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Content Marketing Scientific Articles in the WOS: A Bibliometric Analysis

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Abstract

Purpose: Despite the widespread diffusion and interest aroused by content marketing, little attention has been paid until this moment to building a framework that presents the main currents and studies of the field. Hence, the main aim of this study was to cover this gap by analyzing bibliographic information as complementary sources and enable a wider understanding and grasp of the content marketing field.

Method: For this purpose, a bibliometric study of the publications indexed in Web of Science (WoS) between 1985-2022 was conducted. The search process used in this review was informed by PRISMA guidelines. During the search process, a set of 371 documents (research and review articles) were obtained. Also, the bibliometrix R-package and VOSviewer software were used for quantitative analysis and visualizing bibliometric networks.

Findings: The descriptive statistics showed that content marketing studies have rapidly grown since 2011. The US and Spain are the countries with the most publications of the field. The most prominent journal concerning content marketing research is Brand Journalism (with 11 articles), and the most prolific author is Bull A (with 11 articles).

The results of the thematic analysis showed that 'digital marketing' and 'brand storytelling' are emerging themes and have replaced 'content marketing'. The co-word analysis of author's keywords defines 8 clusters: 1) platforms and techniques 2) content marketing concepts, 3) influencer marketing and

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advertising, 4) digital and social media marketing, 5) brand management and brand storytelling, 6) brand journalism, 7) private and native media, and 8) corporate and public communication.

Conclusion: Simultaneously with the development of content creation platforms, these platforms have been welcomed in the field of content marketing. Content preparation has undergone changes in recent years. The style of information content based on news and specialized knowledge has shifted its focus to storytelling and narrative messages from the brand. This paper introduces the main areas of interest and possible gaps. It also contributes to the body of knowledge by providing a comprehensive overview of content marketing literature.

Keywords: Content Marketing, Brand Storytelling, Web of Science, Bibliometric Analysis.



Introduction

In recent decades, 'content' has been used as a marketing strategy due to the widespread use of digital communications and social networks. (Rancati & Gordini, 2014; Yaghtin et al., 2021). The increasing utilization of information technology and the internet has changed marketing strategies and led potential buyers to interact with their companies. Most customers are tuned in and connected to the digital world all day. They can access the internet using their computers, laptops, and mobile phones (Kee & Yazdanifard, 2015). This has engendered a new paradigm called 'content marketing'. This paradigm has become one of the most prominent marketing tools and powerful marketing tactics with substantial benefits and influences in different settings and domains (Mathew & Soliman, 2021), insofar as more prominent brands got interested in the transition from traditional marketing to content marketing (Pulizzi, 2012).

Contradictions and intentions in content marketing definition leads to the formation of various definition of the term (Ahmad et al., 2016). According to Pulizzi and Barrett contenthmarketing is "the creation and distribution of educational and/or compelling content in multiple formats to attract and/or retain customers" (Pulizzi & Barrett, 2009, p. 8). Rowley argue that content marketing is a management process where a firm identifies, analyzes, and satisfies customer demand to gain profit with the use of digital content distributed through electronic channels (Rowley, 2008). Actually, the main objective of content marketing is communication with potential and current customers (Cramer, 2013).

Today, content marketing is called "brand's story" (Wuebben, 2011) or "story marketing" (Aimei et al., 2017; Tsai, 2017). Wuebben sees content as the key component to tell a brand's story, s'thecktory of your product or service and propels your brand into the hearts and mindsdddyoudprospective customers and others"f(Wuebben, 2011).

Overall, content marketing can help to stimulate the engagement on the social media It is also vital for the social media marketing campaign (Ahmad et al., 2016; Khan, 2022). The use of more appealing content in advertisement is one of the straightforward ways" to compete, and can improve the effectiveness of advertising (Akpinar & Berger, 2017) and allows firms to build a non-commercially defined relationship with the consumer (Human et al., 2018).

Ultimately, the key Content Marketing objectives involve brand awareness or reinforcement, leading conversion and nurturing, customer conversion, customer service, customer upsell and passionate subscribers (Rose & Pulizzi, 2011). content marketing impacts on perception, attitude and behavior of consumer (Mathew & Soliman, 2021), enhances the value of the market exchange for the customers (Rumbay et al., 2021), builds a trusted authority position (Holliman & Rowley, 2014), and strengthens the firm's brand (Yaghtin et al., 2021). It enhances the purchasing process by adding values to customers (Kajtazi & Zeqiri, 2020) and provides information that consumers want and need which will lead to customer satisfaction and provide mutual value for the company. Content marketing as an inbound marketing strategy not only positively drives the profitable customer action, but also actively improves brand loyalty (Rancati & Gordini, 2014). The purpose of content marketing is to "draw in leads and supplement brand credibility" (Hollebeek & Macky, 2019)

The main purpose of this study is to cover this gap, by analyzing bibliographic information as complementary sources which enable a wider understanding and grasp of the content marketing topic. Subsequently it develops a bibliometric analysis of the existing research on content marketing, trying to elucidate which view better describes the evolution of this topic during a period of 41 years (1981–2022), helping to clarify the concept and applications of content marketing. This paper is expected to serve as an introductory reference and preliminary approach for new researchers targeting to become familiar with the literature on content marketing.

