achieve

the most noteworthy results, with other institutions from the UK in the top 20. Many other European countries publish significantly in the journal. In particular, it is worth noting the results of Finland and Scandinavian countries in general. Finland achieves significant results, especially considering that it has fewer than 6 million people and has the highest number of articles and citations per million inhabitants.

The USA has published the highest number of articles of any country, but considering its size, the results are less significant than in many other journals where its relevance is extremely high (Merigó & Yang, 2017). Some universities achieve remarkable results, such as Michigan State University and Georgia State University. Other English-speaking countries, such as Australia, Canada and New Zealand, perform well in the journal, but none of their institutions are among the top 20 most productive institutions. Australia has two universities in the Top 50, but Canada and New Zealand do not have any.

Some Asian countries regularly publish in IMM, but their results are very low compared to Europe and English-speaking countries. China and Taiwan are growing considerably, but still they need to improve. Some developing countries have also published articles in the journal, but the current number is very low. However, the expectations for the future are that these countries will perform better once they achieve a better economic development, with higher investment in research and development.

Analyzing the journal connections of IMM, it is clear that the journal is primarily oriented towards marketing, with significant connections in

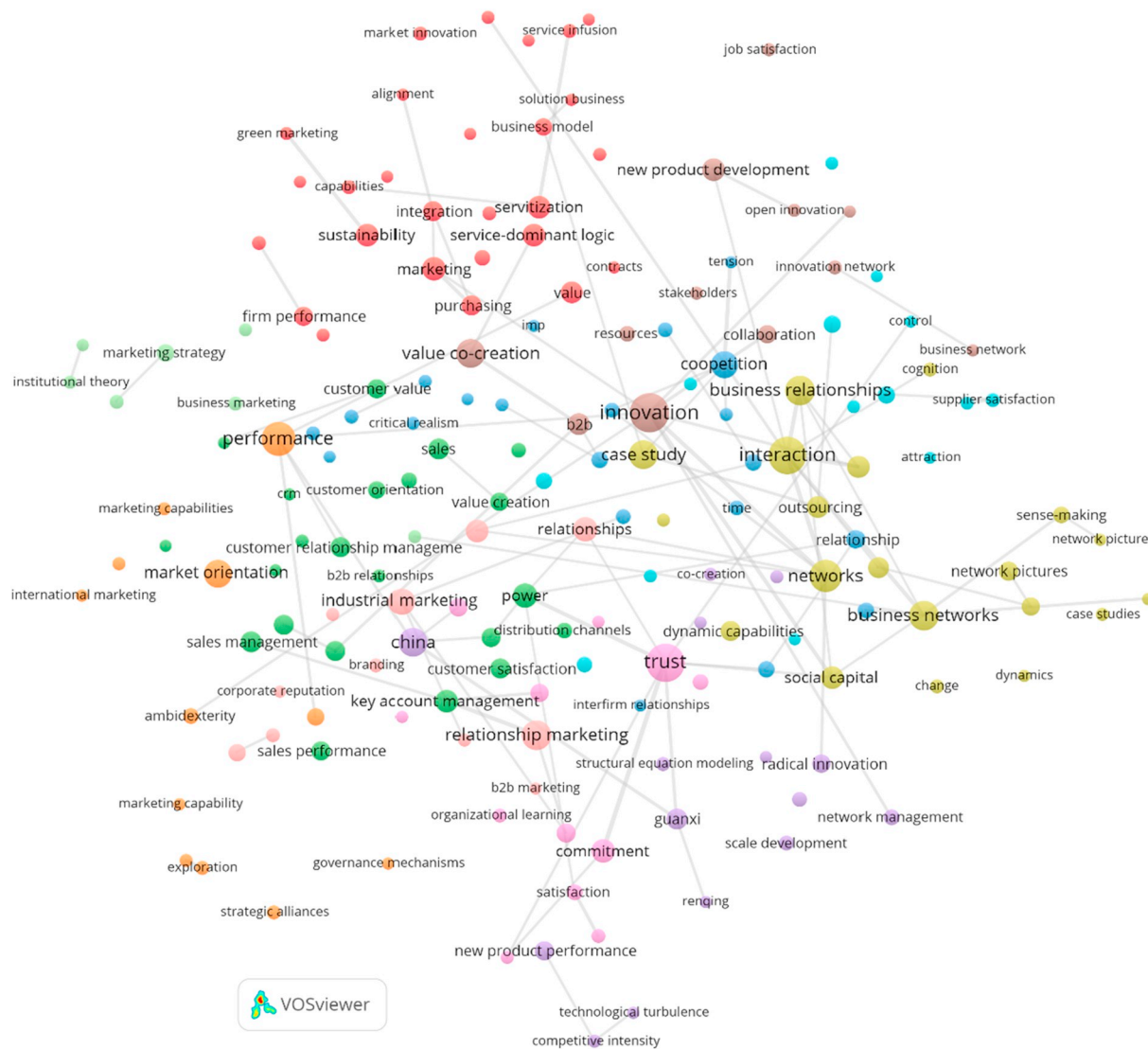


Fig. 11. Co-occurrence of author keywords in IMM: 2008–2017 (minimum occurrence threshold of 5 and 100 links).

operations management and other management areas. As expected, IMM is mostly influenced by the Journal of Marketing, although it also frequently cites the Journal of Marketing Research, Strategic Management Journal, the Journal of Business Research, the Journal of the Academy of Marketing Science and the Academy of Management Journal and Review. The keyword analysis proves that the journal aligns with topics connected to business-to-business marketing and relationship marketing.

