
An Overview of Search Engine Marketing: A Systematic Literature Review

Research Article /Araştırma Makalesi

Alperen ŞAHİN^a, Taşkın DİRSEHAN^b

ABSTRACT

With the advancement of technology, search engines have evolved into significant tools that not only provide information but also offer marketing opportunities, making them of great importance in designing customer journeys for digital marketing strategists. Consequently, a comprehensive understanding of search engines is essential from a business perspective. This systematic literature study aims to identify key issues related to search engine marketing (SEM) from a commercial standpoint. To accomplish this, studies obtained from Scopus and Web of Science databases were compiled, and various analyses were conducted using the VOSviewer program. The analyses revealed that studies on SEM generally revolve around five primary clusters: "search engine optimization," "paid ads," "keyword auctions," "digital marketing characteristics," and "exploring destinations." The obtained results were presented systematically, leading to various inferences. This study is expected to promote future research that identifies priority areas in SEM and adheres to international standards of excellence, thus making a significant contribution to the literature.

Keywords : Search engine marketing ; optimization ; paid ads ; keywords auctions ; digital marketing characteristics ; exploring destinations

1. INTRODUCTION

The Internet has developed into an almost indispensable technology in everyday society. Developments in computer and communication technologies have also affected the web architecture and have been renewed to facilitate information sharing. Web 1.0 was the first application, defined as an information connection network, and lasted from 1989 to 2005. Web 1.0 had little opportunities for consumers to communicate information with one another, and it was impossible to engage with the website. The web's function was essentially passive, and solely utilized for static sites and content delivery. To put it another way, the initial web enabled us to search for and read information (Khanzode and Sarode, 2016). However, with Web 2.0, it has become possible for internet users to actively contribute to web pages, and this revolutionary development has also shed light on future technologies. Today, as we become lost in the millions of websites established across the world using the existing internet infrastructure, research to employ semantic web (Web 3.0) technology in search engines aim to give consumers with simpler and faster access to the site and the information they seek (Shivalingaiah and Naik, 2008).

The magnitude of data amassed on the internet via many databases is massive. On the internet, information is found using sophisticated tools called as search engines. A search engine is a basic software application that searches for relevant information based on keywords entered by users. Normally, this search and reach is based on syntactic analysis of the term (Web 2.0), but because these searches and reach are based on content analysis, consumers will receive a more relevant result. The Semantic Web (Web 3.0) is an expansion of the existing web that provides keywords with a well-defined significance (Aravindhana and Shanmugalakshmi, 2013; Bhandari and Bansal, 2018; Gregurec and Grd, 2012; Killoran, 2013; Kumar, 2013).

Today, knowledge functions as a driving force. Information is behind any economic activity. The need to search for and access information has led to changes in

^aCorresponding Author, Marmara University, ORCID : 0000-0002-3599-0951, alperen.sahin@marun.edu.tr

^bMarmara University, ORCID : 0000-0001-9563-6543, taskin.dirsehan@marmara.edu.tr

the purposes and functions of search engines. Thus, search engines have become the most preferred tools of users. As this tendency has evolved, marketers have progressively begun to use this platform to sell their products (Bhandari and Bansal, 2018).

Search engines have evolved to become one of the useful tools available on the internet as well as an essential component of modern life. With roughly 30% of worldwide web traffic produced by online search and millions of customers coming to websites like Google each day for product research, businesses have begun to incorporate web search campaigns within their digital marketing mix. The advertisements displayed on search engine results pages clearly target the terms supplied by customers, increasing the likelihood of conversion and enabling search advertising as a very successful marketing approach. Besides, expenditure on search advertising in the United States reaches \$84.7 billion in 2021, while spending on mobile advertising will continue to rise as people shop more strongly than ever before (Statista, 2022).

Web-based search is a common and vital activity in e-commerce. Search engines play an important role within internet community; well over half of all web traffic now originate from a search engine instead of just a straight link from some other website (Shih et al., 2013). Search engines are becoming increasingly critical as vital bridges between businesses that utilize the internet to build their brand and their target customers as searches become more common. Compared to other digital advertising channels, search engine marketing is the most expensive for businesses. According to analysts, search engine marketing will eventually eat up a sizable portion of the digital advertising market, which is where e-commerce operations are expected to develop the fastest (Dou et al., 2010).

To detect the emerging research trends in search engine marketing, we apply a systematic literature review to extend our understanding about it.

2. BACKGROUND

2.1. Search engine marketing as a digital marketing strategy

Over the last decade, technological advancements have prompted the economic sector to seek innovative methods to modify its business practices to a digitized and linked world. In this integrated ecosystem, digital channel strategies, among other things, became the foundation for marketing, management, operations, manufacturing, and the creation of new goods and services (Saura et al., 2022). Almost every week, new tools are introduced in the digital environment and many of the previously used ones are also deprecated (Key, 2017).

Marketing tactics centered on new digital media, such as social platforms and digital channels, have become professional habits for a wide range of organizations. In this new era of adaptation and change, data and innovation-centric tactics are critical choices for firms marketing their products and services abroad. Obtaining data on customers and their behavioral acts in digital settings is forcing firms to pay more attention to data gathering and user data analysis. New digital marketing methods are tightly related to digital business structures. To encourage electronic commerce, SEO tactics and digital marketing strategies such as search engine marketing, banner adverts, and email marketing are utilized (Hidayanto et al., 2012; Saura et al., 2022).

According to a global estimate, China will have a total digital search ad in the United States at \$88.08 billion. Search engine marketing spending in the United States in 2022 is estimated to be \$95.2 billion, up from the total online media advertising spending estimate of over 280 billion for that year. In 2021, close to half of all online advertising revenue in the United States came from search engine marketing. Paid search advertising spending on Google climbed by 34% in the third quarter of 2021 compared to the same time the previous year in the United States. The cost-per-click (CPC) of Google paid search advertising climbed by 25%, while clicks grew by 8%. In 2021,

search engine marketing was the highest-yielding form of mobile advertising. Video advertising ranks second with spending of US\$63.82 billion. Video ads spend is projected to grow to an estimated 134.5 billion by 2026 (Statista, 2022).

Companies frequently select between multiple forms of media when presenting product information to customers. Understanding how customers use media as a source of information when making purchase decisions is crucial for marketers that want to maximize their media selections and get the best communication results. A thorough study of the literature, however, reveals that little is known about the advertising medium preferences of technology-based service users (Tesfom et al., 2018). Most companies, at the beginning of internet marketing, focus the goal of their communication strategy on getting site visitors. But to achieve the goal of internet marketing, many potential site visitors need to be real visitors, and real visitors need to be converted into customers. These processes can be evaluated by the concept of the effectiveness of search engine marketing (Paraskevas et al., 2011).

It has been found in recent years that a rising proportion of internet users access the websites they visit using search engines rather than straight links from another online page. Obviously, search engines play a significant role in the online world. It is used to find a variety of information, such as things, events, individuals, and locations. Consumers frequently utilize Web search engines to get e-commerce information (Jansen and Schuster, 2011). Search engines have also grown in prominence as an important tool for businesses that utilize the internet to create their image and find their target clients. A prominent issue in Internet marketing is how to rank high in search results for certain search terms or phrases. (Agarwal and Mukhopadhyay, 2016; Kim and Sundar, 2010; Shih et al., 2013).

Search Engine Marketing (SEM) is defined as placing a message in a search engine which results to encourage certain clicks when a user types a specific keyword phrase on a website (Gregurec and Grd, 2012). Today, search engine marketing (SEM) is the fastest growing promotional instrument, and it is on its way to becoming many times more intensive and powerful than traditional media companies. The reason is that search engines act as a bridge between online shoppers and websites. They also act as a mediator between shoppers and websites. Which sites users will go to depends on the search engine optimization and marketing efforts of the site owners in this process (Spais, 2010). There are various ways to influence the results on search engines. By influencing these results, marketers can do SEO work to advance their products in organic advertisements, they can advertise using sponsored links (Bhandari and Bansal, 2018).

