# The impact of social media in business growth and performance: A scientometrics analysis

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| CHRONICLE | ABSTRACT |
|---|---|
| | The purpose of this research is to investigate the status and the evolution of the scientific studies on the applications of social media in the business. The present research is an applied scientific method based on quantitative approach by using library method and scientometrics indicators. With the use of bibliometric library of R software, scientific products in the field of social media applications in business from 2005 to the end of January 2019, the study overviews trends and achievements of this field. The results show that from the beginning of 2005 through January 2019, 2682 articles have been indexed in Web of Science in the field of social media and business; however, since 2009, scientific productions in this topic have grown rapidly and in 2017, there was a substantial increase in the number of studies. The findings also show that the United States with 1269 published articles and the Business Horizons Magazine with the publication of 73 articles, pioneered in the publications of this topic. Analyzing the content of the works produced in the applications of the social media and businesses can help us better understand the growth trend in this area. |
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## 1. Introduction

The concept of Social Media (SM) has been on top of the agenda for many business executives. Decision makers, as well as consultants, try to identify ways in which firms can make profitable use of applications such as Wikipedia, YouTube, Facebook, Twitter, etc. (Kaplan & Haenlein 2010). Traditionally, consumers used the Internet to simply expend content: they read it, they watched it, and they used it to buy products and services. This represents the social media phenomenon, which can now significantly impact a firm's reputation, sales, and even survival. Yet, many executives eschew or ignore this form of media because they do not understand what it is, the various forms it can take, and how to engage with it and hoe to learn (Kietzmann et al., 2011). Today social media platforms such as Twitter and Facebook enable the creation of virtual customer environments (VCEs) where online communities of interest form around specific firms, brands, or products. (Culnan et al., 2010).

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The emergence of Internet-based SM has made it possible for anyone to communicate with literally thousands of people about particular products and the companies that provide them. Thus, the impact of consumer-to-consumer communications has been widely magnified in the marketplace. SM is a hybrid element of the promotion mix because in a traditional sense it helps firms talk to their customers, while in a nontraditional sense it only assists customers to talk directly to one another. It is often outside managers' direct control to monitor the content and the media-based conversations happening between consumers. This is in contrast to the conventional marketing communications paradigm whereby a high degree of control exists. Thus, managers ought to learn to form consumer discussions in a way that is complied with the organization's mission and performance objectives. Methods by which this can be achieved are delineated herein (Mangold & Faulds, 2009). According to Berthon et al. (2012), to help managers learn more about this new dispensation five axioms are needed to follow: (1) SMs always follow a technology, culture, and government of a particular country or context; (2) local events seldom are local; (3) global events most likely to be (re)interpreted locally; (4) creative consumers' actions and creations depend on technology, culture, and government; and (5) technology is historically dependent. Social media explores the cultural landscape of open source branding, and identifies marketing strategies directed at the hunt for consumer engagement on the People's Web. These strategies exhibit a paradox to reach coveted resonance and the brand has to relinquish control (Fournier & Avery, 2011). All this has helped companies make significant changes on their business strategies. Benefits from the implementation of SM sites increase in awareness and inquiries and enhanced relationships with customers. An increase in the number of new customers has enhanced the ability to reach customers on a global scale and co-promotion of local businesses which enhance the image of small businesses in the region (Jones et al., 2015). With the introduction of Web 2.0, consumers have been more interested in expressing and sharing their ideas on web regarding day-to-day activities and global issues as well. Evolution of SM has also attributed to such activities by giving us a transparent platform to share their views around the world. These electronic Word of Mouth (eWOM) statements expressed on the web are much prevalent in business and service industry to help consumers share their point of view (Ravi & Ravi, 2015). Thus, a large amount of user-generated content becomes available on SM sites. To increase competitive advantage and effectively reach the competitive environment of businesses, most firms require to carefully monitor and analyze both the customer-generated content on their own social media sites and the textual information on their competitors' SM sites (He et al., 2013). The objective is to find the necessary information from this complex data and implement it for trend analysis and prediction. Visual analytics method applied by the toolkit can be used in other domains involving SM data, such as sales prediction and advertisement planning (Lu et al., 2014). Customer feedback which appear in social media, however, are basically unstructured, therefore, a large data set is required for meaningful analysis. Although determining consumers' value structures and behaviors is useful for developing different markets, the unstructured and volume-heavy nature of consumer data bans effective and economical extraction of such information (Jang et al., 2013). The social networking application is not merely associated with customer relationships then relying on the industry, the objectives, etc., and managers have to choose their own techniques. Finally, some have attempted to standardize the implementation of SM networks for businesses by building some necessary tools (Colomo-Palacios et al., 2014).

## 2. About Bibliometrix R package

Bibliometrics is the application of quantitative analysis and statistics to publications such as journal articles and their accompanying citation counts. Quantitative evaluation of publication and citation data is now used in almost all science fields to evaluate growth, maturity, leading authors, conceptual and intellectual maps and the trend of a scientific community. Bibliometrics is also used in research performance evaluation (Aria & Cuccurullo, 2017).