It is worth asking, which will be the most relevant research streams in IMM in the future? Which papers, authors and institutions will be the most influential in these topics? Given the increasing complexity of business-to-business marketing management research, addressing increasingly diverse topics and fields, which areas of knowledge will the journal have a closer relationship with in terms of future research?

Research in industrial marketing is characterized by its proximity to the business world, so that advances in applied marketing tend to respond relatively rapidly to trends and topics of interest in research. In this sense, it seems that the future opens up new fronts in research in this field to address new challenges. Undoubtedly, one of the subjects of interest will continue to be the future role of new technologies in industrial marketing research. In recent years, different technological tools have appeared that are transforming the way companies relate to each other. It is essential to know how business-to-business will be

affected by online marketing, content marketing, the use of digital communication tools, the incorporation of marketing apps as part of the business strategy, and the efficient use of big data, since the correct measurement and analysis of data is increasingly necessary for business success.

Relationship Marketing will continue to be relevant in the future of industrial marketing, as companies have understood that organizations behave, in this sense, in a similar way to the final consumer. Companies are increasingly aware that customer experience can be a determining factor in achieving greater differentiation with respect to competitors, while the creation of added value can generate higher revenues and stronger customer loyalty. Therefore, it will be important to identify the best strategies to achieve these objectives.

Another key aspect for companies in industrial markets, working transversally with other areas of marketing, will be to develop and improve their image. For a long time, society in general, and customers in particular, have valued not only the economic aspects of the company but also their social and environmental commitment. Thus, management of the relationships with the different participants will also be essential for business success.

In any case, we must concur with Lindgreen and Di Benedetto (2018, p. 6) regarding the enduring influence of IMM on business scholars of diverse disciplines.

Table 10
Most common keyword occurrences in IMM.

