BIBLIOMETRIC STUDY: SCIENTIFIC ARTICLES ON DIGITAL MARKETING IN TRADE MARKETING

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Abstract
This bibliometric study of the mapping of digital and mobile marketing applied to trade marketing from the knowledge base and the composition of the research professors with an applied methodology that identifies documents in the Scopus database of a digital and mobile marketing mapping applied to trade marketing on publications in a time interval (1982 to 2022), using the Vosviewer software tool, bibliographic networks of authors, co-authors, keywords and countries were built. As results, a mapping of bibliographic networks was obtained, the visualization of densities where greater strength is seen in the categories "digital marketing" and "mobile", demonstrating that the digital market and mobile telephony are advancing at a dizzying pace in the marketing area of the business sector, in addition, the increase in mobile penetration, the innovation and development of operating systems, applications, data technologies, including artificial intelligence, facilitate the growth of technological use and the market.
Keywords: trade marketing, bibliometrics, digital and mobile marketing mapping

INTRODUCTION

In today's fast-paced and ever-changing business environment, the world of marketing has undergone fundamental changes. Traditional marketing strategies are no longer enough to attract modern buyers, who are hyper-connected, more demanding and digitally immersed than ever. The convergence of digital marketing and corporate marketing has become a powerful catalyst to propel companies into a new era of success and constant growth. This synergy not only revitalizes marketing technology also redefines the nature of brand engagement with its target audiences in retail spaces as described by (Sasa, 2021). Digital marketing has changed customers' buying behaviors and it has brought various advantages to users. (Angeloni & Rossi, 2021). Consequently, it is clear that digital media allows us to learn about the products and services provided by a company, thus obtaining clearer information about the products and services and improving their quality.

Trade marketing has traditionally focused on promoting collaboration between brands and retailers to optimize in store promotions, but now it must adapt to the new era. According to the information indicated to us (Melović, 2020). Digital age has made leaps and bounds in this modern internet age, a world within reach of buyers, who will become consumers and these in turn customers. Branding plays a vital role for products to overwhelm potential customers. Before the emergence of social media, traditional media branding was used as awareness campaign throughout the nation. (Othman et al., 2021), therefore, branding plays an important role in products to surprise potential customers.

Before the advent of social media, a traditional media brand was used as a national information campaign.

Corporate marketing has embraced the digital sphere, taking advantage of the tools and various strategies of digital marketing to reach consumers more effectively, creating memorable brand experiences and driving sales growth as shown (Järvinen, 2015), consequently, business marketing has embraced the digital environment, employing varied online marketing tools and tactics with the goal of connecting more effectively with consumers, generating brand experiences that last in memory and promoting increased sales, as evidenced. The term marketing intelligence refers to developing insights obtained from data to optimize marketing decision-making. (Lies, 2022). In this sense, marketing intelligence is a strategic approach that uses data and analysis to make more informed and effective decisions in the field of marketing helping companies to understand their customers in a better way, adapt their strategies to changing market conditions and gain a competitive advantage in an increasingly complex and competitive business environment. The Mobile Marketing Ecosystem is determined by a number of technological, regulatory, commercial, social and legal components. (Martínez y Arango, 2012), then it is clear that this intricate network that comprises the different sectors of the economy, allowing us to understand the importance of brands. Personalization is the future of digital advertising and the common denominator of every digital marketing activity in favor of higher conversion rates and brand awareness. (Sakas et al., 2022). The expansion of mobile communications and the widespread adoption of high-speed data technologies are evolving rapidly, facilitated by the growth of the devices and communications industry. The business sector is feeling the consequences of technological improvements, and many entrepreneurs are turning to digital marketing to promote their wares. Digital marketing is a form of advertising that makes use of electronic media. (Gaol & Ichsan, 2022). It is worth highlighting that the business sector is positively affected by technological advances and even more so when digital marketing strategies are adopted to promote their products.