## 3. Annual scientific production

With the fast development of social networks, scientific articles on this topic have also grown dramatically. Here we will review 2682 scientific articles to examine the dimensions of this topic.
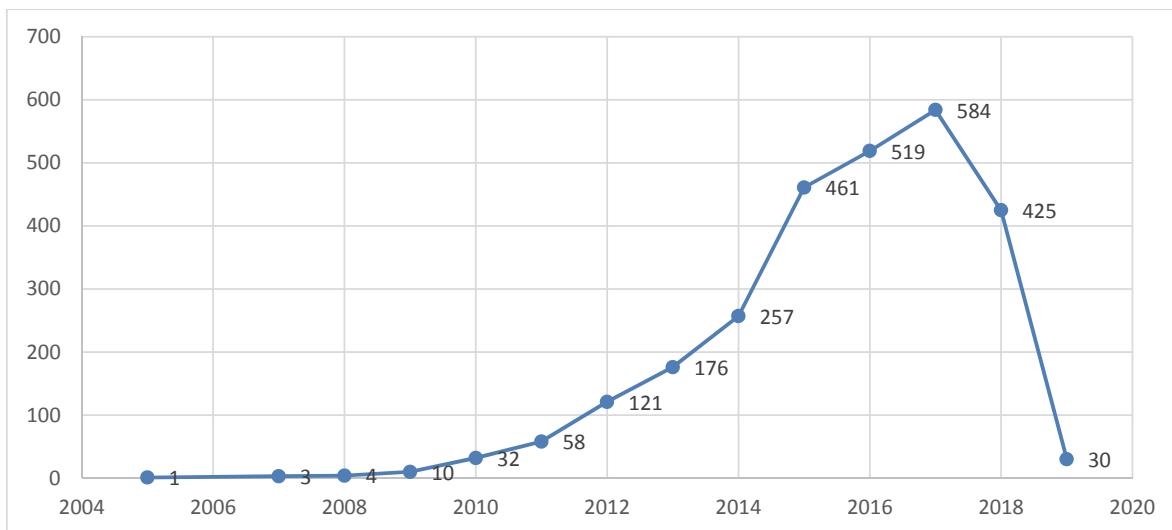
**Fig. 1.** The Web of Science publications on the analysis of social media and business from 2005 to 2019

Fig. 1 shows the growth trend of scientific content in the field of social media and business. It shows that in 2014 we witnessed a mutation.

## 4. Source Dynamics

Fig. 2 shows that the Business Horizons Magazine has a significant contribution to the publication of this topic and, compared to other journals, is highly specialized in the subject of business.
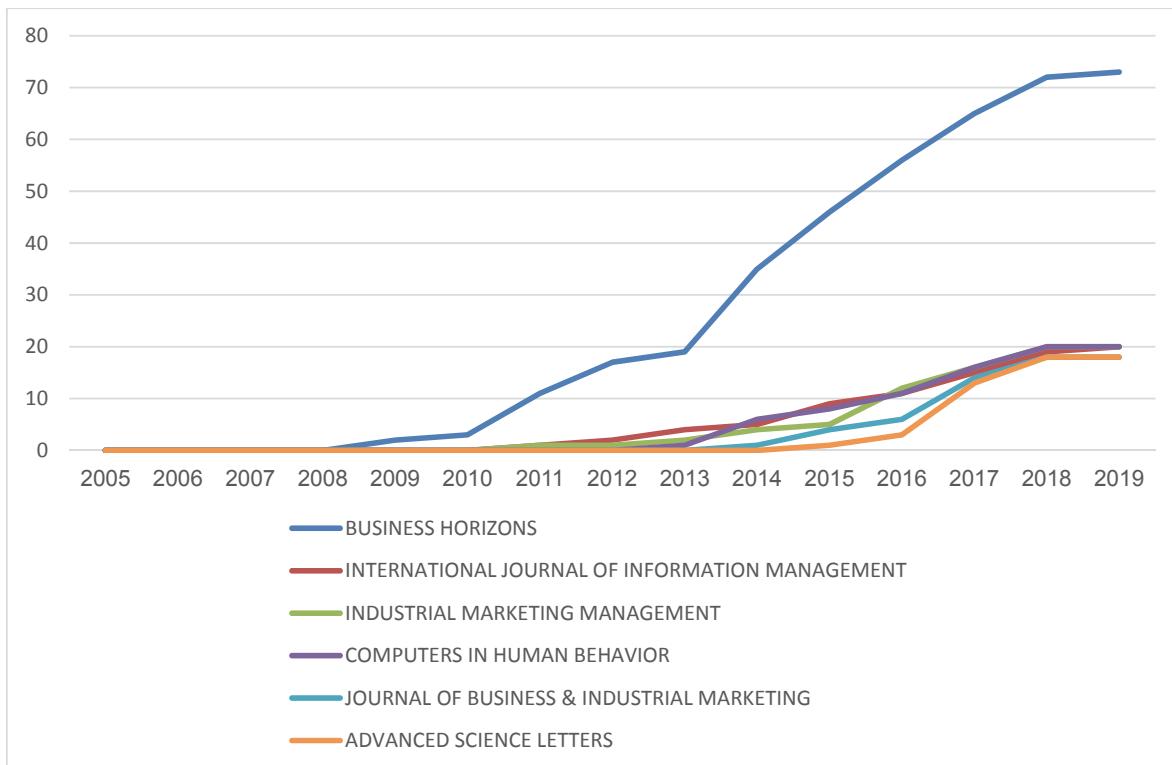


**Fig. 2.** Trend of content related to the subject at different scientific journals

## 5. Country Scientific Production

One of the other important areas of research is the study of the scientific production of different countries. Studies show that researchers from the United States (1269 articles), UK (364 article), China (309 articles) and the Australia (265) have played a major role in scientific production of social media and business.