R	Global		2008–2017			1998–2007			
	Keyword	Oc	Co	Keyword	Oc	Co	Keyword	Oc	Co
1	Trust	73	63	Innovation	53	46	Relationship Marketing	25	25
2	Innovation	65	56	Trust	50	41	Market Orientation	24	22
3	Performance	56	42	Interaction	47	43	Trust	23	21
4	Relationship Marketing	55	47	Performance	40	27	Sales Management	18	12
5	Interaction	52	48	Networks	35	30	Business-To-Business	16	13
6	Market Orientation	50	38	Business Networks	30	25	Performance	16	15
7	Networks	42	37	Business Relationships	30	24	New Product Development	14	8
8	Business Relationships	40	33	Relationship Marketing	30	21	Supply Chain Management	13	7
9	China	39	34	Case Study	28	21	E-Commerce	12	10
10	Business Networks	38	33	China	28	24	Innovation	12	9
11	Business-To-Business	33	28	Value Co-Creation	28	18	Organizational Learning	12	10
12	Industrial Marketing	33	25	Market Orientation	26	14	Relationships	12	9
13	Sales Management	33	24	Coopetition	25	18	China	11	10
14	Relationships	32	28	Industrial Marketing	23	18	Commitment	11	11
15	Case Study	31	24	Power	20	19	Satisfaction	11	10
16	New Product Development	31	21	Relationships	20	18	Business Relationships	10	9
17	Commitment	30	27	Commitment	19	16	Industrial Marketing	10	6
18	Value Co-Creation	28	19	Marketing	19	17	B2B	9	9
19	Marketing	26	23	Key Account Management	18	16	Internet	9	7
20	B2B	25	24	Service-Dominant Logic	18	15	Marketing Strategy	9	7
21	Coopetition	25	19	Business-To-Business	17	14	Business Networks	8	6
22	Key Account Management	23	19	New Product Development	17	13	Case Studies	8	7
23	Power	22	21	Servitization	17	13	Competitive Advantage	8	5
24	Supply Chain Management	22	15	Social Capital	17	14	Customer Relationship Management	7	6
25	Customer Relationship Management	21	16	Sustainability	17	15	Customer Value	7	7
26	Customer Satisfaction	20	12	B2B	16	15	Marketing	7	6
27	Customer Value	20	18	Network	16	14	Networks	7	7
28	Marketing Strategy	20	14	Outsourcing	16	11	Supply Chain	7	5
29	Satisfaction	20	17	Value	16	14	Business Marketing	6	4
30	Business-To-Business Marketing	19	18	Guanxi	15	12	Conflict	6	5
31	Organizational Learning	19	18	Industrial Networks	15	11	Customer Satisfaction	6	3
32	Purchasing	19	15	Sales	15	12	Flexibility	6	6
33	Value	19	17	Sales Management	15	9	Knowledge Management	6	6
34	Integration	18	14	Business-To-Business Marketing	14	13	Product Development	6	5
35	Knowledge Management	18	16	Customer Relationship Management	14	10	Branding	5	4
36	Network	18	16	Customer Satisfaction	14	8	Business-To-Business Marketing	5	5
37	Outsourcing	18	13	Dynamic Capabilities	14	10	CRM	5	4
38	Service-Dominant Logic	18	15	Integration	14	12	Customer Relationship Management (CRM)	5	4
39	Social Capital	18	15	Purchasing	14	12	Dependence	5	5
40	Buyer-Seller Relationships	17	13	Social Media	14	11	Implementation	5	3

Abbreviations: R = Rank; Oc = Author keyword occurrences; Co = Author keyword co-occurrences links.

7. Research limitations

This work provides a quick overview of the leading trends occurring in the journal. However, it is worth noting several limitations. First, the results represent the current picture up to 31 December 2017; however, these results are dynamic and may change over time. For instance, when we were closing the reviews for this paper, the 2018 edition of this journal's 2-year impact factor (SSCI, JCR) was released, showing an impressive all-time record for IMM, beating top marketing journals such as the Journal of Consumer Research, the Journal of Marketing Research, the Journal of Consumer Psychology and the Journal of Retailing. This impact factor is the result of citations from 2017, the last year considered in our study, and 2018. If IMM continues to maintain such high impact factors in future years, the bibliometric analyses of the next decade will differ significantly from those of the last one.

Second, the bibliometric methodology of the study follows the guidelines of Web of Science Core Collection. Although this approach is robust, it may also have some weaknesses. For example, Web of Science uses a full counting system giving one unit to any co-author of the document. Therefore, documents with more co-authors tend to have more influence on the results. However, we have addressed this weakness by developing a fractional counting in the graphical analysis with the VOS viewer. Different perspectives could still be considered, although from a general point of view, no significant deviations are expected.

Finally, bibliometrics is an approach to identify leading trends in a field, but it also has weaknesses due to the specific characteristics of academic research that sometimes may over-estimate a sub-area and/or underestimate another one. In any case, considering these specific limitations, it is clear that the information provided in this article will be of great utility for any reader of the journal interested in obtaining a quick overview of the leading trends of IMM.

