REVIEW OF DIGITAL MARKETING LITERATURE BY BIBLIOMETRIC AND VISUALIZATION ANALYSIS¹

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ABSTRACT

The study aims to examine the publications related to digital marketing published in 1985-2021 with the social network analysis method and to reveal the research trends in the digital marketing field. For this aim, publications with "digital marketing" in the title were scanned in the Scopus database. In the study, bibliometric data of 469 publications downloaded from the Scopus database were used. Bibliometric analysis was carried out for publication language, publication year, publication types, journal citation network, keyword and subject trends, and author co-citation network. According to the results, the interest in the digital marketing research field has increased since 2017. Publications mainly consist of conference proceedings and articles. The languages of the publications are English, Portuguese, and Spanish. The countries of origin of the publications are India, America, and the United Kingdom. While the Digital Marketing journal is the most frequently cited journal, Kannan and Li (2017) is identified it as the most cited paper. The interests of young adults, evolving big data, and consumer buying behavior are the most studied topics. The most commonly used keywords in publications were digital marketing, marketing, commerce, social media, sales, social networks, human, artificial intelligence, internet, and big data.

Keywords: Digital marketing, social network analysis, bibliometric, citespace.

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DİJİTAL PAZARLAMA LİTERATÜRÜNÜN BİBLİYOMETRİK VE GÖRSELLEŞTİRME ANALİZİ İLE İNCELENMESİ

ÖZ

Araştırmanın amacı, 1985-2021 yıllarında yayınlanmış dijital pazarlama ile ilgili yayınları sosyal ağ analiz ile incelemek ve dijital pazarlama alanındaki eğilimleri ortaya çıkarmaktır. Bu amaçla Scopus veri tabanında başlığında "digital marketing" geçen yayınlar taranmıştır. Çalışmada Scopus veri tabanından indirilen 469 yayının bibliyometrik verileri kullanılmıştır. Yayın dili, yayın yılı, yayın türleri, dergi atıf ağı, anahtar kelime ve konu eğilimleri ve yazar ortak atıf ağı için bibliyometrik analiz yapılmıştır. Elde edilen bulgulara göre dijital pazarlama olan ilginin 2017 yılından itibaren önemli ölçüde arttığı söylenebilir. Yayınlar ağırlıklı olarak konferans bildirileri ve makalelerden oluşmaktadır. Yayınların dilleri İngilizce, Portekizce ve İspanyolcadır. Yayınların orijin ülkeleri ise sırasıyla Hindistan, Amerika ve Birleşik Krallıktır. "Digital Marketing" dergisi en sık atıf alan dergi olurken, Kannan ve Li (2017) en çok atıf alan makale olarak belirlemiştir. Genç yetişkinlerin ilgileri, gelişen büyük veri ve tüketici satın alma davranışı en çok çalışılan konulardır. Yayınlarda yaygın olarak kullanılan anahtar kelimeler dijital pazarlama, pazarlama, ticaret, sosyal medya, satış, sosyal ağlar, insan, yapay zekâ, internet ve büyük veri olmuştur.

Anahtar Kelimeler: Dijital pazarlama, sosyal ağ analizi, bibliyometrik, citespace

1. Introduction

The field of marketing and its applications are changing with the widespread use of the Internet and the development of information technologies. Digital transformation has started in the field of marketing as in every field as a result of the Internet and the developing technologies in recent years. With the digital transformation, the habits of people have also changed, and the problem of space and time has disappeared. Therefore, it can be said that digital media is an indispensable communication tool for people. Today, traditional marketing activities have also entered the digitalization process as every field is affected by digital technologies (Şengüler, 2019). With technology and the internet, digitalization has begun, and the concept of digital marketing has emerged (Ertuğrul, 2018). With digital marketing, the way in which many issues such as consumer behavior, factors affecting purchase intention, customer complaints process, and new behavior patterns are handled has also begun to change.