Table 1
Country scientific production in studies with social media in business

| region | Freq | region | Freq |
|---|---|---|---|
| USA | 1269 | GREECE | 47 |
| UK | 364 | BRAZIL | 45 |
| CHINA | 309 | THAILAND | 42 |
| AUSTRALIA | 265 | DENMARK | 39 |
| INDIA | 254 | NORWAY | 39 |
| SPAIN | 179 | POLAND | 38 |
| GERMANY | 139 | SOUTH AFRICA | 37 |
| CANADA | 132 | CZECH REPUBLIC | 34 |
| MALAYSIA | 125 | SWITZERLAND | 34 |
| ITALY | 120 | SAUDI ARABIA | 33 |
| PORTUGAL | 98 | PAKISTAN | 32 |
| TAIWAN | 98 | SINGAPORE | 31 |
| ROMANIA | 96 | JAPAN | 27 |
| FINLAND | 95 | RUSSIA | 26 |
| SOUTH KOREA | 95 | AUSTRIA | 25 |
| INDONESIA | 93 | SLOVAKIA | 25 |
| FRANCE | 82 | BELGIUM | 24 |
| TURKEY | 75 | IRELAND | 24 |
| NETHERLANDS | 59 | IRAN | 23 |
| SWEDEN | 59 | NEW ZEALAND | 22 |
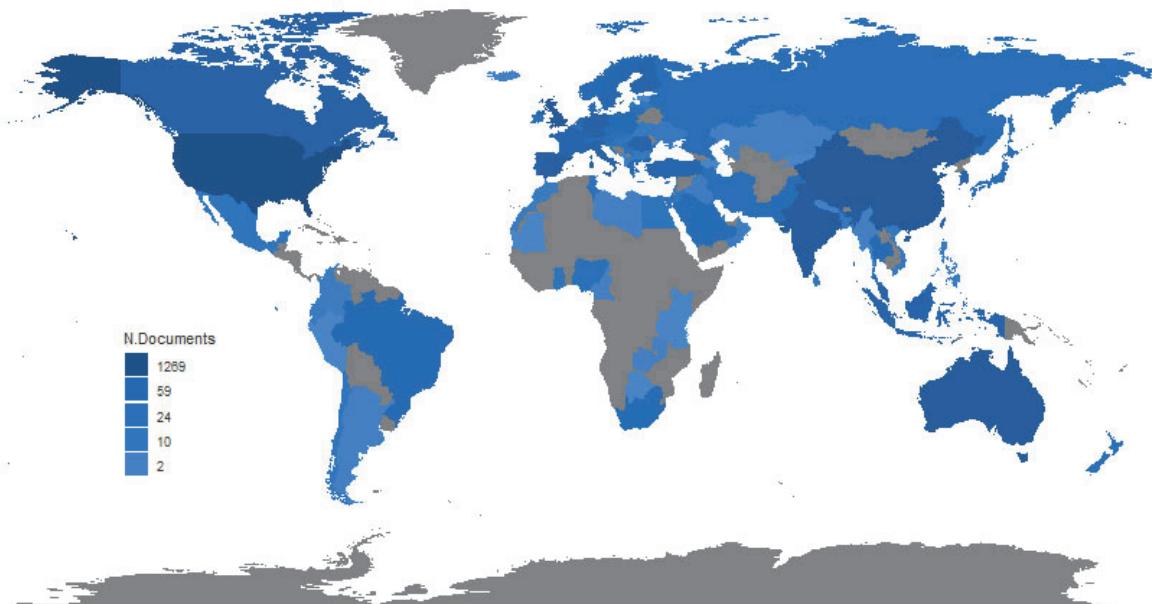


**Fig. 3.** Country scientific production on map

## 6. Corresponding Author's Country

Corresponding Author's Country shows how the authors have been collaborating in one country, or different countries in subject.

SCP: Single Country Publication

MCP: Multi Country Publication

Fig. 4 illustrates the collaboration of the authors from different countries on this topic.
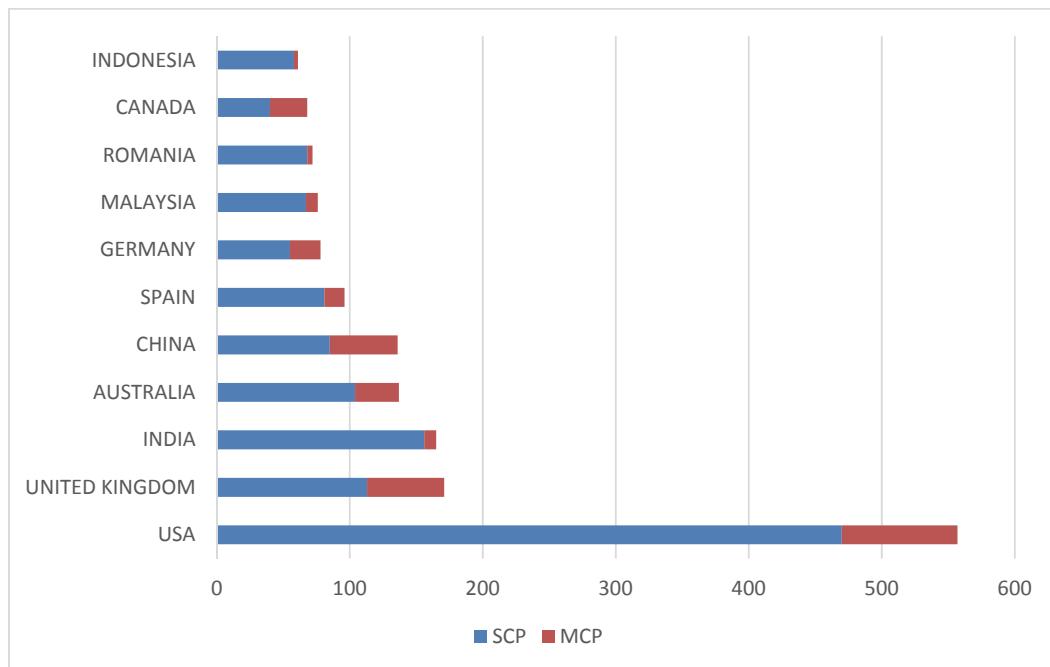