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References

Alonso, S., Cabrerizo, F. J., Herrera-Viedma, E., & Herrera, F. (2009). H-index: A review focused on its variants, computation, and standardization for different scientific fields. *Journal of Informetrics*, 3(4), 273–289.
Backhaus, K., Luggner, K., & Koch, M. (2011). The structure and evolution of business-to-

- business marketing: A citation and co-citation analysis. *Industrial Marketing Management*, 40, 940–951.
- Bakir, A., Vitell, S. J., & Rose, G. M. (2000). Publications in major marketing journals: An analysis of scholars and marketing departments. *Journal of Marketing Education*, 22, 99–107.
- Bar-Ilan, J. (2008). Informetrics at the beginning of the 21 century – A review. *Journal of Informetrics*, 2(1), 1–52.
- Baumgartner, H. (2010). Bibliometric reflections on the history of consumer research. *Journal of Consumer Psychology*, 20(3), 233–238.
- Bengtsson, M., & Kock, S. (2000). “Coopetition” in business networks – To cooperate and compete simultaneously. *Industrial Marketing Management*, 29(5), 411–426.
- Bengtsson, M., & Kock, S. (2014). Coopetition-Quo vadis? Past accomplishments and future challenges. *Industrial Marketing Management*, 43(2), 180–188.
- Beverland, M. B. (2018). Peter Laplace: A case study. *Industrial Marketing Management*, 69, 110–115.
- Blanco-Mesa, F., Merigó, J. M., & Gil-Lafuente, A. M. (2017). Fuzzy decision making: A bibliometric-based review. *Journal of Intelligent Fuzzy Systems*, 32, 2033–2050.
- Bolton, R. N. (2011). To JM on its 75th anniversary. *Journal of Marketing*, 75(4), 129–131.
- Broadus, R. N. (1987). Toward a definition of “Bibliometrics”. *Scientometrics*, 12(5–6), 373–379.
- Calantone, R. J., Cavusgil, S. T., & Zhao, Y. S. (2002). Learning orientation, firm innovation capability, and firm performance. *Industrial Marketing Management*, 31(6), 515–524.
- Cancino, C., Merigó, J. M., Coronado, F., Dessouky, Y., & Dessouky, M. (2017). Forty years of computers & industrial engineering: A bibliometric analysis. *Computers & Industrial Engineering*, 113, 614–629.
- Chabowski, B. R., Mena, J. A., & Gonzalez-Padron, T.L. (2011). The structure of sustainability research in marketing, 1958–2008: A basis for future research opportunities. *Journal of the Academy of Marketing Science*, 39(1), 55–70.
- Chabowski, B. R., Samiee, S., & Hult, G. T. M. (2013). A bibliometric analysis of the global branding literature and a research agenda. *Journal of International Business Studies*, 44(6), 622–634.
- Chan, K. C., Lai, P., & Liano, K. (2012). A threshold citation analysis in marketing research. *European Journal of Marketing*, 46, 134–156.
- Cobo, M. J., Lopez-Herrera, A. G., Herrera-Viedma, E., & Herrera, F. (2011). Science mapping software tools: Review, analysis and cooperative study among tools. *Journal of the American Society for Information Science and Technology*, 62(7), 1382–1402.
- Coombes, P. H., & Nicholson, J. D. (2013). Business models and their relationship with marketing: A systematic literature review. *Industrial Marketing Management*, 42, 656–664.
- Dabirian, A., Diba, H., Tareh, F., & Treen, E. (2016). A 23-year bibliometric study of the Journal of Food Products Marketing. *Journal of Food Products Marketing*, 22(5), 610–622.
- Davies, H., Leung, T. K. P., Luk, S. T. K., & Wong, Y. H. (1995). The benefits of Guanxi – The value of relationships in developing the Chinese market. *Industrial Marketing Management*, 24(3), 207–214.
- Di Benedetto, C. A., & Lindgreen, A. (2018). The emergence of Industrial Marketing Management as the leading academic journal in business-to-business marketing. *Industrial Marketing Management*, 69, 5–12.
- Di Benedetto, C. A., Sarin, S., Belkhouja, M., & Haon, C. (2018). Patterns of knowledge outflow from Industrial Marketing Management to major marketing and specialized journals (1999–2013): A citation analysis. *Industrial Marketing Management*, 69, 13–17.
- Ding, Y., Rousseau, R., & Wolfram, D. (2014). *Measuring scholarly impact: Methods and practice*. Switzerland: Springer.