SEM is a tried-and-true method of increasing web traffic to your organization. It is a marketing approach that employs paid internet advertising to increase your company's rating in search engine results pages (SERPs). A search engine results page (SERP) is the page that shows when you input a phrase into a search engine such as Google or Yandex. By selecting properly researched keywords, SEM propels your firm to the top of search results. Pay-per-click (PPC) advertising is another term for search engine marketing. SEM and SEO are phrases that are occasionally used interchangeably. They do, however, represent two distinct facets of internet marketing. Advertising is frequently used in SEM strategies. SEO, or search engine optimization, employs organic methods to propel a website to the top of search engine results pages (SERPs). In this usage, "organic" denotes "free" (Aswani et al., 2018; Erdmann et al., 2022).

SEM is a type of digital marketing that aims to profit by promoting purchased links. To boost a website's exposure, SEM employs SEO techniques and pay-per-click (PPC) advertising. The capacity to sell items and raise income via PPC advertising on websites is one of the benefits of SEM. To increase a brand's, product's, or service's position in search engines and promote a website, SEM employs a range of methods such as keywords, sponsored links, SEO strategies, and one-click payment (PPC) (Hidayanto et al., 2012). SEO is the process of customizing features to increase a website's ranking or visibility in search engines. It is defined by SEO as a strategy that

employs data observation and marketing research to discover the best 'keyword' for the site, often known as 'keyword advertising'. As a result, selecting a good collection of keywords that may enhance the page rank of a certain website in various search engines is a critical component of a successful SEO (Hidayanto et al., 2012). SEM is an in-built method for increasing online activity. In the highly competitive digital marketplace arena, search engine marketing is a very relevant and responsible kind of marketing (Clarke et al., 2018).

3. METHODOLOGY

Systematic literature reviews, according to Littell, are "research on a specific subject that employs structured, transparent, and reproducible techniques at each step of the process" (Littell et al., 2008). This type of systematic review uses a basic methodology to synthesize and expand on a body of literature (Paul and Criado, 2020). Our research was classified as a method-based review after examining the classifications for systematic reviews of the literature proposed by Paul and Criado (2020).

To reveal out thematic similarities between studies, we used bibliographic coupling using VOSviewer software version 1.6.17 (Mas-Tur et al., 2020; Van Eck and Waltman, 2010). VOSviewer was created by Nees Jan van Eck and Ludo Waltman at Leiden University's Centre for Science and Technology Research (CWTS). Bibliographic consolidation is a method for measuring the similarity of two publications by using a list of common references. The larger the degree of overlap in the articles' bibliographies, the stronger the amount of relationship between the articles. Bibliographic consolidation does not need mass citations and may be used for newly published (uncited) works, emerging fields, and less developed subdomains (Zupic and Čater, 2015).

Cluster analysis is a method for "unsupervised" learning, which is the challenge of discovering organization in data without using a response variable. VOSviewer, by default, allocates nodes on a network to clusters. A cluster is a group of nodes that are connected in some way. Each network node is allocated to exactly one cluster. A resolution parameter determines the number of clusters. The more clusters there are, the higher the value of this parameter. The clustering approach uses direct citation linkages to establish the connectedness of articles. The ability to easily cluster a large number of articles is a significant advantage of employing direct citation connections (for example, tens of millions of posts) (Eck and Waltman, 2014).

The systematic literature review protocol carried out in the study is as follows:

In the first stage, in the Scopus database, the keyword "search engine marketing" was queried within the scope of "title", "abstract" and "keyword" by limiting the research article type and only to the articles written in English. The search was carried out at the end of October 2022 and 124 publications were identified. At this stage, the Web of Science (WOS) database was also queried with the same filters and 58 studies on the subject were reached. In the second stage, the articles obtained from Scopus and WOS databases were read and examined by the authors and the studies that were not relevant to the subject, whose full texts could not be reached, and which were identical to each other were identified. In the third stage, version 1.6.17 of the VOSviewer software was used for bibliographic aggregation and clustering was carried out within 132 studies. The values used in the program in this process are; Attraction 2, Repulsion 1 and Resolution 0.5. The research protocol is shown in Figure 1.

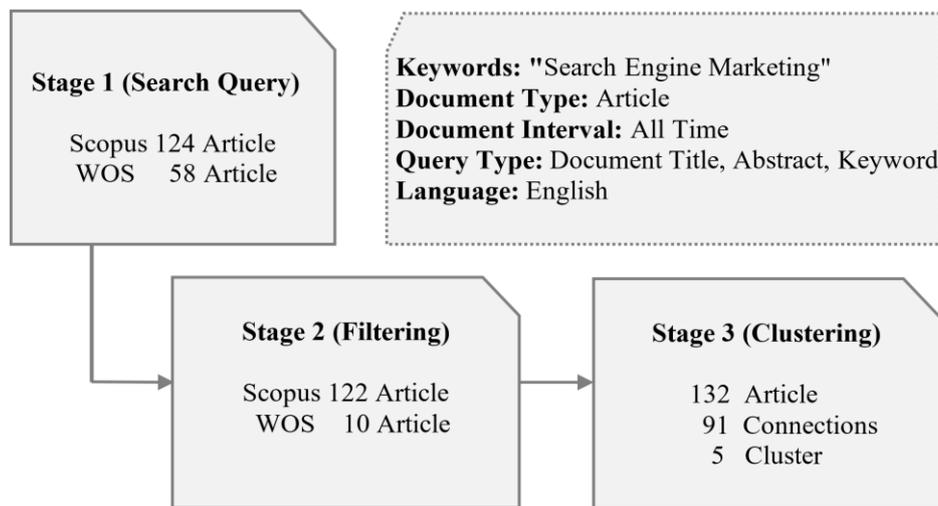


Figure 1. Protocol of the systematic literature review approach

Source: Created by the authors

VOSviewer has determined that 91 of these studies were related to each other and it has produced 5 clusters. All articles were analyzed irrespective of the number of citations. The process attributed a minimum of ten articles per cluster. The cluster network is shown in detail in Figure 2.

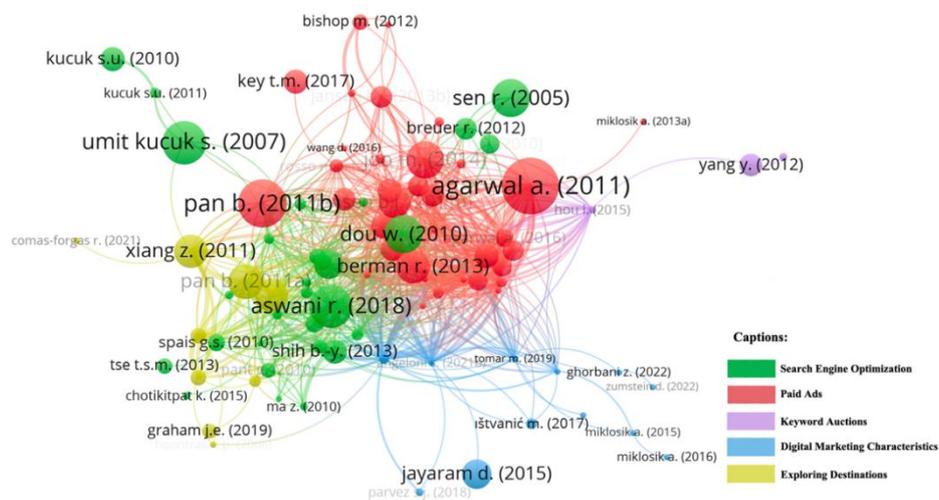


Figure 2. Cluster network of research trends in the sem

Source: Based on the bibliographic output from VOSviewer 1.6.17

4. RESEARCH FINDINGS

4.1. Descriptive analysis

When we examine the breakdowns of SEM studies by year (Figure 3 shows the trends and fluctuations in the number of articles published annually), it is seen that the first article was published in 2004 and the studies on the subject increased especially after 2009. Search Engine Marketing exhibits a tendency that is increasing and decreasing periodically. However, when we look at the trend of the last three years, it is possible to say that the number of studies exhibits an increasing trend. In the years when studies