This article aims to conduct a bibliometric analysis (performance analysis, conceptual mapping) in order to answer the following research questions:

- 0 What is the annual scientific publication growth in content marketing?
- 0 Which authors, documents, journals and countries are the most productive ones in content marketing?
- 0 What is the strategic diagram (Thematic map) of the content marketing topic during the understudied spells?
- 0 What are the conceptual structures of the content marketing field?
- 0 How did research/topics evolve in the field of content marketing in the course of time?

Method

Bibliometric analysis consisted of statistical methods evaluating developments and knowledge enhancement regarding a specific subject. It also included the assessment of the scientific quality and influence of the distinct works and sources (Bouyssou & Marchant, 2011). Bibliometric analysis visualize the trends of existing literature and provides an overview of the current state-of-the-art topics to help future research (Kunosic & Zerem, 2019). A standard bibliometric analysis workflow consists of five stages (Aria & Cuccurullo, 2017) which are 1. Study design; 2. Data collection; 3. Data analysis; 4. Data visualization, and 5. Interpretation.

This study relies on the use of the Web of Science core collection, which is an online scientific information assistant including scientific documents and research papers of all disciplines. This makes the Web of Science core collection (WOS) a suitable database for this study as one of the main objectives of the study is to conduct an interdisciplinary literature review. Moreover many notable bibliometric studies have used this database before (Fetscherin & Usunier, 2012). The search process used in this review was informed by Preferred Reporting Items for Systematic Reviews and Meta-Analysis (PRISMA) guidelines (Rethlefsen et al., 2021) for conducting systematic reviews of research (Figure 1).

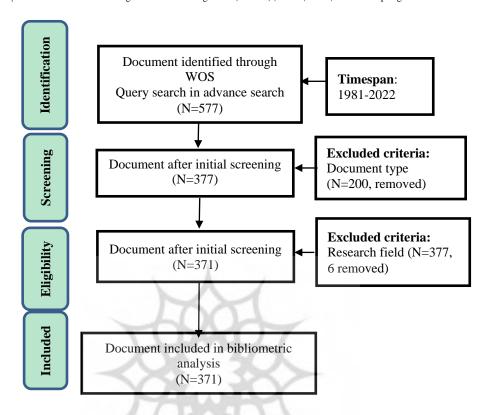


Figure 1. PRISMA diagram describing the collection of content marketing from WOS database

To identify all publications pertaining to this field, the following query was defined:

AK= ("Content marketing" OR "Custom* publishing" OR "Corporate content" OR "Custom* content" OR "Branded content" OR "Brand storytelling" OR "Storytelling Marketing" OR "Story telling Marketing" OR "Brand story telling" OR "Information marketing" OR "Info-content" OR "Contract publishing" OR "Corporate publishing" OR "Custom* media" OR "Corporate media" OR "Private media" OR "Inbound Marketing" OR Advertorial OR "Branded editorial" OR "brand journalis*") OR KP= ("Content marketing" OR "Custom* publishing" OR "Corporate content" OR "Custom* content" OR "Branded content" OR "Branded content" OR "Storytelling Marketing" OR "Storytelling Marketing" OR "Storytelling Marketing" OR "Brand storytelling" OR

"Information marketing" OR "Info-content" OR "Contract publishing" OR "Corporate publishing" OR "Custom* media" OR "Corporate media" OR "Private media" OR "Inbound Marketing" OR Advertorial OR "Branded editorial" OR "brand journalis*") OR TI= ("Content marketing" OR "Custom* publishing" OR "Corporate content" OR "Custom* content" OR "Branded content" OR "Brand storytelling" OR "Storytelling Marketing" OR "Story telling Marketing" OR "Brand story telling" OR "Information marketing" OR "Info-content" OR "Contract publishing" OR "Corporate publishing" OR "Custom* media" OR "Corporate media" OR "Private media" OR "Inbound Marketing" OR Advertorial OR "Branded editorial" OR "brand iournalis*")

The search process retrieved 577 documents concerning content marketing published in the Web of Science from 1981 to the end of 2022. 200 studies were removed by document type and 6 documents were excluded regarding the research field. So, 371 documents (research and review articles) were incorporated into this study.

There are numerous software tools used for conducting bibliometric analysis; However, many of these do not assist scholars in a complete recommended workflow (Aria et al., 2021). In this study, R packages were used for bibliometric analysis. The existence of substantial, effective statistical algorithms, access to high-quality numerical routines, and integrated data visualization tools are the most salient features and strong points making R a preferred language comparing to other languages for scientific computation (Derviş, 2019; Moral-Muñoz et al., 2020). Also, VOSviewer is used for constructing and visualizing bibliometric networks.

Results and Discussion In this research the bibliometric analysis consisted of two parts : 1) Performance analysis and 2) conceptual structure. Performance analysis examines the contributions of research constituents to a given field (Donthu et al., 2021). The conceptual structure is a network of cooccurrences of two terms or words in the scientific domain and a scientific co-words analysis (Callon et al., 1983). The greater the frequency of the joint appearance of the words is, the greater their linkage will be. The results are described as follows:

Performance analysis

In order to answer the first research question- i.e., "What is the annual scientific publication growth in content marketing? - We used the descriptive statistics.