Companies in today's environment operate in a complex competitive environment, which requires effective tools to achieve marketing and business goals. One such tool is digital marketing. (Chaikovska et al., 2022). Considering that digital marketing is presented as a necessary and valuable solution in this competitive context, since it allows companies to promote their products or services more effectively through online channels and digital technologies. Digital marketing is more data-driven than traditional marketing. For example, social media gives you the opportunity to analyze the performance of every single post, how many likes has it achieved, how good is it in terms of range, how is the interaction with our customers, and so on. (Homburg & Wielgos, 2022). Hence, this approach reflects the growing importance of online presence and the opportunities that the digital environment offers to reach potential consumers and clients effectively and efficiently. In the era of digital marketing, consumer advocacy, which is an expression of satisfaction and defenseof a business, has a strong impact on convincing other consumers about the quality of a product or brand. (Setiawan et al., 2022). That said, when a customer expresses satisfaction and defends a business, their positive comment can influence the purchasing decision of other potential customers.

The new digital media has made customers highly participatory by giving them an active voice online and allowing them to actively contribute to the evaluation of a product or service, as well as adapting their digital experience according to their individual preferences. Through new digital media such as social networks and open-source platforms, online customers can openly express their views on products and services and customize or add content. (Todorova-Ekmekci et al., 2022). Initially, digital marketing was approached in a way that involved the application of marketing strategies to digital marketing channels. (Pham et al., 2022). It is clear that digital marketing was developed by adapting traditional marketing strategies, and over time it has evolved, incorporating specific approaches and strategies to make the most of the unique opportunities offered by the digital environment. With the widespread digitization and technological advancement, it is imperative for brands to upgrade their traditional marketing practice into modern techniques and luxury brands are no exception. (Khan et al., 2022). In the globalized world, all brands, including luxury brands, must modernize their

marketing strategies to take advantage of the opportunities offered by digital technology and thus be able to remain competitive. Mentioning specific tools and channels may be relevant, but the main focus is digital marketing, because it has the ability to reach a much larger number of people, because they can include social networks, search engines, email and others online channels. Although mention to Digital marketing, can not think of effective online advertising channels such as Facebook Ads, Google Ads or email marketing, affiliate marketing, forgetting that the essence of digital marketing is marketing on a digital platform. (Hien & Nhu, 2022). Digital marketing which is also known as online marketing, is the promotion of brands to connect with possible customers using the internet as well as other forms of digital communication. (Kerdpitak et al., 2022). Digital marketing can definitely include not only email, social media, and web-based advertising, but also text and multimedia messaging as a marketing channel. Hence it turns out that digital marketing and mobile can improve the effectiveness of trade marketing by providing tools and strategies to reach customers in a much more effective way, promoting their products or services.

METHODOLOGY

According to the bibliometric study of digital marketing applied to trade marketing, the bibliometric analysis in Scopus Elsevier was planned from the study literature, whose query equation:
KEY (marketing AND mobile) AND (LIMIT-TO (LANGUAGE,   "English") OR LIMIT-TO (LANGUAGE, "Spanish")) AND (LIMIT TO (DOCTYPE, "ar")). The exclusion criteria allowed us to obtain documents with the categories of digital marketing, mobile and trade marketing of the Spanish and English languages, selecting only articles as type of documents then an analysis of document productivity by year, document productivity by authors, document productivity by journals indexed in Scopus, document productivity by author affiliation, document productivity by countries, document productivity by area of knowledge, document productivity by funding sponsor. The evaluation of the results begins by providing a fundamental description of the key bibliometric statistics offered by the documents, according to the entered equation, considering: Krešić & Gjurašić, (2022), who state that: "The analysis of the results starts with the essential description of the main bibliometrics statistics which present the following details: type of document, annual scientific production, scientific sources,source growth,number of articles per author, author's keywords, articles'citation, country's production, country's citation, country collaboration map, and country collaboration network".
After extracting bibliometric data from the selected documents, such as the number of citations, authorship, institutional affiliations, keywords, journal of publication, and other data relevant to research professors, the bibliometric analysis phase began, using the bibliometric software VOSviewer, with which the data and bibliometric patterns were analyzed, such as co-authorship networks, citation maps, research trends and others. After the identification of the information, the interpretation of the results took place, mainly through the using of graphs.