began to emerge, especially how to establish an optimal strategy for search engine marketing (Hoontrakul and Sahadev, 2006; Murphy and Kielgast, 2008; Pan et al., 2007; Sen, 2005) emphasis was placed on the investigation of its possibilities. In addition to the studies on tourist destinations that started to increase in 2009 and later, the brand (Aggrawal et al., 2017) sponsored advertisements (Abhishek and Hosanagar, 2012; Agarwal et al., 2011b, 2015) the effectiveness of keywords (Abhishek and Hosanagar, 2007; Chen et al., 2009; Chen and Lang, 2004). In recent years, the future of search engines (Zumstein et al., 2022) marketplaces (Gazala Masood et al., 2023), SEO within the scope of sustainability (Bader et al., 2022; Kusno et al., 2022; Parmar et al., 2022; Roumeliotis et al., 2022). Within the scope of the functionality of search engine marketing, etc., studies are carried out on issues.

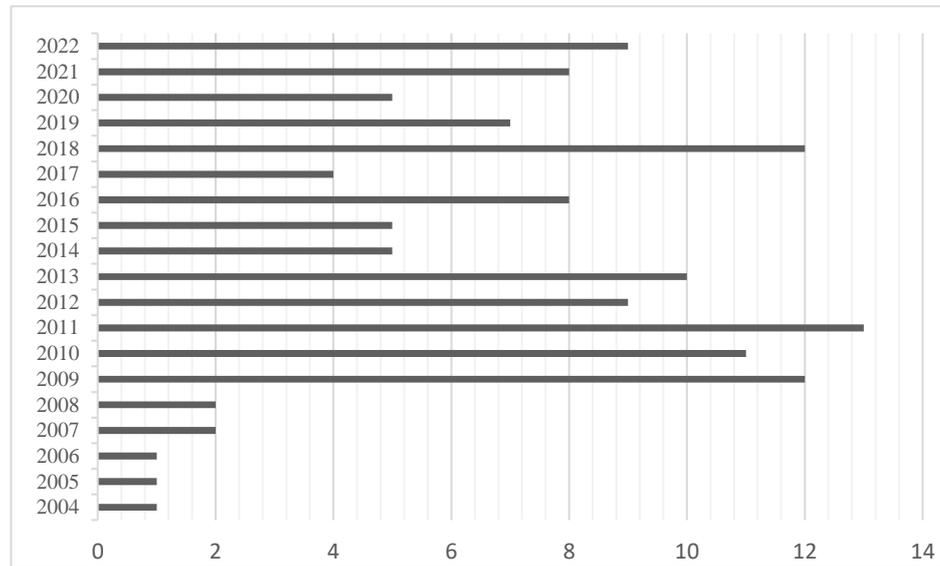


Figure 3. The number of scientific articles per year

4.2. Analysis of bibliographic coupling

4.2.1. SEO as a SEM tool ($n = 31$)

Nowadays we use the internet for many reasons. One of them is to search for topics of interest. Individuals use search engines as a gate to access to the internet (Dou et al., 2010). Since the emergence of search engines, the primary goal of websites has been to improve the value of the website and the number of visitors by ranking higher in search results. "Search Engine Optimization (SEO)" refers to the preparations performed for this aim (Patil Swati et al., 2013).

As part of the most important technical and internet marketing strategy in the SEM process, SEO can be used to increase a website's ranking and increase dominance on the web. All organizations, whether for-profit or non-profit, try to put themselves at the forefront with optimization efforts (McMahon and Griffy-Brown, 2009) SEO also helps with user-centered design and online consumer value (McMahon and Griffy-Brown, 2009), cost-effectiveness (Kennedy and Kennedy, 2008), brand value (Kucuk, 2011) in terms of how search algorithms work and being able to learn exactly what online customers are looking for (Olbrich et al., 2019) as online researchers search for information through search engines, marketers are taking interest in this topic to appeal to these potential customers because of the current engagement (Spais, 2010).

In the studies carried out, it has been shown that the order of display helps to shape brand perceptions and that relatively unknown brands can get ahead of known

brands with optimization techniques (Dou et al., 2010). It has been suggested that the weaker searchability of websites weakens the relationship between supplier and customer at the pre-purchase stage (Beldona et al., 2012; Giraldo-Romero et al., 2021). It is quite important to invest existing resources in the right website resources (Aswani et al., 2021). SEM has the potential to develop brand recognition and generate online sales since it may function up to 24 hours a day, seven days a week (Clarke et al., 2018). Online communities and opinion leaders play an important role in supporting consumers' purchasing decision or filtering their decisions. Companies that use SEO techniques can additionally get support from these leaders and increase the visibility of their sites (Kucuk and Krishnamurthy, 2007).

There are two techniques in SEO practice, white hat SEO and black hat SEO. White hat SEO (also called organic SEO) is a technique that involves no deception in the marketing strategy and is allowed by search engines. Search engines are the largest source for organic search (Aswani et al., 2021). White hat SEO mandates that the information indexed by a search engine be the same as the rest of the website's content. Black hat SEO, on the other hand, involves deception. For example, this may be a fraud by hiding sections of the text that are irrelevant to the rest of the website by using a font color comparable to the backdrop of the page. Search engines continue to index these concealed material (Clarke et al., 2018; Hidayanto et al., 2012; Kucuk, 2011).

Various plugins (Google Keyword, Metadata, Image Friendly, Google Insight, Wordpress Auto Tagger, Link Building) can be used in SEO studies. With these tools, web traffic can be increased, and performance in increasing web traffic can be evaluated. In this context, in a case study conducted with these plugins on three different websites (Chotikitpat et al., 2015; Clarke et al., 2018; Hidayanto et al., 2012; Karjaluo and Leinonen, 2009; Luh et al., 2016; Prawira and Rizkiansyah, 2018; Quinton and Khan, 2009).

A company needs to understand and adopt SEO efforts and the algorithms behind them in order to increase the discoverability of their websites and generate value (Kritzing and Weideman, 2013; Kucuk, 2011; Lim, 2009). Search engines have become a necessary and useful tool for people to find information and shop online. However, the search engine does not provide web searchers with any information about the websites that appear on the results pages and the credibility of a company that represents them. This information is critical because the seller credibility is a major concern for Web consumers (Ma et al., 2010; Ma et al., 2012; Sen, 2005). In addition to its numerous benefits, this side of optimization should not be overlooked.

4.2.2. Paid ads in SEM (n = 20)

Paid advertising is a type of internet marketing in which businesses advertise their services and products on search engine result pages. Sponsored ads are sometimes referred to as keyword advertising, pay-per-click advertising, and search engine advertising (Ištvančić et al., 2017; Jansen and Schuster, 2011; Kritzing and Weideman, 2013). Since its inception in 1998 (Fain and Pedersen, 2006) paid ads has evolved into the primary business model of the major search engines. (Jansen (Jansen and Mullen, 2008; Jansen et al., 2009). As such, key paid advertising has helped shape the nature of the web (Jansen and Schuster, 2011). The business models of the major Web search engines depend primarily on online advertising in the form of keyword advertising (Rosso and Janseny, 2010). Paid advertising efforts benefit searchers and potential consumers to find what they are looking for more effectively (Jansen et al., 2013; Liu and Toubia, 2018).