Table 1 shows that 371 documents (research and review articles) were published in this timespan (1985-2022) in the WoS database. These documents received 7.809 citations on average. The higher average citations per document indicate a speedy growth of scholarly papers in the field of content marketing.

Table 1. Summary statistics

Description	Results
Timespan	1985:2022
Sources (Journals, Books, etc.)	244
Documents	377
Average citations per document	7.809
Author's keywords (DE)	1143
Authors	734
Author appearances	806
Authors of single-authored documents	113
Authors of multi-authored documents	621
Single-authored documents	130
Documents per author	0.505
Authors per document	1.98
Co-Authors per document	2.17
Collaboration index	2.58

The results also showed that 734 unique authors have contributed to the content marketing field within that spell, with an appearance of 806. In addition, there were 130 single-authored documents. On average, 1.98 authors contributed to each document. Documents per author counted to 0.505 while co-authors per document were 2.17. This signifies that in the development of content marketing, a good amount of research is done in collaboration with other authors which is again confirmed in the collaboration index of 2.58.

The collaboration index (CI) is calculated as total number of authors of multi-authored articles/total multi-authored articles (Elango

& Rajendran, 2012; Koseoglu, 2016). In other words, the collaboration index is a co-authors per article index calculated only using the multiauthored article set.

Figure 2 shows the annual scientific publication growth trend in content marketing field in WoS from 1981 to 2022 (growth rate of 4.58%). Despite that the growth between 1985 and 2010 was very slow, the scientific literature on content marketing in peer-reviewed journals increased significantly after 2011. However, there was no quite a steady increase in the number of articles in content marketing field.

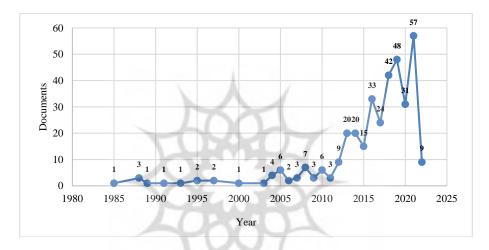


Figure 2. Annual scientii.c production in content marketing (1982-2022)

To answer the second research question, - i.e. "Which authors, documents, journals and countries are the most productive in content marketing?"- The frequency distribution rates of authors, documents, journals, and countries productive in content marketing were extracted. Table 2 to 5 show the performance of the top 20 frequent ones of each.

Performance of authors

Table 2. reports the 20 most prolific authors in terms of the number of the published articles. Results show that Andy Bull is the most prolific author with 11 published articles followed by Charmaine du Plessis and Bárbara Castillo-Abdul with 4 published articles. the remainder of authors in this field had published three or less articles.

Table 2. Most Productive Authors

	Tuble 2. Wost I Toddelive Hathors				
Rank	Authors	Articles	Rank	Authors	Articles
1	Bull A	11	11	Waqas M	3
2	Castillo-Abdul B	4	12	Ahmad Ns	2
3	Du Plessis C	4	13	Bachtiar Am	2
4	Hamzah Zl	3	14	Barinagarrementeria I	2
5	Koch T	3	15	Blay-Arraez R	2
6	Martinez Ac	3	16	Carvajal M	2
7	Pophal L	3	17	Chen X	2
8	Romero Cd	3	18	Costa-Sanchez C	2
9	Salleh Nam	3	19	Czaplewski Aj	2
10	Segarra-Saavedra J	3	20	Dharmayanti D	2

Results presented in Table 3 show that more than 93% of authors are occasional'authors with just one written document confirming Lotka's law which describes the frequency of publication by authors (scientific productivity) in any given field (Lotka A.J., 1926). However, Bull (11 articles), Castillo-Abdul, and Du Plessis (4 articles) are core authors in the content marketing field.

Table 3. frequency of publication by authors (Lotka law)

Documents written	N. of Authors	Proportion of Authors (%)
1	683	93.1
2	40	5.4
3	8	1.1
4	2	0.3
11	1	0.1

Performance of journals

Table 4 shows that "Brand Journalism" had the highest contribution in this domain.

Table 4. Most Relevant Sources

Rank	Sources	Articles	Percentage
1	Brand Journalism	11	3.26
2	Econtent	9	2.67
3	Journal Of Research in Interactive Marketing	7	2.08
4	Journal Of Strategic Marketing	7	2.08
5	Journal Of Product and Brand Management	6	1.78
6	Public Relations Review	6	1.78
7	adcomunica-revista cientifica de estrategias tendencias e innovacion en communicacion	5	1.48
8	Digital Journalism	5	1.48

Rank	Sources	Articles	Percentage
9	Journalism	5	1.48
10	Profesional De La Informacion	5	1.48
11	revista icono 14-revista cientifica de comunicacion y tecnologias	5	1.48
12	doxa comunicacion	4	1.19
13	International Journal of Media & Cultural Politics	4	1.19
14	Journal Of Marketing Management	4	1.19
15	Industrial Marketing Management	3	0.89
16	International Journal of Online Marketing	3	0.89
17	Journal Of Business & Industrial Marketing	3	0.89
18	Journal Of Business Research	3	0.89
19	Marketing Intelligence & Planning	3	0.89
20	Prisma Social	3	0.89

Table 4 shows that the 20 most contributing journals have published a total number of 101 articles representing about 30% of all identified articles. While 75% of journals (184 journals) published just one article on content marketing.