**Fig. 4.** Corresponding Author's Country

## 7. Most Cited Countries

The study of the countries influencing the production of science shows that the United States is the leader in this field, followed by France, Canada and the United Kingdom. The results show that leading countries cover more than 70% of the total number of references.
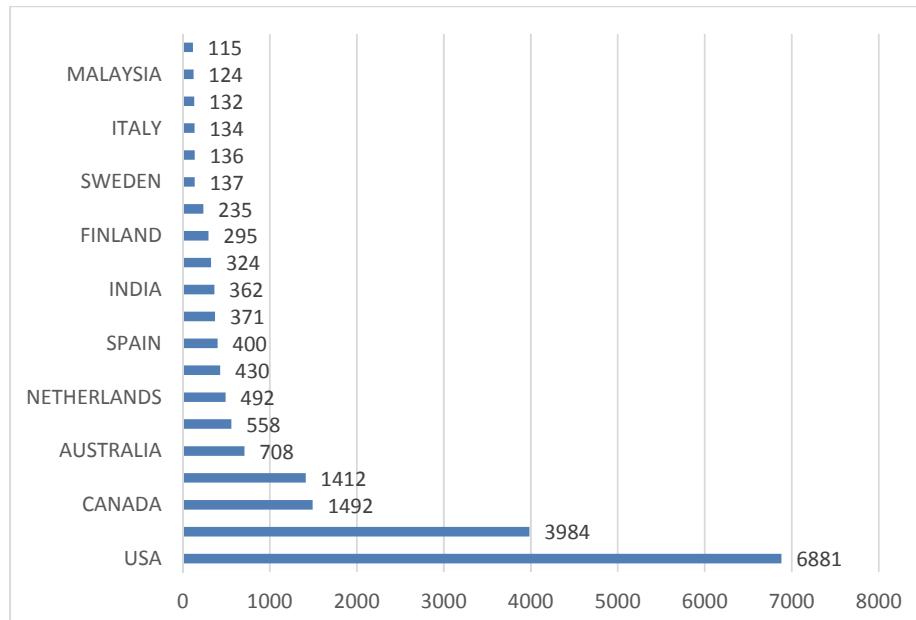


**Fig. 5.** Most Cited Countries

## 8. The most common keywords and Temporal Analysis

Table 2 demonstrates some of the most popular keywords used in studies associated with Social media and business. As we can observe from the results of Table 2, "social media", "impact" and "word-of-mouth" are three keywords known in the literature. Fig. 6 shows the most important words used over times.

**Table 2**
The most popular keywords used in studies with social media in business.

| Words | Occurrences | Words | Occurrences |
| --- | --- | --- | --- |
| social media | 261 | antecedents | 27 |
| impact | 171 | business intelligence | 26 |
| word-of-mouth | 156 | competitive advantage | 26 |
| performance | 140 | customer satisfaction | 26 |
| model | 123 | strategies | 26 |
| management | 122 | acceptance | 24 |
| information | 112 | challenges | 24 |
| internet | 107 | firm | 24 |
| perspective | 104 | hospitality | 24 |
| networks | 93 | smes | 24 |
| innovation | 92 | user acceptance | 24 |
| behavior | 90 | power | 23 |
| business | 87 | user-generated content | 22 |
| information-technology | 87 | brand community | 21 |
| media | 84 | consumer | 21 |
| framework | 79 | design | 21 |
| Facebook | 76 | e-commerce | 21 |
| communication | 75 | firms | 21 |
| technology | 75 | technologies | 21 |
| trust | 72 | work | 21 |
| adoption | 67 | capabilities | 20 |
| twitter | 64 | co-creation | 20 |
| online | 59 | classification | 19 |
| systems | 53 | commitment | 19 |
| communities | 52 | future | 19 |
| web | 51 | knowledge management | 19 |
| knowledge | 49 | models | 19 |
| organizations | 49 | community | 18 |
| engagement | 46 | context | 18 |
| quality | 45 | dynamic capabilities | 18 |
| satisfaction | 43 | e-business | 18 |
| consumers | 39 | environments | 18 |
| sales | 38 | governance | 18 |
| big data | 35 | intelligence | 18 |
| determinants | 35 | intention | 18 |
| industry | 34 | networking sites | 18 |
| strategy | 34 | relationship quality | 18 |
| loyalty | 33 | service quality | 18 |
| participation | 33 | services | 18 |
| sites | 32 | support | 18 |
| brand | 31 | companies | 17 |
| information-systems | 31 | consumption | 17 |
| online communities | 31 | education | 17 |
| reviews | 30 | experience | 17 |
| usage | 30 | orientation | 17 |
| firm performance | 29 | customer relationship management | 16 |
| web 2.0 | 29 | higher-education | 16 |
| analytics | 28 | identification | 16 |
| sentiment analysis | 28 | identity | 16 |
| tourism | 28 | network | 16 |

As shown in Fig. 6, "social media", "business", "data", "marketing", "management", "analysis", "communication", "content" and "customer" are the research hotspots with a high frequency of the keywords used in different project.