There are three different goals an advertiser can have for a particular keyword. Traffic growth, profit, and self-financing (Blankenbaker and Mishra, 2009). Search engine marketing is typically conducted as an independent activity that seeks to maximize their growing profits (Joo et al., 2016). The dominant paid advertising model is pay-per-click (PPC), where an advertiser pays the search engine only when a searcher

actually clicks on the displayed advertising hyperlink (Jansen et al., 2013; Liu and Toubia, 2018).

Search engines are becoming increasingly critical as vital bridges between businesses that utilize the internet to build their brand and their target customers as searches become more common. Compared to other digital advertising channels, search engine marketing is the most expensive for businesses. According to analysts, search engine marketing will eventually eat up a sizable portion of the digital advertising market, which is where e-commerce operations are expected to develop the fastest (Miklosik et al., 2020). Data from online searches can be used to forecast market outcomes. Understanding the dynamics of online search allows us to better understand how search data can be utilized to forecast new product sales and identify customer characteristics. Ad spend increases the tendency of searchers to search for brand-related keywords (Joo et al., 2016). It has been shown that paid ads and higher ranked ads provide better overall performance than ads in lower positions (Jansen et al., 2013). The use of paid advertising helps consumers make purchasing decisions (Bishop and Barber, 2012). When used effectively, this approach enables a company to save costs while generating higher revenues (Jansen et al., 2011).

4.2.3. Keyword auctions in SEM ($n = 17$)

Several search engines, especially Google, Yahoo!, and MSN, sell their ad content through auctions (Agarwal et al., 2015). Because keywords serve as a bridge between user searches and advertising communications, selecting the correct keywords is critical for effective paid search campaign management (Hou, 2015; Klapdor et al., 2014; Park and Agarwal, 2018). In keyword auctions (Abrams and Ghosh, 2007; Chen et al., 2006; Lahaie et al., 2007), advertisers bid on specific search keywords. Each keyword appears in one of the ad spaces on the search result page when a user searches for one of the keywords associated with their ad, provided that they bid more for that ad space than their competitors (Abou Nabout and Skiera, 2012; Agarwal et al., 2011a; Danak and Mannor, 2011; Kalyanam et al., 2018; Skiera et al., 2010). Organic links are prioritized based on their relevancy to the search query, whereas sponsored links are distributed to advertisers in a competitive keyword auction (Berman and Katona, 2013). The keyword auction offers good targeting, low cost, and easy scalability (Hou, 2015). Keyword choice and bidding are critical components of SEM campaign effectiveness (Jiang, 2018).

Leading positions in search results attract the attention of users and are therefore more preferred. At this time, it is sold to the highest (weighted) bidder. Because of this, higher bids lead to higher and, thus, more attractive rankings, more awareness, more clicks and consequently a higher number of earned customers. However, prices per click are also higher during these ranks, which leads to higher acquisition costs per customer (Skiera et al., 2010). Since budget decisions, keyword portfolio, and bid setting are important inputs in keyword auctions due to costs, how to allocate the limited budget rationally is an important issue (Abou Nabout and Skiera, 2012; Danak and Mannor, 2011; Yang et al., 2012).

Advertisers must constantly assess which keywords perform best (Skiera et al., 2010). For instance, if an advertiser chooses a term that is too broad to accurately address the user's information demand, the ad displayed will be less likely to be relevant to the user, resulting in a reduced reaction to the ad. Keywords including an advertiser's name have been proven to be accurate indicators of campaign effectiveness (Klapdor et al., 2014). Consumers perceive the links that appear at the top of the search results as a sign of the high quality of the brand (Agarwal and Mukhopadhyay, 2016). To attract consumers to a website, it is necessary to use better identified and competitive words (Ramaboa and Fish, 2018).

Keyword choosing and bidding are critical components of SEM campaign effectiveness. Managers must properly position themselves in order to maximize efficiency and gain from sponsored search campaigns. Retailers may boost impressions

in a variety of ways. They can raise the amount of sponsored and organic keywords they purchase, increasing the frequency with which their adverts show (Jiang, 2018).

4.2.4. Digital marketing characteristics of SEM (n = 13)

Product promotion, mostly through digital marketing, has become an increasingly crucial component in the new digital era. Traditional marketing is falling behind digital marketing, which provides people with new options such as tailored messaging or responses to search queries (Angeloni and Rossi, 2021b; Ištvančić et al., 2017; Jayaram et al., 2015; Miklosik, 2016; Tomar et al., 2019).

Digital marketing has changed the buying behavior of customers and provided various advantages to users. It allows consumers to have continuous information about the products or services of the companies, to be more interested in the activities of the companies, to get clearer information about the products or services, to increase their shopping convenience by comparing quality and cost between products. (Ištvančić et al., 2017; Jayaram et al., 2015). Pervasive digital media enables consumers to access information that has a significant impact on their purchasing decisions, anytime and anywhere. This convenience requires careful selection of marketing strategies used by the companies (Angeloni and Rossi, 2021a; Jayaram et al., 2015; Loosschilder et al., 2017).

Changes in consumer behavior in the digital world and the digital economy need to be understood by companies and marketing managers. People are using more digital devices to search for new products, compare and evaluate them, share ideas, seek other users' opinions, and/or finally buy a product service. People start searching on one device, continue on another, and in some cases end the search or purchase decision on a third device (Jayaram et al., 2015; Loosschilder et al., 2017; Miklosik, 2016).

In today's digital era, the importance of digital marketing has grown year after year as a means of informing, engaging, and selling services and products to clients. The evolution of digital marketing has altered how brands and businesses employ marketing technologies (Ghorbani et al., 2022). Digital marketing campaigns support user experience, search engine marketing, and the analysis and optimization of data-driven decisions (Jayaram et al., 2015; Zumstein et al., 2022). Search engine marketing is one of the most rapidly developing aspects of digital marketing. Auctions are used to sell available space for sponsored adverts or locations, and payment is computed depending on the amount of hits each place receives (Jayaram et al., 2015; Loosschilder et al., 2017; Parvez et al., 2018; Santos et al., 2022).

It is convincing that search engine marketing, regardless of type, affects not only online purchases, but purchases in general. It is advantageous for both the advertiser and the consumer if marketing managers provide good search engine visibility throughout and after the campaign (Jayaram et al., 2015; Loosschilder et al., 2017; Miklosik, 2016).

4.2.5. Use of SEM for exploring destinations (n = 10)

Search engines play an important role in linking the supply and demand for tourism by allowing tourists to access vast amounts of information online, resulting in upstream traffic. In this regard, search engines have emerged as a major technique for gaining access to travel items over the Internet (Eichhorn and Buhalis, 2011; Pan et al., 2011; Paraskevas et al., 2011). Computer science, information sciences, and consumer behavior are heavily used in research on search engines and information search. As a result, search engine marketing may be described as a sophisticated and dynamic process that necessitates a thorough grasp of how potential tourists utilize search engines as part of the travel planning process (Fesenmaier et al., 2011; Lewandowski, 2017). When looking for travel information, it is critical to understand the extent to which tourism websites are visible to travelers (Hoontrakul and Sahadev, 2006; Xiang and Law, 2013; Xiang et al., 2010).