- Handfield, R. B., & Bechtel, C. (2002). The role of trust and relationship structure in improving supply chain responsiveness. *Industrial Marketing Management*, 31(4), 367–382.
- Hirsch, J. E. (2005). An index to quantify an individual's scientific research output. *Proceedings of the National Academy of Sciences of the United States of America*, 102(46), 16569–16572.
- Hoffman, D. L., & Holbrook, M. B. (1993). The intellectual structure of consumer research: A bibliometric study of author cocitations in the first 15 years of the Journal of Consumer Research. *Journal of Consumer Research*, 19, 505–517.
- Jia, H., Zhou, S., & Allaway, A. W. (2018). Understanding the evolution of consumer psychology research: A bibliometric and network analysis. *Journal of Consumer Behaviour*, 17(5), 491–502.
- Kessler, M. M. (1963). Bibliographic coupling between scientific papers. *American Documentation*, 14(1), 10–25.
- Kouropalatis, Y., Giudici, A., & Acar, O. (2019). Business capabilities for industrial firms: A bibliometric analysis of research diffusion and impact within and beyond Industrial Marketing Management. *Industrial Marketing Management* (In press).
- Kumar, P., Sharma, A., & Salo, J. (2019). A bibliometric analysis of extended key account management literature. *Industrial Marketing Management* (In press).
- LaPlaca, P., & Lindgreen, A. (2016). Letter from the co-editors-in-chief. *Industrial Marketing Management*, 59, 1–4.
- LaPlaca, P. J. (1997). Contributions to marketing theory and practice from industrial marketing management. *Journal of Business Research*, 38, 179–198.
- LaPlaca, P. J., & Katrichis, J. M. (2009). Relative presence of business-to-business research in the marketing literature. *Journal of Business-to-Business Marketing*, 16, 1–22.
- Lichtenthal, J. D., Tzempelikos, N., & Tellefsen, T. (2018). The emergence of Industrial Marketing Management as the leading academic journal in business-to-business marketing. *Industrial Marketing Management*, 69, 40–52.
- Lindgreen, A., & Di Benedetto, C. A. (2018). Citation classics from Industrial Marketing Management: Celebrating forty-seven years of publications on business-to-business marketing management. *Industrial Marketing Management*, 73, 1–6.
- Malhotra, N. K., Wu, L., & Whitelock, J. (2005). An overview of the first 21 years of research in the International Marketing Review, 1983–2003. *International Marketing Review*, 22, 391–398.
- Malhotra, N. K., Wu, L., & Whitelock, J. (2013). An updated overview of research published in International Marketing Review: 1983 to 2011. *International Marketing Review*, 30, 7–20.
- Martinez, M. A., Herrera, M., Lopez-Gijon, J., & Herrera-Viedma, E. (2014). H-classics: Characterizing the concept of citation classics through H-index. *Scientometrics*, 98, 1971–1983.
- Martínez-López, F. J., Merigó, J. M., Valenzuela, L., & Nicolás, C. (2018). Fifty years of the European Journal of Marketing: A bibliometric analysis. *European Journal of Marketing*, 52(1–2), 439–468.
- Merigó, J. M., Gil-Lafuente, A. M., & Yager, R. R. (2015). An overview of fuzzy research with bibliometrics indicators. *Applied Soft Computing*, 27, 420–433.
- Merigó, J. M., Mas-Tur, A., Roig-Tierno, N., & Ribeiro-Soriano, D. (2015). A bibliometric overview of the Journal of Business Research between 1973 and 2014. *Journal of Business Research*, 68(12), 2645–2653.
- Merigó, J. M., & Yang, J. B. (2017). A bibliometric overview of operations research & management science. *Omega – International Journal of Management Science*, 73, 37–48.
- Meyer, R., & Winer, R. S. (2014). Introduction to the JMR 50th anniversary special section. *Journal of Marketing Research*, 51, 83.
- Moller, K., & Halinen, A. (2018). IMP thinking and IMM: Co-creating value for business marketing. *Industrial Marketing Management*, 69, 18–31.
- Moller, K. K., & Halinen, A. (1999). Business relationships and networks: Managerial challenge of network era. *Industrial Marketing Management*, 28(5), 413–427.
- Moussa, S., & Touzani, M. (2010). Ranking marketing journals using the Google Scholar-based hg-index. *Journal of Informetrics*, 4, 107–117.