RESULTS

As a result of the bibliometric study of digital and mobile marketing applied to trade marketing consulted in Scopus Elsevier, a compilation of the terms Digital and mobile marketing applied to trade marketing was carried out, limited to the English and Spanish language and with the document type articles published in Scopus whose equation is: KEY (marketing AND mobile) AND (LIMIT-TO (LANGUAGE, "English") OR LIMIT-TO (LANGUAGE, "Spanish")) AND (LIMIT-TO (DOCTYPE, "ar")). Showing as results one thousand eight hundred and sixty-eight (1868) documents, an analysis was carried out on them: 1) Productivity of documents per year in digital and mobile marketing applied to trade marketing in Scopus Elsevier; 2) Productivity of documents by Authors on the topic of digital and mobile marketing applied to trade marketing; 3) Productivity of digital and mobile marketing documents applied to trade marketing by journals indexed in Scopus Elsevier; 4) Productivity of digital and mobile marketing documents applied to trade marketing by Author Affiliation; 5) Productivity of digital and mobile marketing documents applied to trade marketing by countries; 6) Productivity of marketing and mobile documents by knowledge area; 7) Productivity of digital and
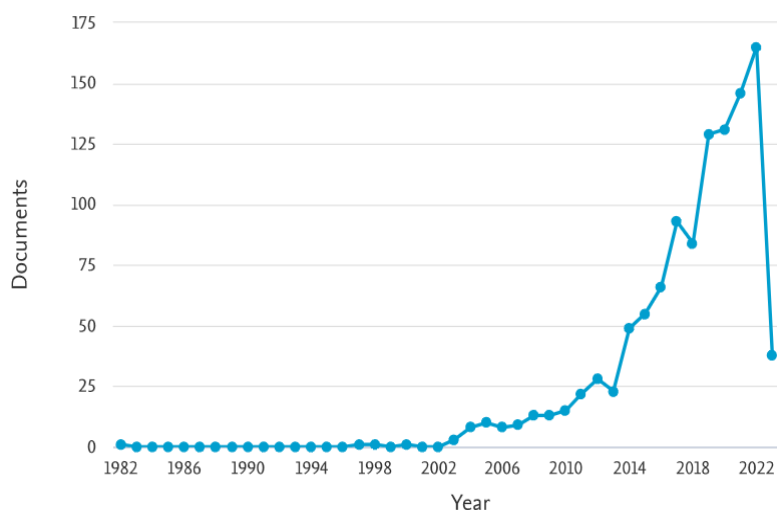
mobile marketing documents applied to trade marketing by financing sponsor; in the second stage network map analysis.

According to the mobile marketing analysis of document productivity in Scopus Elsevier, a total of 1,112 documents were filtered from the proposed equation starting in 1982, found greater productivity in 2022 with 38 documents, the author with the highest productivity was Eze, S.C., with 5 documents, the journal National Natural Science Foundation of China with 31 documents has the highest percentage of document productivity by journals indexed in Scopus Elsevier, with a 38% share. In addition, the University of Queensland University of Technology with 14 documents has the highest document productivity by affiliation, while the United States with 226 documents has the highest productivity of digital and mobile marketing documents applied to trade marketing in the relationship by countries. The Computer Science area with 406 documents has the highest Productivity of documents by knowledge area, while the sponsor "National Natural Science Foundation of China" with 31 papers has the highest Paper Productivity per funding sponsor.

Figure 1 shows how the first document was published starting in 1982, where an increase since 2002 in the number of documents is seen. In the year 2022, one hundred and sixty-five documents were published with a percentage of (15%); In 2021, one hundred and fifty-one documents were published with a percentage of (14%); In 2020, one hundred and forty documents were published with a percentage of (13%); In 2019, one hundred and thirty-five documents were published with a percentage of (12%); In 2018, ninety-two documents were published with a percentage of (8%); In 2017, ninety-two documents were published with a percentage of (8%), the previous documents represent 70% in the last 6 years until the consultation time. Productivity of documents by Authors of the marketing and mobile topic.