**Fig. 6.** The frequency of the keywords used in different paper

## 9. Conceptual structure, Co-occurrence network
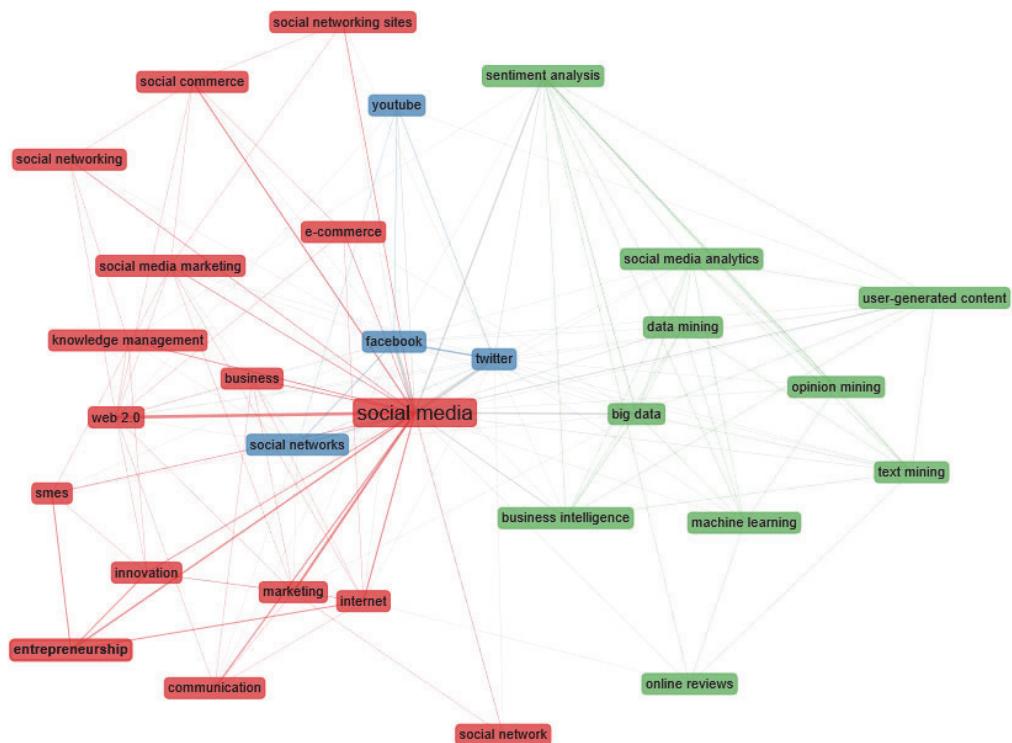


**Fig. 7.** Co-occurrence network (2005-2019)

A keywords co-occurrence network (KCN) focuses on understanding the knowledge components and knowledge structure of a scientific/technical field by examining the links between the keywords in the literature. Fig. 7 focuses on the analysis methods based on KCNs, which have been used in theoretical and empirical studies to explore research topics and their relationships in selecting scientific fields. If keywords are grouped into the same cluster, they are more likely to reflect identical topics. Each cluster has different number of subject keyword. As can be seen from the Fig.7, the social networking platform, data and its use, and social media applications are the main clusters of this research.

## 10. Conceptual structure map, Correspondence analysis
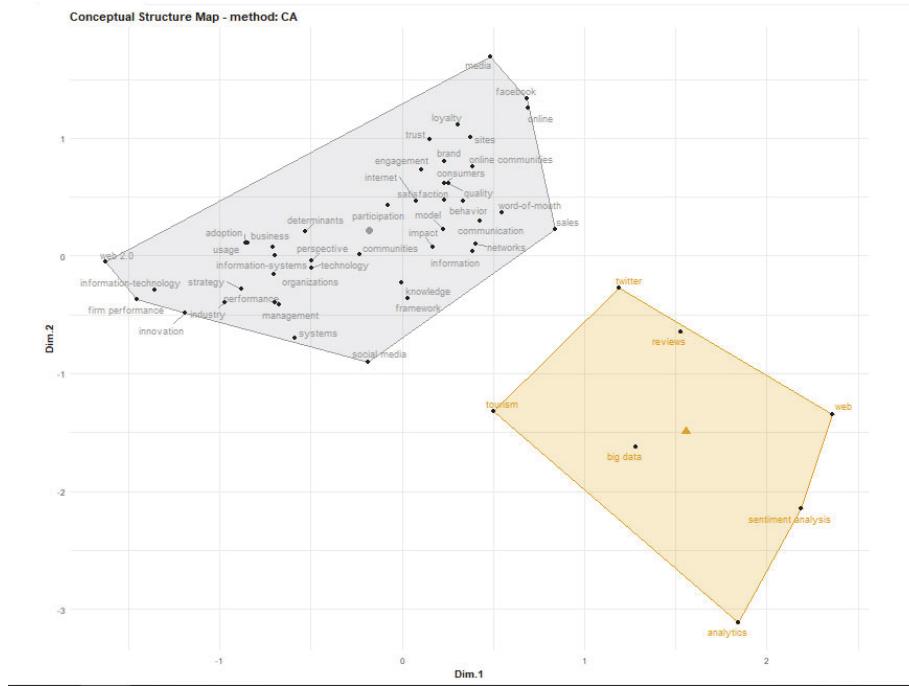


**Fig. 8.** Co-occurrence network (2005-2019)

Co-word analysis aims at representing the conceptual structure of a framework using co-occurrence of words. The words can be replaced by authors' keywords, keywords plus, and terms extracted from titles or abstracts. The conceptual structure function produces three kinds of mapping as listed: conceptual structure map, factorial map of the documents with the highest contributes and factorial map of the most cited documents. Conceptual structure map is presented in Fig. 8. Left Cluster has the most keywords, which means the attention of the researchers to the subject matter of the study.