Digital marketing has received increasing attention in the last ten years in the marketing literature. The study's main purpose is to examine the international studies in the field of digital marketing with social network analysis. In the study, bibliometric analysis, which is one of the social network analyses, was used. Bibliometric and visualization analysis is the application of mathematical and statistical methods to studies published in a given year (Pritchard, 1969). In bibliometric studies, certain features of publications are included in the analysis, and their findings regarding scientific networks are revealed (Al and Costur, 2007). For this reason, bibliometric and visualization analyses can be conducted in countries, journals, authors, etc., which guide the study on a particular subject and provide a roadmap for the research to be done (Aydın, 2014). The current research aimed to examine the studies focused on digital marketing in the WoS database with bibliometric analysis. Thus, trends in digital studies can be revealed, and suggestions can be made for future research. Within its scope of marketing for digital marketing, the study aims to answer the following questions: "What is the current status of the studies in the literature on digital marketing?", and "What are the subject trends in the studies on digital marketing?". Within the scope of this study, the data of 469 publications with the word "digital tourism" in their titles were downloaded from the Scopus database. The data were analyzed in the CiteSpace5 social network analysis program. In the study, the past of digital marketing in the marketing field was shown, and suggestions for future study topics were made.

2. Development of Digital Marketing

Technological developments have not only affected information and communication tools, but also changed the needs of people. Thus, the concept that human needs are essentially endless has emerged while laying the foundations of a consumer-oriented marketing era (Ay and Ünal, 2002). In this context, the American Marketing Association made a definition of marketing in 1985. According to this

definition, marketing is the planning and implementation process of determining the prices, promotion, and distribution of services, products, and ideas to create changes that will enable achieving organizational and personal goals (Tekin, 2007). Over the years, modernization in the field of marketing has led to continuous transformation and change. Therefore, marketing strategies have adapted to current process requirements, and thus marketing has succeeded in meeting changing consumer needs over time. The significant shift in marketing strategies is the transformation of marketing operations into digital environments with technological developments. This digitalization, which combines technical communication applications and marketing, brings consumers and producers much closer today (Merisavo, 2006).

With the new order shaped after the Second World War, globalization and new information technologies have accelerated. In all areas, the transition from traditional understandings to more modern ones has begun. Over time, countries with changing political administrations, socio-economically changing regions, and new generations have differentiated their previous habits, needs, and priorities. While marketing strategies were production-oriented in the 1930s, they switched to product-oriented in the 1950s. Then, in the 1980s, marketing strategies began to be more sales-oriented. Finally, marketing strategies are now customer-oriented (Güleryüz, 2019). Today, technological developments and modern marketing methods, which are used more and more, form digital marketing activities. Modern and technological methods, such as methods that have changed with some existing traditional methods, also bring new areas used in digital marketing. When they are examined in general, they can be listed as relationship marketing, data-based marketing, viral marketing, and network marketing.

Relationship marketing focuses on providing profitability to the enterprise by increasing sales by considering the needs of customers and establishing and developing relationships with consumers. Data-based marketing is the use of information such as name, surname, gender, age, e-mail, telephone number, purchased products as a marketing tool, in which customer information is stored as an archive (Kaşlı and İlban, 2009). Viral marketing occurs when customers share their positive or negative thoughts on the Internet through various social networks as a result of their experiences with the company's products and services and affect other customers (Avcılar, 2005). With the new era that started with the increase in technological developments and the spread of the Internet, the structural features of the internet not only remained in the technological field, but also began to integrate into life socially. Therefore, the Internet has gained value both as a technological innovation and as a new formation that has a social place. With the widespread use of the Internet, the variety of marketing types has increased. Marketers who actively use the Internet and aim to reach consumers directly have focused on social networks. With the effect of globalization, marketing practices on social networks have diversified (Castells, 2004).