Figure 1 Documents per year in digital and mobile marketing applied to trade marketing.

Source: own taken from Scopus Elsevier (2023

Figure 2 shows the Top-10 document productivity by authors on the topic of digital and mobile marketing applied to trade marketing. Author Eze, S.C., published six documents; author Chinedu-Eze, V.C. published five documents; author Karjaluoto, H. published five papers; author Awa, H.O. published four documents; author Dwivedi, Y.K. published four documents; author Haynes-Maslow, L. published four papers; author Russell-Bennett, R. published four papers; author Stephen, A.T. published four documents; author Ullah, I. published four documents; author Adebiyi, S.O. published three documents; of the marketing and mobile topic according to the Scopus Elsevier Database.

Figure 2 Documents by authors on the topic digital and mobile marketing applied to trade marketing
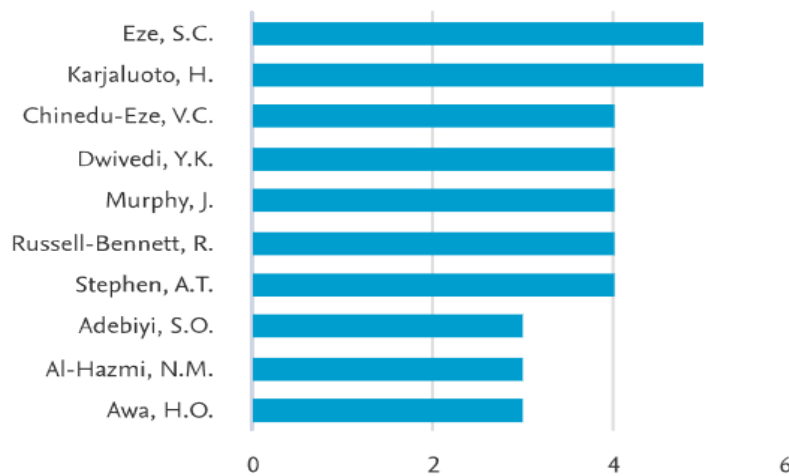
Source: own taken from Scopus Elsevier (2023)

Figure 3 shows the top-5 Productivity of marketing and mobile documents in journals indexed by Scopus Elsevier, the first journal is "Sustainability Switzerland" with forty-four documents and a CiteScore of 5.8, an SJR of 0.664 and a SNIP of 1.198. While in second place is the IEEE Access journal with twenty-four documents, with a CiteScore of 9, an SJR of 0.926 and a SNIP of 1.422; followed by the International Journal Of Interactive Mobile Technologies with nineteen papers, with a CiteScore of 4.2, an SJR of 0.409 and a SNIP of 0.945. There are also "Frontiers In Psychology" journal with seventeen documents, with a CiteScore of 4.5, an SJR of 0.891 and a SNIP of 1.422. The International Journal Of Direct Data And Digital Marketing Practice journal with seventeen papers, with a CiteScore of 1.0, an SJR of 0.237 and a SNIP of 1.279.