## 11. Thematic map

Co-word analysis draws clusters of the keywords and they are considered as themes. In the strategic diagram presented in Fig. 9, the vertical axis measures the density – i.e., the strength of the internal links within a cluster represented by a theme –, and the horizontal vertical axis the centrality – i.e. the strength of the links between the theme and other themes in the map. Thematic map is a very intuitive plot and we can analyze themes according to the quadrant in which they are placed:

(Q1) upper-right quadrant: motor-themes

(Q2) lower-right quadrant:  basic themes

(Q3) lower-left quadrant: emerging or disappearing themes;

(Q4) upper-left quadrant: very specialized/ niche themes.
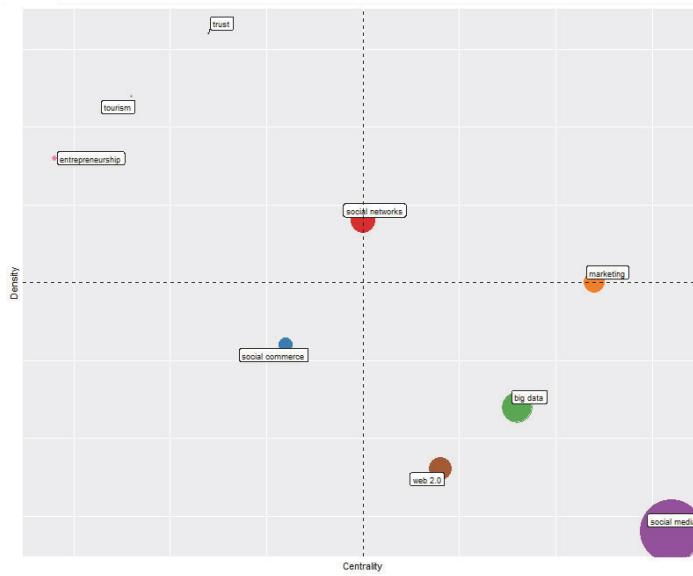
**Fig.9.** Thematic Map

Hence, the themes with the highest internal coherence and closest relationship to other themes appear in the second quadrant (the lower right part of the graph). In the third and fourth, the following topics can be found: social commerce, social networking, entrepreneurship and tourism. Themes in this quadrant are important for a research field but are not developed. This quadrant group's transversal and general, basic themes.

## 12. Social structure, Contributions of countries

As shown in Fig. 10, the United States is the leader in science production in this topic.



**Fig. 10.** Country collaboration

**Table 3**
Country collaboration in studies about social media in business

| From | To | Frequency |
| --- | --- | --- |
| USA | CHINA | 47 |
| CANADA | USA | 22 |
| USA | UNITED KINGDOM | 18 |
| UNITED KINGDOM | ITALY | 15 |
| USA | AUSTRALIA | 15 |
| AUSTRALIA | CHINA | 14 |
| FRANCE | USA | 14 |
| FRANCE | UNITED KINGDOM | 12 |
| UNITED KINGDOM | CHINA | 12 |
| USA | GERMANY | 12 |
| USA | TAIWAN | 12 |
| USA | FINLAND | 11 |
| AUSTRALIA | UNITED KINGDOM | 10 |
| USA | NETHERLANDS | 10 |
| USA | ITALY | 8 |
| USA | KOREA | 8 |
| CANADA | AUSTRALIA | 7 |
| CANADA | CHINA | 7 |
| CANADA | UNITED KINGDOM | 7 |
| NETHERLANDS | UNITED KINGDOM | 7 |
| UNITED KINGDOM | GERMANY | 7 |
| USA | INDIA | 7 |
| AUSTRALIA | GERMANY | 6 |
| DENMARK | NORWAY | 6 |
| FRANCE | AUSTRALIA | 6 |
| CHINA | KOREA | 5 |
| FRANCE | GERMANY | 5 |
| ITALY | SPAIN | 5 |
| SPAIN | PORTUGAL | 5 |
| UNITED KINGDOM | SPAIN | 5 |
| USA | BELGIUM | 5 |
| USA | NORWAY | 5 |
| USA | SINGAPORE | 5 |
| USA | SPAIN | 5 |
| USA | SWITZERLAND | 5 |
| AUSTRALIA | DENMARK | 4 |
| AUSTRALIA | NEW ZEALAND | 4 |
| AUSTRALIA | SINGAPORE | 4 |

## 13. Highly cited papers

Although articles' citation is considered as an indicator of the impact of papers, the impact of the article cannot be evaluated solely by considering the first influential articles. More people have not yet seen newer articles that are truly influential and, therefore, they have not shown their influence. Table 4 shows the summary of the most cited articles. As we can observe from the results of Table 3, the study by Kaplan and Haenlein (2010) has received the highest citations. This paper analyzed the challenges and opportunities of Social Media. They provided a classification of Social Media, which group applications currently subsumed under the generalized term into more specific categories by different characteristics such as collaborative projects, blogs, content communities, social networking sites, virtual game worlds, and virtual social worlds. Finally, they presented 10 pieces of advice for companies, which decide to utilize Social Media. The second highly cited work belongs to Kietzmann et al. (2011), which explains that the SM now significantly influences on a firm's reputation, sales, and even survival. Yet, many business partners disregard this form of media since they have not realized the value of this market, the different forms it can take, and how to engage with it and learn. They provided a framework which

defines SM by using seven functional building blocks including identity, conversations, sharing, presence, relationships, reputation, and groups. They also suggested on how firms should develop different strategies for monitoring, understanding, and responding to various social media activities. The third highly cited work is associated with Mangold and Faulds (2009) where the focus was on communication in social networks. In addition, they emphasized that social networks for companies have two parts, the first is the activities that are accomplished by the company, and the second is the ones that users share about the firms. Therefore, managers have to learn to direct consumer interests to the mission and objectives of the organizations. Then they introduced methods for this purpose.