In the last years of the 20th century, access to the Internet has increased rapidly with the technological revolution. The Internet, which was used only for military purposes at first, later became used for commercial and social purposes in the 1990s. Technological developments in the 21st century and the formation and spread of the digital environment have affected consumption and purchasing as well as marketing. This innovation has made it an area preferred by businesses, institutions, and brands searching for a new target audience (Çizmeci and Ercan, 2015). Furthermore, with the use of the Internet on mobile devices over time, people have started to spend their time on the Internet on mobile devices. Therefore, mobile devices connected to the Internet have affected the lives of people and changed their purchasing behaviors and habits. Thus, today businesses have started to include digital marketing in their budgets to market their products and services (Ryan, 2016).

According to Merisavo (2006), digital marketing is a form of marketing that aims to spread promotional activities efficiently through the opportunities offered by information and communication technologies. Simoes et al. (2019) state that digital marketing is the marketing of products and services through digital platforms that use digital technology to satisfy customers, increase brand awareness, sales, and customer loyalty. According to Odabaşı and Oyman (2003), digital marketing is the use of internet-related digital technology to achieve marketing objectives and assist existing marketing methods such as consumer or business orientation. Digital marketing is also called online marketing, e-marketing, interactive marketing, and web marketing. In order to promote the brand and business, digital marketing refers to the continuity of the business by using interactive networks such as the Internet and mobile instead of traditional media tools such as magazines, television, and radio (Altındal, 2013). Koçak et al. (2018) defined digital marketing as the use of Internet and mobile platforms tools to support all marketing activities in this process while promoting and marketing the businesses and products in which they operate.

With the integration of technology with social life and corporate life, significant developments and differences have emerged. Many subjects in conventional marketing have started to change rapidly with the unlimited possibilities offered by technological developments in digital marketing (Bulunmaz, 2016). Digital marketing has gained importance with the rapid access of people to the Internet and smartphones. Digital marketing has brought significant benefits to both businesses and consumers. With digital marketing, businesses have a new area to sell their products and services with different promotional activities. On the other hand, consumers have the opportunity to make a purchase at any time and place they want, without incurring time costs. The most important benefits of digital marketing are that it is more practical and less costly compared to other types of marketing (Stewart and Zhao, 2000). With digital marketing that develops with digitalization, consumers can get information about products and make purchases faster

by spending less time in more comfortable environments. With digital marketing, physical storage, time, place, and geographical location have become unimportant details (Ryan, 2016).

3. Bibliometric Studies in the Field of Marketing

The most important benefit of digital marketing to businesses is that it gives consumers the opportunity to reach certain target audiences related to personalized products. Therefore, the subject of digital marketing has started to attract a lot of attention in the academic field in recent years. Bibliometric analyses are needed to identify growing interest, past studies, and future study topics. While bibliometric studies describe a current situation, they are based on statistical and mathematical analyses of studies in the literature, such as the evolution of studies in different disciplines and publication types (Broadus, 1987). Social network analysis, which is used in bibliometric studies, explains the relationships between publications, authors, topic clusters, and keywords. While bibliometric studies give an idea to the authors regarding a field, these studies contribute to the acquisition of essential authors and their perspectives in that field (Benckendorff and Zehrer, 2013).

Sakar and Cehit (2013) analyzed bibliometrically the articles on marketing published in SSCI journals from Turkey between 1980 and 2012. As a result, they determined that studies on marketing are multi-authored, and publications in the field of tourism are in the foreground. It has been revealed that keywords used most frequently are international marketing, global marketing, consumer preferences, brand, and quality. Zeren and Kaya (2020) conducted a bibliometric analysis with 334 studies in the national literature within the scope of digital marketing. According to the results, studies on digital marketing have started in the national literature since 2003, and it continues to increase every year. The authors determined that digital marketing, mobile marketing, and social media marketing were the keywords used mostly.

Öztürk (2020) examined 32 publications published in the field of niche marketing bibliometrically. The author has determined that there has been an increasing study interest in niche marketing since 2017 and determined that the words used together are information technology, textile, clothing, and agriculture. Kavak and Sunaoğlu (2020) carried out bibliometric analysis of graduate theses prepared in the field of marketing science in 2010-2020. As a result, it has been determined that the three most studied topics are brand and brand management, consumer behavior, and marketing communication.