- Munoz-Leiva, F., Sanchez-Fernandez, J., Liebana-Cabanillas, F. J., & Martinez-Fiestas, M. (2013). Detecting salient themes in financial marketing research from 1961 to 2010. *Service Industries Journal*, 33(9/10), 925–940.
- Pritchard, A. (1969). Statistical bibliography or bibliometrics? *Journal of Documentation*, 25, 348–349.
- Radler, V. M. (2018). 20 years of brand personality: A bibliometric review and research agenda. *Journal of Brand Management*, 25(4), 370–383.
- Saad, G. (2010). Applying the h-index in exploring bibliometric properties of elite marketing scholars. *Scientometrics*, 83, 423–433.
- Samiee, S., & Chabowski, B. R. (2012). Knowledge structure in international marketing: A multi-method bibliometric analysis. *Journal of the Academy of Marketing Science*, 40(2), 364–386.
- Sanzo, M. J., Santos, M. L., Vázquez, R., & Álvarez, L. I. (2003). The effect of market orientation on buyer-seller relationship satisfaction. *Industrial Marketing Management*, 32(4), 327–345.
- Schwert, G. W. (1993). The Journal of Financial Economics: A retrospective evaluation (1974–91). *Journal of Financial Economics*, 33(3), 369–424.
- Shugan, S. M. (2006). Editorial: Fifty years of Marketing Science. *Marketing Science*, 25(6), 551–555.
- Sinkovics, N. (2016). Enhancing the foundations for theorizing through bibliometric mapping. *International Marketing Review*, 33, 327–350.
- Small, H. (1973). Co-citation in the scientific literature: A new measure of the relationship between two documents. *Journal of the American Society for Information Science*, 24, 265–269.
- Sprott, D. E., & Miyazaki, A. D. (2002). Two decades of contributions to marketing and public policy: An analysis of research published in Journal of Public Policy & Marketing. *Journal of Public Policy & Marketing*, 21, 105–125.
- Svensson, G., & Wood, G. (2007). Research designs and scientific identity in marketing journals: Review and evaluation. *European Journal of Marketing*, 41, 419–458.
- Svensson, G., & Wood, G. (2008). Top versus leading journals in marketing: Some challenging thoughts. *European Journal of Marketing*, 42, 287–298.
- Tellis, G. J., Chandy, R. K., & Ackerman, D. S. (1999). In search of diversity: The record of major marketing journals. *Journal of Marketing Research*, 36, 120–131.
- Theoharakis, V., & Hirst, A. (2002). Perceptual differences of marketing journals: A worldwide perspective. *Marketing Letters*, 13, 389–402.
- Theubl, S., Reutterer, T., & Hornik, K. (2014). How to derive consensus among various marketing journal rankings? *Journal of Business Research*, 67, 998–1006.
- Tur-Porcar, A., Mas-Tur, A., Merigó, J. M., Roig-Tierno, N., & Watt, J. (2018). A bibliometric history of the Journal of Psychology between 1936 and 2015. *Journal of Psychology*, 152, 199–225.
- Valenzuela, L., Merigó, J. M., Johnston, W., Nicolás, C., & Jaramillo, F. (2017). Thirty years of the Journal of Business & Industrial Marketing: A bibliometric analysis. *Journal of Business & Industrial Marketing*, 32(1), 1–18.
- Van Eck, N. J., & Waltman, L. (2010). Software survey: VOSviewer, a computer program for bibliometric mapping. *Scientometrics*, 84(2), 523–538.
- Wang, W., Laengle, S., Merigó, J. M., Yu, D., Herrera-Viedma, E., Cobo, M. J., & Bouchon-Meunier, B. (2018). A bibliometric analysis of the first twenty-five years of the International Journal of Uncertainty, Fuzziness and Knowledge-Based Systems. *International Journal of Uncertainty, Fuzziness and Knowledge-Based Systems*, 26, 169–193.
- Windahl, C., & Lakemond, N. (2006). Developing integrated solutions: The importance of relationships within the network. *Industrial Marketing Management*, 35(7), 806–818.
- Zhuang, G. J., Xi, Y. M., & Tsang, A. S. L. (2010). Power, conflict, and cooperation: The impact of guanxi in Chinese marketing channels. *Industrial Marketing Management*, 39(1), 137–149.
- Zinkhan, G. M., & Leigh, T. W. (1999). Assessing the quality ranking of the “Journal of Advertising”, 1986–1997. *Journal of Advertising*, 28, 51–70.
- Zuschke, N. (2019). An analysis of process-tracing research on consumer decision-making. *Journal of Business Research* (In press).