Figure 3 Documents on digital and mobile marketing applied to trade marketing in Scopus Elsevier indexed journals
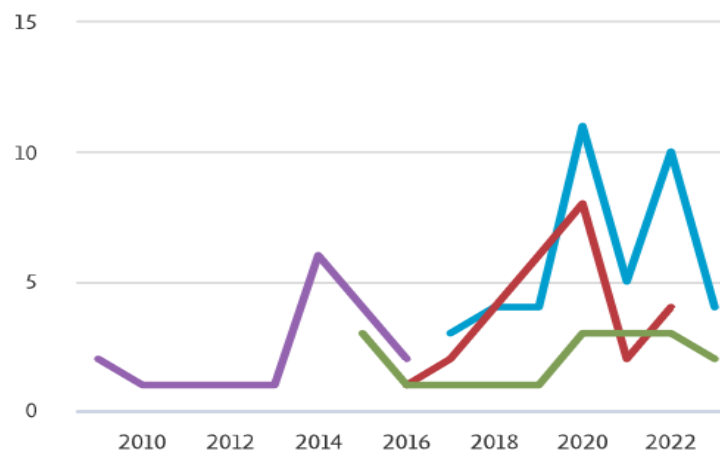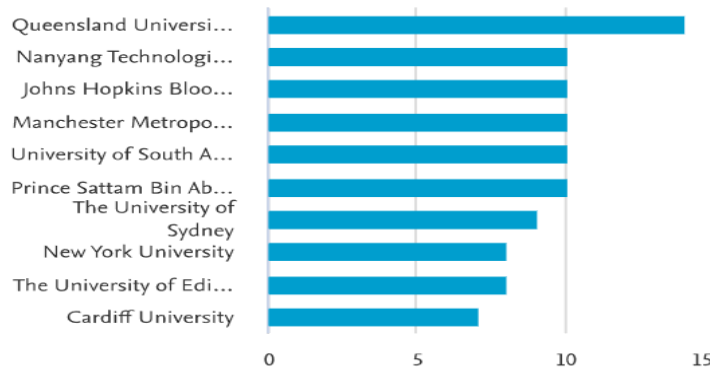

Source: own taken from Scopus Elsevier (2023)

Figure 4 shows the Top-10 by affiliation of marketing and mobile documents in Scopus, with a total of 160 entities in which the University of Queensland University of Technology is in first place with fourteen documents, which represents a percentage of (1.88%) of publications in Scopus. The affiliation of Prince Sattam Bin Abdulaziz University follows with eleven documents with a percentage of 1.48%; affiliation of Nanyang Technological University with ten documents and a percentage of 1.34%. The affiliation of Johns Hopkins, "Bloomberg School of Public Health" with ten documents with a percentage of 1.34% of the total documents published; followed by the affiliation of

Manchester Metropolitan University with ten documents with a percentage of 1.34%; the affiliation of The University of Sydney with nine documents in scopus with a percentage of 1.21%. Finally, the affiliation of the University of South Australia with nine published documents with a percentage of 1.21%; the affiliation of New York University with eight published documents with a percentage of 1.07%; the affiliation of The University of North Carolina at Chapel Hill with eight published documents with a percentage of 1.07%; and in tenth place the affiliation of the University of Oxford with eight documents with a percentage of 1.07%.

Figure 4

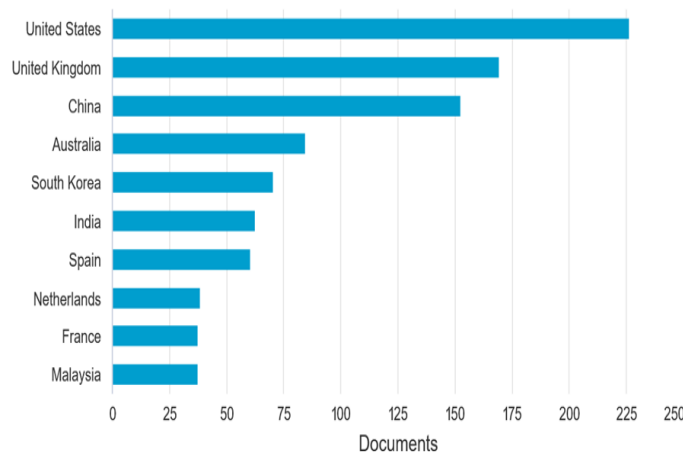The Top-10 documents by affiliation in Scopus.

Source: own taken from Scopus Elsevier (2023)

Figure 5 shows the productivity of digital and mobile marketing documents applied to trade marketing by countries, in the top-10 is United States with the highest number of publications and in tenth is Malaysia, in that order of ideas, the United States country with the highest productivity has two hundred and twenty-six documents; United Kingdom with a productivity of one hundred and sixty-nine documents; China with a productivity of one hundred and fifty-two documents published in Scopus.