Nicolas et al. (2020) examined the marketing publications published in Web of Science and Scopus databases between 1990 and 2017. The authors determined that the most interesting topics in the field of marketing are advertising, consumer behavior, trust, innovation, and customer satisfaction. Patrick and Hee (2020) reviewed 789 publications on online marketing that they accessed from the Scopus

database. According to the study results, they determined that in the field of online marketing, they mainly focus on social media marketing tools such as Facebook, Twitter, and Instagram.

Yalçın and Sarıgül (2021) performed a bibliometric analysis of publications on green marketing from the Web of Science database. According to the findings, the most used word in green marketing is sustainability. In the context of keywords, the most used concepts are green product, sustainable development, environment, green consumption, sustainable consumption, corporate social responsibility, and consumer behavior. Saleem et al. (2021) subjected 1025 publications on green marketing published between 1977 and 2020 to bibliometric analysis. According to the word analysis they carried out, it was revealed that the topics of sustainability, sustainable development, sustainable marketing, and environmental marketing related to green marketing were the mostly researched in the last ten years. Eryaşar and Gönüllüoğlu (2021) were analyzed and examined the studies on "nudging" prepared in the field of marketing between 1996 and 2020. As a result of the research, it has been observed that nudge will help marketing studies and social structures related to marketing in developed countries. Even if the keywords are chosen broadly to connect the two main fields, the youngness of the study field also shows that there is a need for scientific publications in this field.

Erkan (2020) analyzed 1054 studies that were included in the title, abstract or keyword of the word digital media in the Scopus database with the R software. According to the study results, the most used keywords are social media, big data, and electronic commerce. Furthermore, the author determined that the countries with the most studies were America, India, and England. This study carried out has two differences from those studies. The first study is to do with a total of 469 publications where the word digital marketing is mentioned only in the title. The reason why it was chosen only in the title is that although the word digital marketing is mentioned in the abstract, some studies do not focus on digital marketing. The second difference is that the visualization was also made using the CiteSpace5 program, which is a bibliometric analysis program that has proven itself in social network analysis.

4. Method

The purpose of the study is to examine the publications related to digital marketing published in the Scopus database between 1980-2021. In the Scopus database, the concept of "digital tourism" was scanned only in the title, and it was determined that there was a total of 469 publications. Relevant data for these 469 publications were downloaded from the Scopus database on May 22, 2021. Bibliometric analysis was conducted to reveal author co-citation networks, publication co-citation networks, journal co-citation networks, topics, and keyword trends. The CiteSpace5 statistical program was used. The data of 469 publications obtained from the Scopus database were uploaded to the Citespace5 software, and

analysis was performed. CiteSpace5 is a Java-based program used to analyze and visualize trends (Chen et al., 2010).

The term "bibliometrics" is a concept originally coined by Alan Pritchard in 1969. Pritchard defines bibliometrics as the application of mathematical and statistical methods to analyze written communication and to guide the processes of this communication and the reality and development of a discipline (Lawani, 1981). Bibliometrics is one of the methods revealing the development of the field by examining the studies carried out in a certain field (Al, 2012). In addition, bibliometric analysis is a method that can use many analysis techniques such as co-entity, co-citation, co-author, bibliographic matching (Nova-Reyes et al., 2020).

Network densities, average silhouette values, and modularity values were calculated with the analyses performed. Network density determines the extent to which potentially existing connections in a network are used (Al and Doğan, 2012). The modularity value determines whether a network will be divided into independent clusters. The modularity value takes a value between 0 and 1. If the modularity value is low, it means that the network cannot be divided into clusters with clear boundaries. If the modularity value is high, it can be said that the network can be divided into clusters, and the network is well-structured. The average silhouette value is used to determine the maximum number of clusters. The silhouette takes a value between (1) and (-1) (Chen et al., 2010). An average silhouette value greater than 0.7 indicates that the cluster is strong (Simovici, 2007).