Figure 3 shows the distribution frequency of sources based on Bradford's law. According to the figure, each subject area has 3 zones. The top third (Zone 1 or the core) represents the journals that are most frequently cited in the literature on the subject and they are, therefore, likely to be of the highest interest to researchers in the discipline. These 28 journals publish about a third of the documents of the inter collection that are the core journals.

The middle third (Zone 2) includes the journals with an average amount of citation, and the bottom third (Zone 3 or the tail) comprises the long tail of journals that are seldom cited and regarded as of marginal importance to the subject.

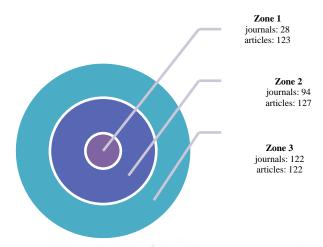


Figure 3. source by Bradford Law Zones

Performance of documents

In Table 5, a list of the 20 most cited articles of all time in content marketing is presented. The most cited paper is entitled "Factors influencing popularity of branded content in Facebook fan pages" that was published by SABATE in 2014 in EUR MANAG J, and has received 207 citations. With regard to total citations per year, HOLLEBEEK's article entitled "Digital Content Marketing's Role in Fostering Consumer Engagement, Trust, and Value: Framework, Fundamental Propositions, and Implications" is the most productive and influencing article.

Table 5. the 20 most cited articles

Rank	Paper	Title	Total Citations	•	Normalized TC
1	SABATE F, 2014, EUR MANAG J	Factors influencing popularity of branded content in Facebook fan pages	207	23.00	11.17
2	ABIDIN C, 2016, MEDIA INT AUST	Engaging with Influencers' fashion brands and #OOTD advertorial campaigns on Instagram	137	19.57	10.28
3	BERNDT ER, 1995, AM ECON	Information, Marketing, and Pricing in the U.S. Antiulcer Drug Market	135	4.82	2.00

Rank	Paper	Title	Total Citations	TC per Year	Normalized TC
	REV				
4	SUPRAN G, 2017, ENVIRON RES LETT	Assessing ExxonMobil's climate change communications (1977–2014)	120	20.00	10.95
5	HOLLEBEE K LD, 2019, J INTERACT MARK	Digital Content Marketing's Role in Fostering Consumer Engagement, Trust, and Value: Framework, Fundamental Propositions, and Implications	116	29.00	16.57
6	JARVINEN J, 2016, AND MARKET MANAG	Harnessing marketing automation for B2B content marketing	98	14.00	7.35
7	HOLLIMAN G, 2014, J RES INTERACT MARK	Business to business digital content marketing: marketers' perceptions of best practice	97	10.78	5.24
8	FUTAI N, 2006, LAB CHIP	Handheld recirculation system and customized media for microfluidic cell culture†	78	4.59	2.00
9	PULIZZI J, 2012, PUBLISH RES Q	The Rise of Storytelling as the New Marketing	69	6.27	5.91
10	PETERS L, 2000, INT J INFORM MANAGE	IT and the mass customization of services: the challenge of implementation	69	3.00	1.00
11	ROWLEY J, 2008, J MARKET MANAG- UK	Understanding digital content marketing	66	4.40	4.57
12	CAMPBELL C, 2015, BUS HORIZONS	Good native advertising isn't a secret	54	6.75	5.51
13	HOLTON	Identity lost? The personal	48	8.00	4.38

Rank	Paper	Title	Total Citations	TC per Year	Normalized TC
	AE, 2017, JOURNALI SM	impact of brand journalism			
14	MURRAY S, 2005, MEDIA CULT SOC	Brand loyalties: rethinking content within global corporate media	47	2.61	3.78
15	PETTIGRE W JE, 2010, J PUBLIC RELAT RES	The New Dynamic in Corporate Media Relations: How Fortune 500 Companies Are Using Virtual Press Rooms to Engage the Press	37	2.85	3.47
16	KUPFER AK, 2018, J MARKETIN G	The Role of the Partner Brand's social media Power in Brand Alliances	34	6.80	7.48
17	HEINE K, 2014, J GLOB FASH MARK	Luxury goes digital: how to tackle the digital luxury brand–consumer touchpoints	32	3.56	1.73
18	KILGOUR M, 2015, CORP COMMUN	The social media transformation process: curating content into strategy	32	4.00	3.27
19	WILLIAMS ON PO, 2016, FOOD QUAL PREFER	Influencing consumer choice: short- and medium- term effect of country-of- origin information on wine choice	31	4.43	2.33
20	COLE JT, 2013, J MASS COMMUN Q	Audience Response to Brand Journalism: The Effect of Frame, Source, and Involvement	29	2.90	6.67