Tourism firms and organizations are always competing with one another and with many other sources of information to gain the attention of internet consumers who are sifting through the massive quantity of information available online (Pan et al., 2011). With the increasing relevance of search in online trip planning, marketers must also better grasp the behavioral aspects of search engine use (Xiang and Pan, 2011). Previous product knowledge is one of the most extensively researched elements influencing travelers' information-seeking behavior. Previous product information and information kept in an individual's memory makes information processing faster and more effective since informed customers can focus on the pieces of information that are pertinent to the choice at hand (Comas-Forgas et al., 2021; Lu et al., 2022). One of the first stages in making a travel decision is to seek or collect information. It also effects on-the-spot decisions such as lodging, transportation, activities, and tour selection. "The purposeful activation of information held in memory or the collection of information from the environment," he (Fesenmaier et al., 2011) termed information search. Personal experiences relating to a specific or comparable place, as well as knowledge collected via a continuous quest for information, are examples of internal sources (Gursoy, 2003). Search is the process of retrieving information from memory. External information research entails acquiring market information (Xiang and Law, 2013).

Consumers' willingness to conduct external research before making a purchase is closely tied to the sort of goods they want to acquire. When choosing higher-priced, more prominent, and more sophisticated things, such as most travel and tourist products, consumers tend to make more external decisions (Gursoy, 2003). Travelers are not restricted to one source of information. Although travelers employ a variety of accessible information sources, they differentiate them in geographical, temporal, and operational dimensions. Travelers employ a limited number of information techniques, each with its own set of geographical, temporal, and operational aspects (Fodness and Murray, 1998). Travelers in the early stages of learning (low familiarity) are more inclined to make holiday selections based on external sources of information. As their familiarity with the product grows, their reliance on other sources of information reduces, as they tend to make their selections based on what they remember. However, as they study more (specialize), they recognize that they require more comprehensive knowledge to make holiday judgments, and as a result, they begin to seek extra external information to make holiday decisions (Gursoy, 2003).

5. DISCUSSION

Search engines are information systems used by Internet users to find information. The infrastructure required by search engine operators to deliver free search services is massive and costly. Sponsored search advertising is nearly the only source of money in such a circumstance to secure the provision of a free search service. Without sponsored search, search engines are unlikely to pay anything like its infrastructure in order to maintain this free service to online users (Jansen et al., 2009).

SEM is a form of digital marketing that aims to promote websites by increasing their visibility in SERPs through paid and free advertising (Wiid and van Rooyen, 2018a, 2018b). SEM consists of the direct use of search engines as a marketing and advertising platform (Jayaram et al., 2015; Loosschilder et al., 2017; Parvez et al., 2018; Santos et al., 2022; Wiid and van Rooyen, 2018b). This strategy is often useful when the name of the organization is unique or when there is a good competitive environment to sell products or services (Varma et al., 2020). The findings of this study supports this situation. The general focus of the studies associated with search engine marketing is that a business uses SEM as a marketing activity and makes this marketing process more effective through advertising (Bishop and Barber, 2012; Fain and Pedersen, 2006; Jansen et al., 2013; Jansen and Mullen, 2008; Jansen and Schuster, 2011; Jansen et al., 2009; Jayaram et al., 2015; Joo et al., 2016; Liu and Toubia, 2018; Loosschilder et al., 2017; Miklosik, 2016; Miklosik et al., 2020; Rosso and Janseny, 2010; Varma et al., 2020).

Since previous research show that users don't easily pay attention to the second and third results pages, it's important that a website be placed on the first page of the

SERPs (Lindsey, 2011; Luh et al., 2016). This implies that if an advertiser's website appears after the first page, it will most likely receive insufficient exposure to potential customers and will produce fewer website traffic. Search engine optimization (SEO) and pay-per-click (PPC) campaigns are two SEM digital marketing methods that may be used to increase website exposure and traffic (Juščius et al., 2016; Lindsey, 2011; Luh et al., 2016; Östberg and Bergström, 2016; Ramos and Cota, 2006).

Although keyword auctions, website optimization, sponsored advertisements and information search functions that are operationalized within the scope of information technologies find their place in the field of information technologies as structures that can be used separately, SEM is a synthesis digital marketing strategy that incorporates all these structures as an integrated system in terms of bringing these structures together to promote businesses in the online world.

6. CONCLUSION

The method that search engines like Google and Yandex crawl, index, and rank websites are continually being adjusted and changed. These changes cause difficulties for those in the industry to keep up with the latest trends and strategies. Understanding what the future holds for SEM is important for business owners and search engine marketing service providers who want to deliver consistent, long-term results for their customers.

The findings obtained regarding the SEM studies show that the studies carried out in this field generally focus on five basic structures. While "digital marketing" serves as a general framework for SEM as a marketing strategy, the "optimization", "sponsored ads", "keywords" and "information acquisition" sets constitute the sub-components of the SEM strategy, which is a component of this basic framework. Basically, SEO studies that serve to highlight the rankings of web pages on search result pages are grouped under the optimization set within the scope of SEM studies. In terms of marketing, it has been found that businesses, whether for profit or non-profit, want to give value for their customers online in addition to promoting the websites of their brands. These businesses help their clients to discover the value in a good or service by facilitating their access to the information they want more quickly and conveniently through the use of online techniques. It has been demonstrated that when you rank high in search result pages, even unknown brands can outperform popular brands. This finding demonstrates that optimization studies conducted within the scope of SEM can help businesses obtain a competitive advantage.

A company that targets profit maximization can achieve this goal with sponsored advertisements with SEM activities. As information seekers, consumers can access the products and services they are looking for through various keywords. The findings of SEM studies show that ad spend increases the tendency of searchers to search for keywords related to the brand. Consumers narrow their next searches accordingly with the keywords they see in the sponsored ads they encounter in their first search. It is possible to say that this makes it important for businesses to highlight the keyword that the consumer will encounter. In this way, consumers can be helped to make purchasing decisions with sponsored ads. A keyword that is in the consumer's mind can be used in the first search query for later purchases. This can help businesses achieve cost-savings by achieving economies of scale in the long term through the brand awareness they have created through sponsored ads.

Search engines are implementing sponsored ads to businesses through auctions that involve bidding on keywords. Keywords represent the connection between the consumer and the business. The selection of the right keywords within the scope of the SEM activities implemented by the enterprises to convey their products or services to consumers is very important for the success of sponsored ads. With a correctly applied strategy, consumers can perceive a brand that ranks high as better than other brands. This seems to be very important for businesses to manage a successful SEM process.

It is mentioned above that search engines used as an information search tool function as a means for operators to reach consumers within the scope of SEM activities. The first thing that comes to mind in relation to the search for information is that all kinds of information are searched with these tools. This is a true proposition. However, as a specific finding of this study, it is noteworthy that the SEM studies in the literature are concentrated in the studies on destination marketing including hotel enterprises within the scope of information search function.

At this point, it is possible to say that SEM will maintain its functionality in the future. Factors such as content quality, mobile, and artificial intelligence will all become key focal points over the next few years. The use of natural language processing will also become more widespread. For this reason, businesses should strictly follow these trends in the development of search engines and organize their search engine marketing efforts accordingly.

The study is limited in terms of the resources accessed. Until October 2022, 132 journal publications published in the field of SEM have been determined within this scope. There are a few suggestions that can be recommended as a topic selection for future studies. First, new approaches to search engine marketing can be studied, and new technologies and models for search engine marketing relationships can be developed. Additionally, optimization, paid ads, keyword auctions and information acquisition phenomena can be carried out to create a basic model for SEM. Search engine marketing applications on mobile platforms can be examined. It seems that if researchers make more efforts to conduct interdisciplinary studies by incorporating theories from other fields into the field of SEM research, the SEM literature can be further developed.