In the study, journal citation network, publication citation network, author co-citation network, digital marketing topic clusters, and word analysis were determined according to centrality value. The centrality value shows the connection level of a node with other nodes that are not connected to each other. The high centrality value of a node indicates that it is a bridge connecting other nodes (Ni et al., 2017). The log-likelihood ratio (LLR) algorithm was used to determine the topic trends of the publications.

5. Findings

There are a total of 469 publications on digital marketing in the 1985-2021 period. While the first publication was made in 1985 (1 publication in 1985), it was determined that there was a rapid increase in publications related to digital marketing every year. There are a total of 92 publications in 2019 and a total of 124 publications in 2020. The distribution and percentages of publications by year are given in Table 1.

Year	N	%
2021*	46	9.81
2020	124	26.44
2019	92	19.62
2018	54	11.51
2017	31	6.61
2016	30	6.40
2015	19	4.05
2014	19	4.05
2013	12	2.56
2012	8	1.71
1985-2011	34	7.25
Total	469	100

Table 1. Distribution of Publications by Years

Distribution and percentages related to publication types are given in Table 2. When we look at the types of publications, the first three publication types related to digital marketing are 240 articles, 126 conference papers, and 39 book chapters. While there are 24 compilation publications, there are six books. As we get closer to today, the number of articles continues to increase very rapidly, which shows that the field attracts attention. Since the research was conducted in 2021, the number of articles is expected to increase in the following period.

Table 2. Distributions by Publication Type

Туре	N	0/0
Article	241	51.28
Conference Paper	126	26.92
Book Chapter	39	8.33
Compilation	24	5.13
Editor's Note	16	3.42
Brief Study	10	2.14
Book	6	1.28
Notes	4	0.85
Conference Critic	3	0.64
Total	469	100

The distribution and percentages of the studies related to the publication languages are given in Table 3. When we examine the publication languages, there are English (449 publications), Spanish (8 publications), Portuguese (7 publications), German (3 publications), French (1 publication), and Japanese (1 publication). There are no publications available in Turkish. The fact that English is accepted

^{*}From January 01 to May 22

as an international academic language, that important sources in the field of digital marketing are published in English.

Language	N	%
English	449	95.74
Spanish	8	1.71
Portuguese	7	1.49
German	3	0.64
French	1	0.21
Japanese	1	0.21
Total	469	100

Table 3. Publication Language Distribution

When the origin countries of the publications are examined, the first five countries are India (83 publications), America (62 publications), United Kingdom (36 publications), Indonesia (31 publications), and Portugal (24 publications). There are no publications from Turkey.

5.1. Journal Citation Network

The results of the social network analysis applied to reveal the journals in which the publications are widely cited and important publications related to digital marketing are visualized are presented in Figure 1 according to the degree of centrality.



Figure 1. Journal Citation Network Image

According to the findings of social network analysis, a journal citation network consisting of 400 links and 1610 nodes was obtained. There are 52 clusters in the journal citation network. The density of the cluster was calculated as 0.0202. The modularity value was calculated as Q = 0.67, and the average silhouette value was 0.85. These values show that the journal co-citation network has clusters that are clearly separated from each other and that the clusters have a strong structure.

The network values of the first five journals that have an important place in the network are summarized in Table 4.

*			
Journal	F	Year	Cluster#
Digital Marketing	52	2017	1
Journal of Marketing	40	2013	0
Journal of Business Research	30	2018	1
Journal of Interactive Marketing	28	2014	1
Harvard Business Review	25	2012	0

Table 4. Top Five Journals in the Journal Citation Network

The first journal with the highest number of citations in studies published on digital marketing is "Digital Marketing," with 52 citations. While the second journal is "Journal of Marketing," with 40 citations, the third journal is "Journal of Business Research," with 30 citations. These sources are sources with a high impact factor as well as having a lot of studies in terms of publication number. It is important for researchers who will work in this field to turn to these journals in order to increase the impact of their research.

5.2. Author Co-Citation Network

An author citation network consisting of 167 clusters, 265 links, and 152 nodes was obtained according to the degree of centrality obtained by the social network analysis applied to reveal the author-common citation network. The density of the cluster was calculated as 0.0043. The modularity value is calculated as Q = 0.95, and the average silhouette value is 1. These values show that the journal co-citation network has clusters that are clearly separated from each other and that the clusters have a strong structure. The network values of the top 10 authors who have an important place in the network are summarized in Table 5.