**Table 4**
The summary of the most cited articles

| Paper | Total Citations | TC per Year |
|---|---|---|
| KAPLAN AM, 2010, BUS HORIZONS | 3332 | 370.2 |
| KIETZMANN JH, 2011, BUS HORIZONS | 977 | 122.1 |
| MANGOLD WG, 2009, BUS HORIZONS | 804 | 80.4 |
| HANNA R, 2011, BUS HORIZONS | 379 | 47.4 |
| SASHI CM, 2012, MANAGE DECIS | 235 | 33.6 |
| BERTHON PR, 2012, BUS HORIZONS | 228 | 32.6 |
| VERHOEF PC, 2015, J RETAILING | 214 | 53.5 |
| CULNAN MJ, 2010, MIS Q EXEC | 211 | 23.4 |
| FOURNIER S, 2011, BUS HORIZONS | 204 | 25.5 |
| HE W, 2013, INT J INFORM MANAGE | 199 | 33.2 |
| MICHAELIDOU N, 2011, IND MARKET MANAG | 192 | 24.0 |
| ARAL S, 2013, INFORM SYST RES | 181 | 30.2 |
| MUNAR AM, 2014, TOURISM MANAGE | 171 | 34.2 |
| RAVI K, 2015, KNOWL-BASED SYST | 165 | 41.3 |
| LIANG TP, 2011, INT J ELECTRON COMM | 164 | 20.5 |
| KIM W, 2010, INFORM SYST | 155 | 17.2 |
| KAVANAUGH AL, 2012, GOV INFORM Q | 146 | 20.9 |
| MALTHOUSE EC, 2013, J INTERACT MARK | 143 | 23.8 |
| LUO XM, 2013, INFORM SYST RES | 129 | 21.5 |
| WEINBERG BD, 2011, BUS HORIZONS | 126 | 15.8 |
| LI LN, 2013, CARTOGR GEOGR INF SC | 119 | 19.8 |
| TRAINOR KJ, 2014, J BUS RES | 116 | 23.2 |
| DU SL, 2012, J BUS ETHICS | 115 | 16.4 |
| KAPLAN AM, 2011, BUS HORIZONS | 115 | 14.4 |
| SOTIRIADIS MD, 2013, ELECTRON COMMER RES | 113 | 18.8 |
| RISHIKA R, 2013, INFORM SYST RES | 108 | 18.0 |
| KAPLAN AM, 2012, BUS HORIZONS | 106 | 15.1 |
| KAPLAN AM, 2011, BUS HORIZONS-a | 103 | 12.9 |
| DAVENPORT TH, 2012, MIT SLOAN MANAGE REV | 98 | 14.0 |
| RAPP A, 2013, J ACAD MARKET SCI | 96 | 16.0 |
| XIANG Z, 2015, J RETAIL CONSUM SERV | 94 | 23.5 |
| YU Y, 2013, DECIS SUPPORT SYST | 93 | 15.5 |
| KWOK L, 2013, CORNELL HOSP Q | 92 | 15.3 |
| SCOTT SV, 2012, ACCOUNT ORG SOC | 91 | 13.0 |
| KAPLAN AM, 2009, BUS HORIZONS | 89 | 8.9 |
| XIE KL, 2014, INT J HOSP MANAG | 87 | 17.4 |
| ZHOU LN, 2013, ELECTRON COMMER R A | 87 | 14.5 |
| LARISCY RW, 2009, PUBLIC RELAT REV | 87 | 8.7 |
| PANTELIDIS IS, 2010, CORNELL HOSP Q | 84 | 9.3 |
| SAXTON GD, 2013, INFORM SYST MANAGE | 83 | 13.8 |
| FERRARA E, 2014, KNOWL-BASED SYST | 81 | 16.2 |
| CHAE B, 2015, INT J PROD ECON | 77 | 19.3 |
| LIN KY, 2011, CYBERPSYCH BEH SOC N | 77 | 9.6 |
| CHENG MM, 2016, INT J HOSP MANAG | 76 | 25.3 |
| HAJLI MN, 2014, TECHNOL FORECAST SOC | 75 | 15.0 |
| PIOTROWICZ W, 2014, INT J ELECTRON COMM | 73 | 14.6 |
| ABRAHAMS AS, 2012, DECIS SUPPORT SYST | 72 | 10.3 |
| POYRY E, 2013, ELECTRON COMMER R A | 71 | 11.8 |
| SERAJ M, 2012, J INTERACT MARK | 70 | 10.0 |