Information on Plagiarism

This article was scanned with plagiarism detection software. No plagiarism was detected.

Ethics Committee Approval Information

Ethics committee approval was not required.

Author Contribution Statement

The authors' contributions to this study are equal.

Funding Statement and other Acknowledgments

This study has not received any type of funding or support.

Competing Interests Statement

There is no conflict of interest to declare with any institution or person within the framework of the study.

REFERENCES

- Abhishek, V., & Hosanagar, K. (2007). Keyword generation for search engine advertising using semantic similarity between terms. Proceedings of the ninth international conference, Minneapolis, MN.
- Abhishek, V., & Hosanagar, K. (2012). Optimal bidding in multi-item multi-slot sponsored search auctions. 13th ACM Conference on Electronic Commerce, EC '12, Valencia.
- Abou Nabout, N., & Skiera, B. (2012). Return on Quality Improvements in Search Engine Marketing. *Journal of Interactive Marketing*, 26(3), 141-154. <https://doi.org/10.1016/j.intmar.2011.11.001>

- Agarwal, A., Hosanagar, K., & Smith, M. D. (2011a). Location, location, location: An analysis of profitability of position in online advertising markets. *Journal of Marketing Research*, 48(6), 1057-1073. <https://doi.org/10.1509/jmr.08.0468>
- Agarwal, A., Hosanagar, K., & Smith, M. D. (2011b). Sponsored search: Do organic results help or hurt the performance and under what conditions? 32nd International Conference on Information System 2011, ICIS 2011, Shanghai.
- Agarwal, A., Hosanagar, K., & Smith, M. D. (2015). Do organic results help or hurt sponsored search performance? *Information Systems Research*, 26(4), 695-713. <https://doi.org/10.1287/isre.2015.0593>
- Agarwal, A., & Mukhopadhyay, T. (2016). The impact of competing ads on click performance in sponsored search. *Information Systems Research*, 27(3), 538-557. <https://doi.org/10.1287/isre.2016.0637>
- Aggrawal, N., Ahluwalia, A., Khurana, P., & Arora, A. (2017). Brand analysis framework for online marketing: ranking web pages and analyzing popularity of brands on social media. *Social Network Analysis and Mining*, 7(1), Article 21. <https://doi.org/10.1007/s13278-017-0442-5>
- Angeloni, S., & Rossi, C. (2021a). An analytical model for comparing the profitability of competing online marketing channels: Search engine marketing versus e-commerce marketplace. *Journal of Marketing Theory and Practice*, 29(4), 534-549. <https://doi.org/10.1080/10696679.2021.1879656>
- Angeloni, S., & Rossi, C. (2021b). Online search engines and online travel agencies: A Comparative Approach. *Journal of Hospitality and Tourism Research*, 45(4), 720-749. <https://doi.org/10.1177/1096348020980101>
- Aravindhan, R., & Shanmugalakshmi, R. (2013). Comparative analysis of Web 3.0 search engines: A survey report. 2013 International Conference on Advanced Computing and Communication Systems,
- Aswani, R., Ghrera, S. P., Chandra, S., & Kar, A. K. (2021). A hybrid evolutionary approach for identifying spam websites for search engine marketing. *Evolutionary Intelligence*, 14(4), 1803-1815. <https://doi.org/10.1007/s12065-020-00461-1>
- Aswani, R., Kar, A. K., Ilavarasan, P. V., & Dwivedi, Y. K. (2018). Search engine marketing is not all gold: Insights from Twitter and SEOClerks. *International Journal of Information Management*, 38(1), 107-116. <https://doi.org/10.1016/j.ijinfomgt.2017.07.005>
- Bader, D. M., Aityassine, F. L., Khalayleh, M. A., Al-Quran, A. Z., Mohammad, A., Al-Hawary, S. I., & Alkhawaldah, R. A. (2022). The Impact of E-marketing on Marketing Performance as Perceived by Customers in Jordan. *Information Sciences Letters*, 11(6), 1897-1903. <https://doi.org/10.18576/isl/110605>
- Beldona, S., Lin, K., & Chen, M. (2012). Hotel trademarks in organic search: A longitudinal cross-national study. *Journal of Travel Research*, 51(2), 227-238. <https://doi.org/10.1177/0047287511400612>
- Berman, R., & Katona, Z. (2013). The role of search engine optimization in search marketing. *Marketing Science*, 32(4), 644-651. <https://doi.org/10.1287/mksc.2013.0783>
- Bhandari, R. S., & Bansal, A. (2018). Impact of search engine optimization as a marketing tool. *Jindal Journal of Business Research*, 7(1), 23-36.
- Bishop, M., & Barber, N. (2012). A market segmentation approach to esteem and efficacy in information search. *Journal of Consumer Marketing*, 29(1), 13-21. <https://doi.org/10.1108/07363761211193019>
- Blankenbaker, J., & Mishra, S. (2009). Paid search for online travel agencies: Exploring strategies for search keywords. *Journal of Revenue and Pricing Management*, 8(2-3), 155-165. <https://doi.org/10.1057/rpm.2008.64>
- Chen, J., Liu, D., & Whinston, A. B. (2006). Resource packaging in keyword auctions. 27th International Conference on Information Systems, ICIS 2006, Milwaukee, WI.
- Chen, J., Liu, D., & Whinston, A. B. (2009). Auctioning keywords in online search. *Journal of Marketing*, 73(4), 125-141. <https://doi.org/10.1509/jmkg.73.4.125>
- Chen, Z., & Lang, Y. (2004). Measuring topic bias in web search. Proceedings of the International Conference on Internet Computing, IC'04, Las Vegas, NV.