Table	5.	Citation	Numbe	r of	Top	10 /	Author	S
A 41				10				_

Author	F	Year	Cluster#
Gupta S	4	2020	13
Ahuja V	4	2015	58
Martin EJ	3	2015	125
Grilo A	3	2015	17
Martins J	3	2018	1
Kumar GA	2	2019	66
Nigam D	2	2020	64
Mekonnen A	2	2016	70
Dumitru D	2	2019	21
Bajpai C	2	2017	8

As seen in Table 5, the studies published on digital marketing and examined in the present study mostly cited Gupta's work, with four citations. After Ahuja, Martin, Grilo, and Martins are the most cited authors, in that order.

5.3. Publication Citation Network

According to the results of the social network analysis conducted to reveal the common citations of the publications examined in the study, the publication citation network consists of 465 nodes and 2638 links. The publication citation network is visualized as in Figure 2.

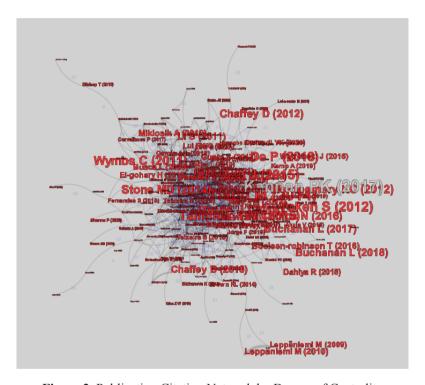


Figure 2. Publication Citation Network by Degree of Centrality

The publication citation network consists of 200 clusters. The density of the cluster was calculated as 0.025. The modularity value was calculated as Q = 0.50. These values show that the journal co-citation network has clusters that are clearly separated from each other and that the clusters have a moderate structure. The network values of the first five publications that are important in the network are given in Table 6.

1	Table 6.	Citations	from	Citation	Sources	(Top 5	Publication	s)

Publication Tag	F	Cluster#
Kannan, P.K. and Li, H. (2017). Digital marketing: A framework, review and research agenda. International Journal of Research in Marketing, 34(1), 22-45.	260	0
Tiago, M. and Verissimo, C. (2014) Digital marketing and social media: why bother?. Business Horizons, 57(6), 703-708.	173	0
Smith, K.T. 2012. Longitudinal study of digital marketing strategies targeting millennials. Journal of Consumer Marketing, 29(2), 86-92.	90	0
Jarvinen, J. and Karjaluoto, H. (2015). The use of web analytics for digital marketing performance measurement. Industrial Marketing Management, 50, 117-127.	89	0
Wang, Y. and Tang, T. (2003). Assessing customer perceptions of website service quality in digital marketing environments. Journal of Organizational and End User Computing, 15, 14-31.	73	1

As seen in Table 6, the most cited (260 citations) publication about digital marketing is the article by "Kannan and Li" in 2017. The second is the article published by Tiago and Verissimo in 2014.

5.4. Digital Marketing Topic Clusters

The citation network of the publication obtained in the study also reveals the trend themes in a field. Citing different studies in a particular field to a particular research has often referred to the similar themes of these studies (Ukşul, 2016). The identified digital marketing topic clusters are summarized in Table 7.

Table 7. Digital Marketing Topic Clusters

Subject	LLR p-value	Cluster	F	Silhouette	Year
Young adult interests	89.72, 1.0E-4	0	62	0.935	2016
Developing big data	62.81, 1.0E-4	1	49	0.742	2017
Consumer buying behavior	66.16, 1.0E-4	2	42	0.862	2018
Consumer buying intend	60.08, 1.0E-4	3	39	0.814	2017
Digital marketing platform	38.88, 1.0E-4	4	33	0.864	2014
Digital marketing compliance	41.22, 1.0E-4	5	28	0.776	2019
Modern portfolio theory	65.82, 1.0E-4	6	26	0.906	2016
Innovative digital marketing trend	81.25, 1.0E-4	7	26	0.903	2017

When the subject clusters were examined, it was determined that the most studied subjects were "young adult interests" with 62. The silhouette value of the cluster with the theme of young adult interests is 0.935, and it can be said that it is homogeneous. Studies in the cluster refer to publications published in 2014, 2016, 2017, 2018, and 2019.