South Australia with a productivity of eighty-four published documents; South Korea with a productivity of seventy published documents; India with a productivity of sixty-two documents; Spain with a productivity of sixty documents; Netherlands with a productivity of thirty-eight documents; France with a productivity of thirty-seven documents; In tenth place is the country Malaysia with a productivity of fifty-six digital and mobile marketing documents applied to trade marketing published in Scopus articles. Below, the productivity of digital and mobile marketing documents applied to trade marketing by knowledge area.

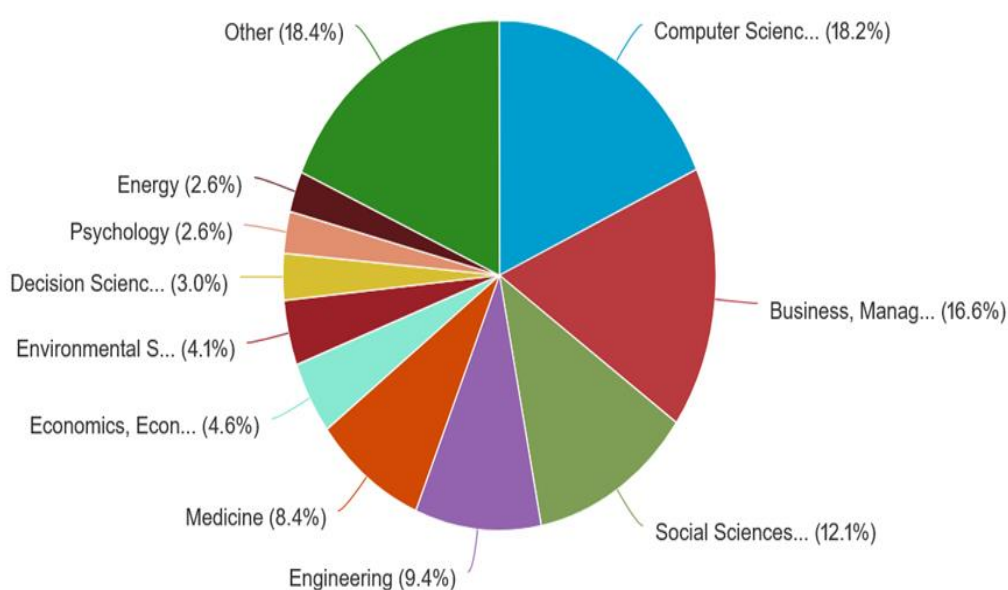Figure 5 Digital and mobile marketing documents applied to trade marketing by country.

Source: own taken from Scopus Elsevier (2023)

Figure 6 shows the top-10 knowledge areas with the highest productivity of digital and mobile marketing documents applied to trade marketing in Scopus Elsevier, the four main areas of greatest score are Computer Science, Business, Management and Accounting Social Sciences Engineering with one thousand two hundred and fifty-seven documents with a percentage of 56.3%; the Computer Science area has four hundred and six documents with a percentage of 18.2%; The Business, Management and Accounting area has eight hundred and fifty-one documents with a percentage of 37.1%. The area of Medicine has one hundred and eighty-seven documents with a percentage of 8.4%; the Economics, Econometrics and Finance area has one hundred and three documents with a percentage of 4.6%; and the Environmental Science area has ninety-two documents with a percentage of 4.1%; The Decision Sciences area has sixty-six documents with a percentage of 3.0%; The Psychology area has fifty-nine documents with a percentage of 2.6%; The Energy area has fifty-eight documents with a percentage of 2.6%.

Figure 6 Digital and mobile marketing documents applied to trade marketing by area of knowledge

Source: own taken from Scopus Elsevier (2023)

Figure 7 shows the Top-10 funding sponsors in the topic of digital and mobile marketing applied to trade marketing according to Scopus Elsevier, where the largest sponsor is the National Natural Science Foundation of China with thirty-one documents published in Scopus Elsevier; In second place is the funding sponsor National Institutes of Health with eighteen published papers; The sponsor of the National Cancer Institute with seventeen published papers; The funding sponsor European Commission with fourteen published documents.