- Chotikitpat, K., Nilsook, P., & Sodsee, S. (2015). Techniques for improving website rankings with search engine optimization (SEO). *Advanced Science Letters*, 21(10), 3219-3224. <https://doi.org/10.1166/asl.2015.6503>
- Clarke, T. B., Murphy, J., Wetsch, L. R., & Boeck, H. (2018). TEACHING SEARCH ENGINE MARKETING THROUGH THE GOOGLE AD GRANTS PROGRAM. *Marketing Education Review*, 28(2), 136-147. <https://doi.org/10.1080/10528008.2018.1448282>
- Comas-Forgas, R., Morey-López, M., & Sureda-Negre, J. (2021). Advertising in Search Engines of the Spanish Contract Cheating Websites: Analysis of Traffic, Costs and Keywords. *Revista Espanola de Documentacion Científica*, 44(3), 1-15, Article e298. <https://doi.org/10.3989/REDC.2021.3.1767>
- Danak, A., & Mannor, S. (2011). A robust learning approach to repeated auctions with monitoring and entry fees. *IEEE Transactions on Computational Intelligence and AI in Games*, 3(4), 302-315, Article 5936110. <https://doi.org/10.1109/TCIAIG.2011.2160994>
- Dou, W., Lim, K. H., Su, C., Zhou, N., & Cui, N. (2010). Brand positioning strategy using search engine marketing. *MIS Quarterly: Management Information Systems*, 34(SPEC. ISSUE 2), 261-279. <https://doi.org/10.2307/20721427>
- Eck, N. J. V., & Waltman, L. (2014). Visualizing bibliometric networks. In *Measuring scholarly impact* (pp. 285-320). Springer.
- Eichhorn, V., & Buhalis, D. (2011). Accessibility: A key objective for the tourism industry. *Accessible tourism: Concepts and issues*, 46-61.
- Erdmann, A., Arilla, R., & Ponzoa, J. M. (2022). Search engine optimization: The long-term strategy of keyword choice. *Journal of Business Research*, 144, 650-662. <https://doi.org/10.1016/j.jbusres.2022.01.065>
- Fain, D. C., & Pedersen, J. O. (2006). Sponsored search: A brief history. *Bulletin-American Society For Information Science And Technology*, 32(2), 12.
- Fesenmaier, D. R., Xiang, Z., Pan, B., & Law, R. (2011). A framework of search engine use for travel planning. *Journal of Travel Research*, 50(6), 587-601. <https://doi.org/10.1177/0047287510385466>
- Fodness, D., & Murray, B. (1998). A typology of tourist information search strategies. *Journal of Travel Research*, 37(2), 108-119.
- Ghorbani, Z., Kargaran, S., Saberi, A., Haghighinasab, M., Jamali, S. M., & Ale Ebrahim, N. (2022). Trends and patterns in digital marketing research: bibliometric analysis. *Journal of Marketing Analytics*, 10(2), 158-172. <https://doi.org/10.1057/s41270-021-00116-9>
- Giraldo-Romero, Y. I., Pérez-De-los-cobos-agüero, C., Muñoz-Leiva, F., Higuera-Castillo, E., & Liébana-Cabanillas, F. (2021). Influence of regulatory fit theory on persuasion from google ads: An eye tracking study. *Journal of Theoretical and Applied Electronic Commerce Research*, 16(5), 1165-1185. <https://doi.org/10.3390/jtaer16050066>
- Gregurec, I., & Grd, P. (2012). Search Engine Optimization (SEO): Website analysis of selected faculties in Croatia. Proceedings of Central European Conference on Information and Intelligent Systems,
- Gursoy, D. (2003). Prior product knowledge and its influence on the traveler's information search behavior. *Journal of Hospitality and Leisure Marketing*, 10(3-4), 113-131.
- Hidayanto, A. N., Adha, M. S., Jiwanggi, M. A., & Melia, T. (2012). A study of impact of search engine optimisation to internet marketing strategy. *International Journal of Services, Economics and Management*, 4(4), 298-316. <https://doi.org/10.1504/IJSEM.2012.050950>
- Hoontrakul, P., & Sahadev, S. (2006). Morethailand.com: Online Travel Intermediary. *International Journal of E-Business Research (IJEER)*, 2(4), 94-114. <https://doi.org/10.4018/jebr.2006100106>
- Hou, L. (2015). A hierarchical bayesian network-based approach to keyword auction. *IEEE Transactions on Engineering Management*, 62(2), 217-225, Article 7031949. <https://doi.org/10.1109/TEM.2015.2390772>
- Ištvančić, M., Milić, D. C., & Krpić, Z. (2017). Digital marketing in the business environment. *International Journal of Electrical and Computer Engineering Systems*, 8(2), 67-75. <https://doi.org/10.32985/ijeces.8.2.4>

- Jansen, B. J., Liu, Z., & Simon, Z. (2013). The effect of ad rank on the performance of keyword advertising campaigns. *Journal of the American Society for Information Science and Technology*, 64(10), 2115-2132. <https://doi.org/10.1002/asi.22910>
- Jansen, B. J., & Mullen, T. (2008). Sponsored search: an overview of the concept, history, and technology. *International Journal of Electronic Business*, 6(2), 114-131.
- Jansen, B. J., & Schuster, S. (2011). Bidding on the buying funnel for sponsored search and keyword advertising. *Journal of Electronic Commerce Research*, 12(1), 1-18. <https://www.scopus.com/inward/record.uri?eid=2-s2.0-81255207503andpartnerID=40andmd5=d7a56865063adb03a757fcce713db87c>
- Jansen, B. J., Sobel, K., & Zhang, M. (2011). The brand effect of key phrases and advertisements in sponsored search. *International Journal of Electronic Commerce*, 16(1), 77-106. <https://doi.org/10.2753/JEC1086-4415160103>
- Jansen, B. J., Zhang, M., & Schultz, C. D. (2009). Brand and its effect on user perception of search engine performance. *Journal of the American Society for Information Science and Technology*, 60(8), 1572-1595. <https://doi.org/10.1002/asi.21081>
- Jayaram, D., Manrai, A. K., & Manrai, L. A. (2015). Effective use of marketing technology in Eastern Europe: Web analytics, social media, customer analytics, digital campaigns and mobile applications. *Journal of Economics, Finance and Administrative Science*, 20(39), 118-132. <https://doi.org/10.1016/j.jefas.2015.07.001>
- Jiang, P. (2018). Understanding the efficiency of keywords in search engine marketing – A comparison study using data envelopment analysis. *International Journal of Electronic Business*, 14(3), 273-292. <https://doi.org/10.1504/IJEB.2018.095980>
- Joo, M., Wilbur, K. C., & Zhu, Y. (2016). Effects of TV advertising on keyword search. *International Journal of Research in Marketing*, 33(3), 508-523. <https://doi.org/10.1016/j.ijresmar.2014.12.005>
- Juščiū, V., Labanauskaitė, D., & Baranskaitė, E. (2016). The Evaluation of online marketing channels efficiency in Lithuania. *Regional formation and development studies*, (2), 44-53.
- Kalyanam, K., McAteer, J., Marek, J., Hodges, J., & Lin, L. (2018). Cross channel effects of search engine advertising on brick and mortar retail sales: Meta analysis of large scale field experiments on Google.com. *Quantitative Marketing and Economics*, 16(1), 1-42. <https://doi.org/10.1007/s11129-017-9188-7>
- Karjaluoto, H., & Leinonen, H. (2009). Advertisers' perceptions of search engine marketing. *International Journal of Internet Marketing and Advertising*, 5(1-2), 95-112. <https://doi.org/10.1504/IJIMA.2009.021952>
- Kennedy, K., & Kennedy, B. B. (2008). A small company's dilemma: Using search engines effectively for corporate sales. *Management Research News*, 31(10), 737-745. <https://doi.org/10.1108/01409170810908499>
- Key, T. M. (2017). Domains of Digital Marketing Channels in the Sharing Economy. *Journal of Marketing Channels*, 24(1-2), 27-38. <https://doi.org/10.1080/1046669X.2017.1346977>
- Khanzode, C. A., & Sarode, R. D. (2016). Evolution of the world wide web: from web 1.0 to 6.0. *International journal of Digital Library services*, 6(2), 1-11.
- Killoran, J. B. (2013). How to use search engine optimization techniques to increase website visibility. *IEEE Transactions on professional communication*, 56(1), 50-66.
- Klapdor, S., Anderl, E. M., von Wangenheim, F., & Schumann, J. H. (2014). Finding the Right Words: The Influence of Keyword Characteristics on Performance of Paid Search Campaigns. *Journal of Interactive Marketing*, 28(4), 285-301. <https://doi.org/10.1016/j.intmar.2014.07.001>
- Kritzinger, W. T., & Weideman, M. (2013). Search Engine Optimization and Pay-per-Click Marketing Strategies. *Journal of Organizational Computing and Electronic Commerce*, 23(3), 273-286. <https://doi.org/10.1080/10919392.2013.808124>
- Kucuk, S. U. (2011). Towards integrated e-marketing value creation process. *Journal of Direct, Data and Digital Marketing Practice*, 12(4), 345-363. <https://doi.org/10.1057/ddmp.2011.3>