5.5. Word Analysis

To better understand the relationship between the digital marketing collaborative studies, keyword analysis was carried out using the frequency of keywords occurring together. According to the findings of the social network analysis, a keyword network consisting of 391 nodes and 1605 links was obtained. There are 42 clusters in the keyword network. The density of the network was calculated as 0.021, the modularity value Q = 0.60, and the average silhouette value 0.85. These values show that the journal co-citation network has clusters that are clearly separated from each other and that the clusters have a strong cluster structure. Table 2 summarizes the top 10 common keywords used in publications in terms of frequency and centrality.

Table 8. Common Keywords and Centrality Values Used in Publications (Top 10)

Word	F	Word	Centrality
Digital marketing	255	Trade	0.37
Marketing	145	Marketing	0.25
Trade	113	Social media	0.21
Social media	59	Advertisement	0.15
Sales	26	Consumer behavior	0.12
Social network	23	Artificial intelligence	0.11
Human	22	Big data	0.10
Artificial intelligence	19	Sales	0.09
Internet	17	Human	0.09
Big data	15	Social network	0.08

According to the result, the first three keywords are digital marketing, marketing, and trade, while the top three keywords in terms of centrality are trade, marketing, and social media.

6. Conclusion, Recommendations, and Limitations

The study is a bibliometric analysis of studies on digital marketing. Each bibliometric analysis study obtains results related to its specific field. This is a limitation of the study. As a result of the bibliometric analysis of the data obtained by using secondary data in the study, by analyzing digital marketing studies in the field of marketing, it is aimed to reveal the historical, subject, and content relationship and trends in the field of digital marketing. According to the study findings, the topic of digital marketing is getting more and more attention every year, and the number of publications is increasing every year. According to the publication types, most publications on digital marketing are articles, while the most published language

is English. According to the results of Erkan's (2020) study, while the first three countries of origin are America, India, and England, respectively, in this study, India, America, and England are determined.

According to the results of the journal citation network, the most cited journal on digital marketing is "Digital Marketing" (52 citations). Out of 469 published studies on digital marketing, Kannan and Li's (2017) article is centrally located in the publication citation network with 260 citations. According to the digital marketing topic cluster analysis, the top three clusters of topics are "young adult interest," "developing big data," and "consumers purchasing behavior" clusters. According to the word analysis carried out, it is recommended that those who want to do a study on digital marketing should consider consumer behavior, social media, artificial intelligence, big data, and social networks. For researchers who want and are interested in doing research in the common field of digital marketing, reviewing the most cited articles and the most published journals within the scope of the study will help them both get to know the field better and find research topics to study in the field.

In this study, the time interval in which the data of the study was obtained is a limitation of the study. Considering that both marketing and digital marketing literature will develop over time, as in all disciplines, it is recommended to repeat studies with the bibliometric method, which provides longitudinal analysis, considering that the results of the study will differ in different time periods. However, only bibliometric analysis results are included in this study. The theoretical foundations of digital marketing literature are evaluated with a subjective approach within the framework of the main themes obtained as a result of bibliometric analysis. For this reason, it is recommended to evaluate trends in digital marketing literature by combining different analysis methods such as content analysis and meta-analysis, together with bibliometric analysis in future research. Although theoretical studies have been made on digital marketing in general, it can be said that there are limited studies on this subject. Therefore, it will provide guidance to both marketers and academics to research the subject of digital marketing and provide a competitive advantage to businesses. Determining digital marketing on the basis of sectors by examining it with bibliometric analysis on the basis of sectors will contribute to both the literature and enterprises.

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