Performance of country

According to the contribution of different countries in scholarly works on content marketing, the USA and Spain with 73 and 66 articles had the most contribution (30% of all the documents). Among the top 20 countries, France has high international collaboration. The multiple country publications (MCP) ration of France is 75%. (Table 6)

Table 6. Most productive countries

	Table 6. Mos	ւ բւ սաս	CHYC	cou	111111	<u>s</u>
Rank	Country	Articles	Freq	SCP	MCP	MCP_Ratio
1	USA	73	0.21	66	7	0.10
2	SPAIN	66	0.19	58	8	0.12
3	CHINA	18	0.05	13	5	0.28
4	UNITED KINGDOM	18	0.05	12	6	0.33
5	GERMANY	14	0.04	12	2	0.14
6	AUSTRALIA	11	0.03	9	2	0.18
7	BRAZIL	10	0.03	9	1	0.10
8	INDIA	8	0.02	8	0	0.00
9	NETHERLANDS	8	0.02	4	4	0.50
10	RUSSIA	8	0.02	8	0	0.00
11	CANADA	7	0.02	6	1	0.14
12	SOUTH AFRICA	7	0.02	6	1	0.14
13	KOREA	6	0.02	5	1	0.17
14	INDONESIA	5	0.01	5	0	0.00
15	IRAN	5	0.01	4	1	0.20
16	MALAYSIA	5	0.01	5	0	0.00
17	SINGAPORE	5	0.01	2	3	0.60
18	FINLAND	4	0.01	2	2	0.50
19	FRANCE	4	0.01	1	3	0.75
20	POLAND	4	0.01	4	0	0.00

Figure 4, the country collaboration map, shows the collaboration path in the world. The color blue illustrates the networks of study with other nations.

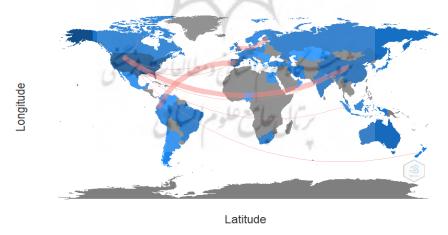


Figure 4. Country collaboration map on content marketing literature around the world

The findings indicate that the USA and China (4 articles), Spain and Ecuador (3 articles) and UK and Finland (3 articles) have the most collaboration in publications in content marketing. Although there is no significant network of cooperation between the countries in this field, it is important to note that countries with a sizable proportion of content marketing studies have higher collaboration rates, which means that they have exchanged expertise and have enabled each other to identify appropriate research findings.

Conceptual Structure

This paper uses co-word analysis to visualize the conceptual structure in a network of words and introduces main areas of interests and possible gaps in content marketing field. For this purpose, first the words had to be refined through a normalization process in terms of singular and plural forms (e.g., "brand" and "brands"), any typographical error, whole words or phrases or abbreviations/acronym forms (e.g., SEO vs. search engine optimization), or words in British or American English spelling (e.g., "behavior" vs. "behaviour"). Then, the conceptual structure in a network of words is visualized.

Frequency and Evolution of Words

Table 7 shows the top 20 fruquunt werds that occur among the author's keywords. Result shows that 'Content Marketing', 'Branded Content', 'Social Media', and 'Engagement' have the highest frequency among author's keywords.

Table 7. frequency and evolution of Words

Rank	Words	Occurrences	Rank	Words	Occurrences
1	content marketing	78	11	native advertising	13
2	branded content	57	12	social media marketing	13
3	social media	37	13	inbound marketing	12
4	engagement	23	14	brand	11
5	corporate media	19	15	branding	9
6	advertising	16	16	communication	9
7	brand storytelling	16	17	digital content marketing	9

Rank	Words	Occurrences	Rank	Words	Occurrences
8	advertorial	15	18	journalism	9
9	Facebook	15	19	marketing	9
10	digital marketing	13	20	storytelling	8

Figure 5 shows the annual growth of top 10 frequently used words in publications. The figure 5 illustrates that the words 'content marketing' and 'branded content' are highly growing between the years 2014 and 2022. Also, the results show that the words 'Social Media' and 'Engagement' increase with corelation, simultaneously, and in parallel with the 'Content Marketing' and 'Branded Content'. This means that researchers working in the field of content marketing have used it in 'Social Media' contexts, in addition they have used 'Engagement' as the independent variable of 'Content Marketing' and 'Branded Content'.

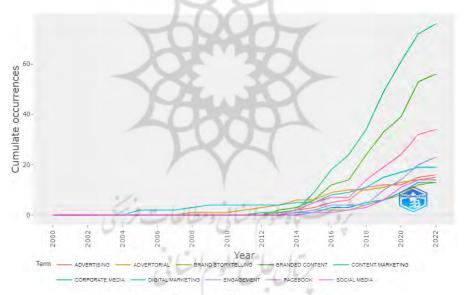


Figure 5. Word Growth (year-wise)

Thematic map (Strategic diagram)

To build strategic diagrams in the process of clustering, a set of interconnected networks or themes is obtained. Then, in this context each keyword network or theme are characterized by two parameters (Concari et al., 2022; Rojas-Lamorena et al., 2022) namely centrality and density.