The funding sponsor European Regional Development Fund with ten published papers; Funding sponsor National Institute of Mental Health published ten papers; Funding sponsor National Science Foundation with ten published papers; Funding sponsor Engineering and Physical Sciences Research Council with nine published papers; Funding sponsor Fundamental Research Funds for the Central Universities with eight published papers; Funding sponsor China Scholarship Council with seven published papers.

Figure 7 Digital and mobile marketing documents applied to trade marketing by financing sponsor

Source: own taken from Scopus Elsevier (2023)

Below, the next stage where the network and density maps are described with the VOSviewer software version 1.6.19, whose authors are Nees Jan and Waltman, from Leiden University and Erasmus University Rotterdam, which visualizes bibliometric data of digital and mobile marketing terms applied to trade marketing, based on query data in Scopus Elsevier.

Figure 8 Network map visualization of digital and mobile marketing terms applied to trade marketing

Source: Own elaboration VOSViewer search data from Scopus Elsevier (2023)

The large component of the citation network is visualized in figure 8 that shows the terms in the categories of digital and mobile marketing, the viewer can observe how these results come from the most cited articles from the citation network groups and the topics related to the terms of digital marketing and at the same time mobile, the prominence of research on this topic is shown. In the visualization of the network map on the terms digital and mobile marketing applied to trade marketing, a number of twenty (20) co-occurrences of keywords or terms were postulated reaching

a threshold of (132), with a total co-occurrence bond strenght of (22138), the closer the terms are located to each other, the stronger their co-occurrence analysis relationship. In the map visualization of the density of the words digital and mobile marketing applied to trade marketing, which are displayed using a radio button (Van Eck and Waltman, 2010), with a display scale according to the variation in the size of the low labels and a maximum length of 30 and with a medium density kernel width, where each node is displayed in purple and indicating its density.

CONCLUSIONS

In the bibliometric study of the literature of scientific articles in digital and mobile marketing applied to trade marketing, a great contribution to literature is evident, this will determine the understanding and literary dynamics; an indicator that measures the development of countries and mechanisms from the perspective of digital marketing in its incidence of mobile trade marketing that promote development in companies, universities and R&D research and development institutions.

According to the productivity of documents per year in digital and mobile marketing applied to trade marketing in Scopus Elsevier, starting in the 1980s, the first document was published, visualizing an increase approximately to the 20th century in document productivity; More specifically, for the year two thousand and three, the momentum was triggered given the rapid technological and digital expansion, in the productivity of documents by author is the author Eze, S.C. followed by author Chinedu-Eze, V.C.; In document productivity in journals there is the Sustainability Switzerland journal with a high CiteScore 5.8, SJR 0.664 and SNIP 1.198 followed by the IEEE Access magazine; in document productivity by affiliation, first the Queensland University of Technology followed by the Prince Sattam Bin Abdulaziz University; In the productivity of documents by country, United States with the highest number of publications and Malaysia tenth; in document productivity by knowledge area, the area of Computer Science followed by the area of Business, Management and Accounting; The highest document productivity per funding sponsor is Queensland University of Technology followed by Prince Sattam Bin Abdulaziz University.

In the visualization of the network map on the terms digital and mobile marketing applied to trade marketing, a high co-occurrence of terms was postulated, reaching a consistent threshold and a total strength of the high co-occurrence link, given that the closer the terms are, the stronger their analysis relationship with a closer approximation of terms which are the term "Competition" and the term "Research and development" where these terms are strongly linked, making it beneficial to investigate these relationships. Finally, as digital and mobile marketing continues to transform the way businesses interact with their consumers and business partners, the bibliometric analysis becomes an essential tool to stay up-to-date and make the most of constantly changing opportunities in trade marketing.

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