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|---|---|---|
| PARENT M, 2011, BUS HORIZONS | 70 | 8.8 |
| CHUA AYK, 2013, J KNOWL MANAG | 67 | 11.2 |
| LIU C, 2014, IEEE T PARALL DISTR | 65 | 13.0 |
| OESTREICHER-SINGER G, 2013, MIS QUART | 64 | 10.7 |
| YANG CW, 2017, INT J DIGIT EARTH | 63 | 31.5 |
| HAJLI MN, 2014, INT J MARKET RES | 60 | 12.0 |
| MCCARTHY J, 2014, INTERNET RES | 59 | 11.8 |
| SHEN J, 2012, J ELECTRON COMMER RE | 56 | 8.0 |
| MARINE-ROIG E, 2015, J DESTIN MARK MANAGE | 54 | 13.5 |
| MURALIDHARAN S, 2011, PUBLIC RELAT REV | 53 | 6.6 |
| KUMAR V, 2015, J MARKETING | 52 | 13.0 |
| MELIAN-GONZALEZ S, 2013, CORNELL HOSP Q | 52 | 8.7 |
| BLAZEVIC V, 2013, J SERV MANAGE | 52 | 8.7 |
| BRAVO-MARQUEZ F, 2014, KNOWL-BASED SYST | 50 | 10.0 |
| LIU SY, 2014, SIGMOD'14: PROCEEDINGS OF THE 2014 ACM SIGMOD IN- | 49 | 9.8 |
| BECHMANN A, 2013, NEW MEDIA SOC | 49 | 8.2 |
| NGAI EWT, 2015, IND MANAGE DATA SYST | 48 | 12.0 |
| BATRINCA B, 2015, AI SOC | 47 | 11.8 |
| WU YC, 2014, IEEE T VIS COMPUT GR | 47 | 9.4 |
| PENTINA I, 2013, COMPUT HUM BEHAV | 47 | 7.8 |
| SPARKS BA, 2016, TOURISM MANAGE | 46 | 15.3 |
| BEREZINA K, 2016, J HOSP MARKET MANAG | 46 | 15.3 |
| JUSSILA JJ, 2014, COMPUT HUM BEHAV | 46 | 9.2 |
| VERHOEF PC, 2013, EUR MANAG J | 46 | 7.7 |
| PALACIOS-MARQUES D, 2015, MANAGE DECIS | 45 | 11.3 |
| GRIFFIS HM, 2014, J MED INTERNET RES | 45 | 9.0 |
| HU YJ, 2015, COMPUT ENVIRON URBAN | 44 | 11.0 |
| KLAUS P, 2013, J SERV MARK | 44 | 7.3 |
| MUNAR AM, 2012, SCAND J HOSP TOUR | 44 | 6.3 |
| ZHANG MM, 2011, ELECTRON MARK | 44 | 5.5 |
| TURCOTTE J, 2015, J COMPUT-MEDIAT COMM | 43 | 10.8 |
| HE W, 2015, INFORM MANAGE-AMSTER | 42 | 10.5 |
| SWANI K, 2014, IND MARKET MANAG | 41 | 8.2 |
| PANIAGUA J, 2014, BUS HORIZONS | 40 | 8.0 |
| OESTREICHER-SINGER G, 2012, MIS QUART | 40 | 5.7 |
| CAIN J, 2011, AM J PHARM EDUC | 40 | 5.0 |
| BRAOJOS-GOMEZ J, 2015, INT J INFORM MANAGE | 39 | 9.8 |
| NGO-YE TL, 2014, DECIS SUPPORT SYST | 39 | 7.8 |
| VERMA R, 2012, CORNELL HOSP Q | 39 | 5.6 |
| GOSSLING S, 2017, J SUSTAIN TOUR | 38 | 19.0 |
| HAJLI N, 2015, TECHNOL FORECAST SOC | 38 | 9.5 |
| EVANS C, 2014, BRIT J EDUC TECHNOL | 38 | 7.6 |
| WHEELER CK, 2011, AESTHET SURG J | 38 | 4.8 |
| WEINBERG BD, 2013, J INTERACT MARK | 37 | 6.2 |
| MILLER AR, 2013, INFORM SYST RES | 37 | 6.2 |
| JANSSEN M, 2014, SOC SCI COMPUT REV | 36 | 7.2 |
| WAMBA SF, 2014, J ORGAN END USER COM | 36 | 7.2 |
| GAL-TZUR A, 2014, TRANSPORT POLICY | 36 | 7.2 |
| KOO C, 2011, INT J INFORM MANAGE | 36 | 4.5 |
| KAPLAN AM, 2016, BUS HORIZONS | 35 | 11.7 |
| GAMBOA AM, 2014, BUS HORIZONS | 35 | 7.0 |
| TIAGO MTPMB, 2014, BUS HORIZONS | 34 | 6.8 |
| COLLINS C, 2013, J PUBLIC TRANSPORT | 34 | 5.7 |
| WANG H, 2016, INFORM SCIENCES | 33 | 11.0 |
| KAUN A, 2014, NEW MEDIA SOC | 33 | 6.6 |
| CURTY RG, 2013, ELECTRON COMMER R A | 33 | 5.5 |
| POWERS T, 2012, J ADVERTISING RES | 33 | 4.7 |
| FELIX R, 2017, J BUS RES | 32 | 16.0 |
| BHARATI P, 2015, J KNOWL MANAG | 32 | 8.0 |
| ZHAO XY, 2015, INT J CONTEMP HOSP M | 32 | 8.0 |
| SUN GD, 2014, IEEE T VIS COMPUT GR | 32 | 6.4 |
| WHELAN G, 2013, J BUS ETHICS | 32 | 5.3 |
| ROBLEK V, 2013, KYBERNETES | 32 | 5.3 |

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|---|---|---|
| HARRIS J, 2012, MIS Q EXEC | 32 | 4.6 |
| GREGOIRE Y, 2015, BUS HORIZONS | 31 | 7.8 |
| POELL T, 2014, INFORM COMMUN SOC | 30 | 6.0 |
| SIGALA M, 2014, CORNELL HOSP Q | 30 | 6.0 |
| WEI YJ, 2011, J ELECTRON COMMER RE | 30 | 3.8 |
| PADILLA-MELENDEZ A, 2013, INT J INFORM MANAGE | 29 | 4.8 |
| MANGOLD WG, 2012, BUS HORIZONS | 29 | 4.1 |
| HEWETT K, 2016, J MARKETING | 28 | 9.3 |
| SCHOLZ J, 2016, BUS HORIZONS | 28 | 9.3 |
| WANG LZ, 2015, IEEE CLOUD COMPUT | 28 | 7.0 |
| ALADWANI AM, 2014, COMPUT HUM BEHAV | 28 | 5.6 |
| YOON S, 2013, BMC PUBLIC HEALTH | 28 | 4.7 |
| OH I, 2012, KOREA OBS | 28 | 4.0 |
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## 14. Conclusion

This study has been in the field of analyzing and illustrating the scientific products of the world for 14 Years in the fields of social media and business. The increasing growth of studies began in 2014. However, in 2018, its steep growth stalled. We are likely to consider this because of the review of subcategories and the exclusion of the word business from the keywords. A large variety of keywords, and of course low density, points to the broadness of the subject. Therefore, it should be dealt with in more depth. This issue can be further explored from two dimensions: Social networking platform and companies by industry. Country collaboration map shows that the United States and China are pioneer in this topic.

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