Centrality measures the degree of interaction of a network with other networks. it measures the strength of external ties to other themes. This value can be understood as a measure of the importance of a theme in the development of the entire research field analyzed.

Density measures the internal strength of the network. it measures the strength of internal ties among all keywords describing the research theme. This value can be understood as a measure of the theme's development.

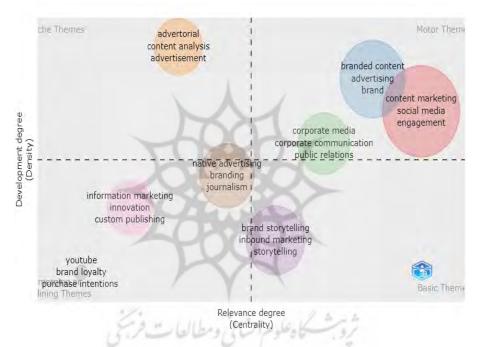


Figure 6. Strategic diagrams of content marketing literature

A thematic map (Figure 6) allows four typologies of themes to be defined according to the quadrant in which they are placed (Rojas-Lamorena et al., 2022):

Motor Themes: Themes in the upper-right quadrant are known as the motor themes. They are characterized by both high centrality and density. This means that they are developed and are of great account for the research field. Among the "motor themes" that are the more developed in the literature, the main concerns are 'Content Marketing', 'Branded Content', And 'Corporate Media'.

Developed and Isolated Themes: Themes in the upper-left quadrant

are known as the high developed and isolated themes or niche themes. They have well developed internal links (high density) but unimportant external links and so are of only limited importance for the field (low centrality). 'Advertorial' is a niche theme in content marketing field.

Emerging or Declining Themes: Themes in the lower-left quadrant are known as emerging or declining themes. They have both low centrality and density meaning that they are weakly developed and marginal. 'Information marketing' and 'native advertising' are declining and emerging themes in the literature respectively.

General/Basic Themes: Themes in the lower-right quadrant are known as basic and transversal themes. They are characterized by high centrality and low density. These themes are important for a research field and concern general/basic topics transversal in the different research areas of the field. Brand storytelling is the basic themes in content marketing field.

Thematic Evolution Map of Keywords

Dividing the time span into different time slices, it is possible to study and plot the topic evolution (in terms of trajectory along time). In Figure 7, the bubble represents an emerging topic that moves toward mainstream themes area. Looking at the distribution of publications per year, three time slices were established during the whole period: the first time slice of 30 years (1985-2015), the second time slice of 4 years (1916-2019), and the third slice of three years (2020-2022).

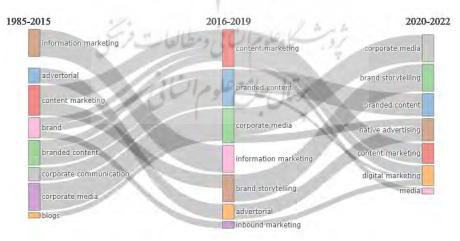


Figure 7. Alluvial diagram of thematic evolution

Thematic evolution discovers thematic change and evolution of content marketing research from 1985 to 2022. Figure 7 demonstrates the evolution of keywords in two different stages (1985-2015, 2016-2029, and 2020-2022). 'Content Marketing', 'Branded Content', and 'Corporate Media' are important keywords as they crop up in all three stages. However, 'Blogs' and 'Brand' have only turned up in the first stage. 'Digital Marketing' and 'Brand Storytelling' emerged in recent years and have replaced 'Content Marketing'. Also, 'Advertorial' and 'Corporate Media' have shifted to 'Native Advertising' in the last three years.

Co-words or co-occurrence word analysis

Co-word analysis is based on the joint appearance of two terms with the purpose of delimiting the conceptual and thematic structure of a scientific domain (Callon et al., 1983). Co-occurrence can be quantitatively described using measures like correlation or mutual information. Based on the co-occurrence frequency of pairs of words or phrases, co-word analysis is used to discover linkages among subjects in a research field and thus to trace the development of science (He, 1999). Co-word analysis is a powerful tool that enables the interactions between keywords in a scientific field to be identified, described, and represented visually (del Barrio-García et al., 2020).

Network of co-word occurrence has been presented in figure 8. In particular, with a minimum of 4 co-occurrences per keyword and a total of 54 keywords, the topics studied most frequently by content marketing scholars cohere with 6 themes. The area of the circle was determined by occurrences of each keyword. Colors of the circles indicate the average year of the keyword occurrences according to the symbol on the lower right corner. Also, the clusters and different themes are shown in Table 8.

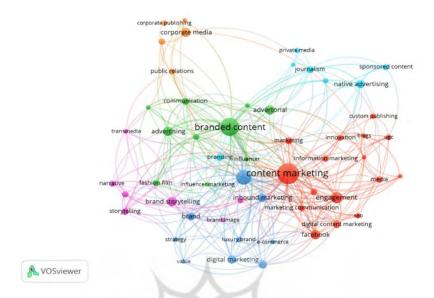


Figure 8. network of co-word occurrence (a threshold of 4 occurrences, display 54 keywords)

Table 8. the clusters and different themes

Clusters	Vormondo				
	Keywords				
Cluster 1:	Blogs, Facebook, Instagram, internet, media, social				
Cluster 1-1: Platforms and	networking site, SEO, UGC				
Techniques	content marketing, custom publishing, digital content				
Cluster 1-2: content	marketing, engagement, information marketing,				
marketing concepts	innovation, marketing, marketing communication				
Cluster 2:	branded content, advertainment, advertising, advertorial,				
influencer marketing and	influencer marketing, influencer, social network, fashion				
advertising	film, communication				
Cluster 3: digital and social media marketing	digital marketing, e-commerce, social media, social media marketing, inbound marketing, luxury brand, strategy, value, Brand				
Cluster 4: brand	brand image, brand management, brand storytelling,				
management and brand	storytelling, narrative transportation, narrative,				
storytelling	transmedia				
Cluster 5:					
Cluster 5-1: brand	brand journalism, branding, journalism,				
journalism	media ownership, native advertising, sponsored content,				
Cluster 5-2: private and	private media				
native media					
Cluster 6: corporate and	corporate communication, corporate media, corporate				
public communication	publishing, public relations, television				

the results of keywords co-word analysis show that there are 6 clusters, but according to the themes in each cluster, it seems that the first and fifth cluster can be divided into two sub-clusters. In the following, each cluster is explained:

Cluster 1-1: Platforms and Techniques: By separating the first cluster of keywords, two sub-clusters were formed. In sub-cluster 1-1 the emphasis is on the words such as "Blogs, Facebook, Instagram, internet, media, social networking site, SEO, UGC" and refers to 'content marketing Platforms and Techniques'. According to figure 9 platforms and techniques such as 'blogs' and 'television' had been used previously. While, Facebook, Instagram and SEO have received more attention from researchers in resent year. In other words, in terms of application, they have replaced the previous platforms.

Cluster 1-2: content marketing concepts: Also, the sub-cluster 1-2 focuses on 'content marketing concepts' and it is characterized by keywords like 'content marketing, digital content marketing, information marketing, custom publishing, innovation, engagement, marketing, and marketing communication'. In fact, this cluster refers to the concepts of content marketing as well as its dependent variables, namely innovation and engagement.

Recently and simultaneously with the development of information technology, digital content marketing has become one of the most prominent marketing tools that has substantial benefits and influences different settings and domains (Mathew & Soliman, 2020). Digital content marketing as a form of content marketing involves "creating, distributing, and sharing relevant, compelling and timely content to engage customers at the appropriate point in their buying consideration processes, such that it encourages them to convert to a business building outcome" (Holliman & Rowley, 2014).

Cluster 2: influencer marketing and advertising: The main focus of the topics in the second cluster is on 'Branded Content' and 'Influencer Marketing and Advertising'. Accordingly, themes such as "Branded Content, Advertainment, Advertising, Advertorial, Influencer Marketing, Influencer, Social Network, and Fashion Film" can be seen in this cluster. Also, concept of influencer marketing in this cluster is

defined as an effective and cost-efficient marketing tool, as it is often not perceived by consumers as advertising and guarantees a wide reach to very engaged audiences (Ye et al., 2021) Hence, brands have been increasingly utilizing influencers' social networks to reach niche markets, and researchers have been studying various aspects of influencer marketing (Kim et al., 2020). Fashion market is increasingly using influencer marketing to build a consumer-brand relationship (Trivedi, 2021).

Cluster 3: digital and social media marketing: Cluster 3 focuses on "Digital and Social Media Marketing' and it is characterized by keywords like 'Digital Marketing, E-Commerce, Social Media, and Social Media Marketing'. In this cluster the classification is based on the type of media where actions used to be present (digital, electronic, social and etc.). The term "Digital Marketing" has evolved over time from a specific term describing the marketing of products and services using digital channels -to an umbrella term describing the process of using digital technologies to acquire customers and build customer preferences, promote brands, retain customers and increase sales (Kannan & Li, 2017). Digital marketing is the simultaneous integration of strategies on the web, through a specific process and methodology, looking for clear objectives using different tools, platforms and social media (Saura et al., 2017).

Cluster 4: brand management and brand storytelling: The main subject in the fourth cluster is 'brand management and brand storytelling'. This cluster is made up of keywords such as 'brand image, brand management, brand storytelling, storytelling, and narrative transportation, narrative'.

Storytelling advertisements help to integrate audiences into advertisements and arouse highly positive emotions among audiences (Escalas, 2004). A brand story is a kind of storytelling that depicts the brand's central spirit and soul, creating an emotional connection between the brand and the consumer (Tsai, 2020).

Cluster 5-1: Brand journalism: Like the first cluster, the fifth cluster can be divided into two sub-clusters. In sub-cluster 5-1 the emphasis is on 'brand journalism' and is constructed by words such as 'brand journalism, branding and journalism'.

Cluster 5-2: Private and native media: the main topic of sub-cluster 5-2 is 'Private and Native Media'. It is characterized by keywords like 'Media Ownership, Native Advertising, and Sponsored Content and Private Media'.

Brand journalism is "a collective term for the production and distribution of news media that are created by or on behalf of companies and other organizations (e.g. nongovernmental organizations, unions and associations) and resemble journalistic publications in terms of content and layout" (Koch et al., 2021). It improves a company's image, builds relations with customers and increases sales (Koch et al., 2020)

Cluster 6: corporate and public communication: the last cluster focuses on 'corporate and public communication'. Hence, this cluster includes keywords like 'corporate communication, corporate media, corporate publishing, public relations, and television'. Corporate media is an essential part of well-coordinated public relations programs and the company's own channel, which is characterized by relatively wide coverage, direct access and high-quality contact with the target audience. Due to its nature, corporate media use the same levers of influence on the public consciousness as the mass media (Oltarzhevskyi, 2019). corporate communication is public relations as practiced by industry and commerce (Kitchen, 1997).

Figure 9 shows temporal overlay on a co-word map of the literature on content marketing (with a threshold of minimum 4 occurrences and display 54 themes in author's keywords). The area of the circle was determined by occurrences of each keyword. Colors of the circles indicated the average year of the keyword occurrences according to the map legend on the lower right corner.



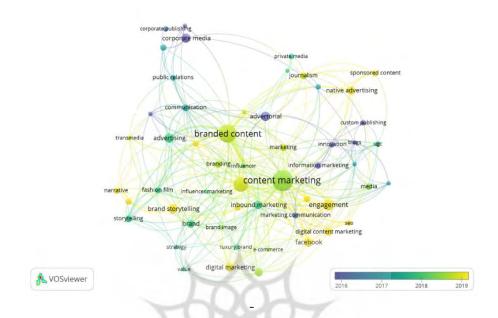


Figure 9. Temporal overlay on a co-word map of the literature on content marketing (threshold of 4 occurrences, display 54 keywords)

Temporal overlay on a co-word map illustrated the tools such as 'Blogs' and 'Television' (Marked in purple) which had formerly been used, while social media, Facebook and Instagram have been used abundantly in the recent years. Also, despite those themes like 'Corporate Media', 'Advertorial', 'Advertising', 'Custom Publishing' and 'Information Marketing' which were frequently used before, 'Narrative' 'Brand Storytelling' and 'Narrative Advertising' have been used more lately.

Conclusion

In spite of the publication of a significant number of articles on marketing, especially in recent years, a detailed bibliometric and network analysis in order to systematically and objectively recognize principal contributions, authors and growing research clusters have not been performed yet. This article presents descriptive statistics on content marketing, it also shows countries with great interest in content marketing, the number of relevant articles published yearly, and the most productive authors, articles and journals for literature review. This analysis contributed to the content marketing literature by identifying

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the conceptual structure of content marketing research. Moreover, it tried to predict the direction of future research by co-word analysis.

A total of 371 content marketing articles was collected from the WoS database. The descriptive statistics show that content marketing studies have rapidly grown since 2011. The US and Spain are the countries with the most publications on content marketing. The most influential journal about content marketing research is Brand Journalism (with 11 articles), and the most productive author is Bull A (with 11 articles).

Articles entitled "Factors Influencing Popularity of Branded Content in Facebook Fan Pages" (Sabate et al., 2014) and "Digital Content Marketing's Role in Fostering Consumer Engagement, Trust, and Value: Framework, Fundamental Propositions, and Implications" (Hollebeek & Macky, 2019) have received most total citations and most average citations respectively.

This research contributed to the literature by presenting the temporal evolution of content marketing research over almost four decades, revealing the most important content marketing-related themes of this period.

The result of words growth analysis showed that the words 'Social Media' And 'Engagement' increase corelation, simultaneously and in parallel with the 'Content Marketing' And 'Branded Content'. This means that researchers working in the field of content marketing have used it in 'Social Media' contexts. in addition, 'engagement' keyword has been used as the independent variable of 'Content Marketing', 'Branded Content'.

Strategic diagrams of content marketing literature illustrate motor themes, developed and isolated themes, emerging or declining themes, and general/basic themes. As expected, 'Content Marketing' and 'Branded Content' are motor themes in this field that are characterized by both high centrality and density.

The results of thematic evolution reveal thematic change and evolution of content marketing during 37 years. This finding conforms to the result of thematic mapping. The 'Digital Marketing' and 'Brand storytelling' are emerging themes which have replaced 'content marketing'.

To get an overview of the main lines of research, keyword cooccurrence analysis was employed to reveal key topics within the content marketing knowledge base. This technique has proved to be a powerful tool for knowledge discovery in databases and emerging research trends. The co-word analysis of the author's keywords defines 8 main clusters and 2 sub-clusters which are:

1) Platforms and Techniques, 2) content marketing concepts, 3) influencer marketing and advertising, 4) digital and social media marketing, 5) brand management and brand storytelling, 6) brand journalism, 7) private and native media, and 8) corporate and public communication.

Simultaneously with the development of content creation platforms, these themes have also been welcomed in the field of content marketing. In the type of content preparation, in recent years, the style of information content based on news and specialized knowledge has changed to storytelling and narrative messages from the brand.

This paper introduced main areas of interest and possible gaps and contributed to the body of knowledge by providing a comprehensive overview of content marketing literature.

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