- Kumar, A. (2013). Search engine optimization (SEO): technical analysis concepts. *International Journal of Emerging Technology and Advanced Engineering*, 3(3), 123-128.
- Kusno, K., Deliana, Y., Sulistyowati, L., & Nugraha, Y. (2022). Determinant factors of online purchase decision process via social commerce: An empirical study of organic black rice in Indonesia. *International Journal of Data and Network Science*, 6(4), 1065-1076. <https://doi.org/10.5267/ijdns.2022.8.002>
- Lahaie, S., Pennock, D. M., Saberi, A., & Vohra, R. V. (2007). Sponsored search auctions. In *Algorithmic Game Theory* (Vol. 9780521872829, pp. 699-716). Cambridge University Press. <https://doi.org/10.1017/CBO9780511800481.030>
- Lewandowski, D. (2017). Users' understanding of search engine advertisements. *Journal of Information Science Theory and Practice*, 5(4), 6-25. <https://doi.org/10.1633/JISTaP.2017.5.4.1>
- Lim, M. (2009). Postmodern paradigms and brand management in the 'search' economy. *International Journal of Internet Marketing and Advertising*, 5(1-2), 4-16. <https://doi.org/10.1504/IJIMA.2009.021948>
- Lindsey, W. T. (2011). Vilazodone for the treatment of depression. *Annals of Pharmacotherapy*, 45(7-8), 946-953. <https://doi.org/10.1345/aph.1P772>
- Littell, J. H., Corcoran, J., & Pillai, V. (2008). *Systematic reviews and meta-analysis*. Oxford University Press.
- Liu, J., & Toubia, O. (2018). A semantic approach for estimating consumer content preferences from online search queries. *Marketing Science*, 37(6), 930-952. <https://doi.org/10.1287/mksc.2018.1112>
- Looschilder, G., Van Der Rest, J. P. I., Schwartz, Z., Cordella, P., & Sierag, D. (2017). From OTA interface design to hotels' revenues: The impact of sorting and filtering functionalities on consumer choices. *Journal of Revenue and Pricing Management*, 16(2), 125-138. <https://doi.org/10.1057/s41272-016-0074-9>
- Lu, Q., Yang, Y., & Huangfu, X. (2022). Traveler's Prior Knowledge And Search Advertising. *Tourism Analysis*, 27(3), 261-272. <https://doi.org/10.3727/108354222X16572285582868>
- Luh, C. J., Yang, S. A., & Huang, T. L. D. (2016). Estimating Google's search engine ranking function from a search engine optimization perspective. *Online Information Review*, 40(2), 239-255. <https://doi.org/10.1108/OIR-04-2015-0112>
- Ma, Z., Pant, G., & Sheng, O. R. L. (2010). Examining organic and sponsored search results: A vendor reliability perspective. *Journal of Computer Information Systems*, 50(4), 30-38. <https://www.scopus.com/inward/record.uri?eid=2-s2.0-77956605105andpartnerID=40andmd5=3249c545b3b3830ba8986ec5708bec31>
- Ma, Z., Sheng, O. R. L., Pant, G., & Iriberry, A. (2012). Can visible cues in search results indicate vendors' reliability? *Decision Support Systems*, 52(3), 768-775. <https://doi.org/10.1016/j.dss.2011.12.002>
- Mas-Tur, A., Kraus, S., Brandtner, M., Ewert, R., & Kürsten, W. (2020). Advances in management research: a bibliometric overview of the Review of Managerial Science. *Review of Managerial Science*, 14(5), 933-958.
- McMahon, D., & Griffy-Brown, C. (2009). Developing an effective and affordable search engine marketing strategy for nonprofits. *International Journal of Internet Marketing and Advertising*, 5(1-2), 113-130. <https://doi.org/10.1504/IJIMA.2009.021953>
- Miklosik, A. (2016). Search-centric approach to sustainability of academic marketing. *Economic Annals-XXI*, 156(1-2), 92-96. <https://doi.org/10.21003/ea.V156-0021>
- Miklosik, A., Kuchta, M., Hasprova, M., & Evans, N. (2020). Are Australian TV Advertisers Aware of Evolving Online Information Search Patterns? *IEEE Access*, 8, 143066-143075, Article 9162021. <https://doi.org/10.1109/ACCESS.2020.3014310>
- Murphy, H. C., & Kielgast, C. D. (2008). Do small and medium-sized hotels exploit search engine marketing? *International Journal of Contemporary Hospitality Management*, 20(1), 90-97. <https://doi.org/10.1108/09596110810848604>
- Olbrich, R., Bormann, P. M., & Hundt, M. (2019). Analyzing the click path of affiliate-marketing campaigns: Interacting effects of affiliates' design parameters with Merchants' search-engine advertising. *Journal of Advertising Research*, 59(3), 342-356. <https://doi.org/10.2501/JAR-2018-043>

- Pan, B., Litvin, S. W., & O'Donnell, T. E. (2007). Understanding accommodation search query formulation: The first step in putting 'heads in beds'. *Journal of Vacation Marketing*, 13(4), 371-381. <https://doi.org/10.1177/1356766707081013>
- Pan, B., Xiang, Z., Law, R., & Fesenmaier, D. R. (2011). The dynamics of search engine marketing for tourist destinations. *Journal of Travel Research*, 50(4), 365-377. <https://doi.org/10.1177/0047287510369558>
- Paraskevas, A., Katsogridakis, I., Law, R., & Buhalis, D. (2011). Search engine marketing: Transforming search engines into hotel distribution channels. *Cornell Hospitality Quarterly*, 52(2), 200-208. <https://doi.org/10.1177/1938965510395016>
- Park, C. H., & Agarwal, M. K. (2018). The order effect of advertisers on consumer search behavior in sponsored search markets. *Journal of Business Research*, 84, 24-33. <https://doi.org/10.1016/j.jbusres.2017.11.003>
- Parmar, P., Ryu, J., Pandya, S., Sedoc, J., & Agarwal, S. (2022). Health-focused conversational agents in person-centered care: a review of apps. *npj Digital Medicine*, 5(1), Article 21. <https://doi.org/10.1038/s41746-022-00560-6>
- Parvez, S. J., Moyeenudin, H. M., Arun, S., Anandan, R., & Janahan, S. K. (2018). Digital marketing in hotel industry. *International Journal of Engineering and Technology(UAE)*, 7, 288-290. <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85082352171andpartnerID=40andmd5=a40eb13ca2c6ce0300854befaead67e4>
- Patil Swati, P., Pawar, B., & Patil Ajay, S. (2013). Search engine optimization: A study. *Research Journal of Computer and Information Technology Sciences*, 1(1), 10-13.
- Paul, J., & Criado, A. R. (2020). The art of writing literature review: What do we know and what do we need to know? *International Business Review*, 29(4), 101717.
- Prawira, I., & Rizkiansyah, M. (2018). Search engine optimization in news production online marketing practice in Indonesia online news media. *Pertanika Journal of Social Sciences and Humanities*, 26(T), 263-270. <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85064504704andpartnerID=40andmd5=adb1bed76a268fb568b50bc0ffcd2a61>
- Quinton, S., & Khan, M. A. (2009). Generating web site traffic: A new model for SMEs. *Direct Marketing*, 3(2), 109-123. <https://doi.org/10.1108/17505930910964777>
- Ramaboa, K. K. K. M., & Fish, P. (2018). Keyword length and matching options as indicators of search intent in sponsored search. *Information Processing and Management*, 54(2), 175-183. <https://doi.org/10.1016/j.ipm.2017.11.003>
- Ramos, A., & Cota, S. (2006). *Insider SEO and Ppc: Get your Website to the Top of the Search Engines*. Jaico Publishing House.
- Rosso, M. A., & Janseny, B. J. (2010). Brand names as keywords in sponsored search advertising. *Communications of the Association for Information Systems*, 27(1), 81-98. <https://doi.org/10.17705/1cais.02706>
- Roumeliotis, K. I., Tselikas, N. D., & Nasiopoulos, D. K. (2022). Airlines' Sustainability Study Based on Search Engine Optimization Techniques and Technologies. *Sustainability (Switzerland)*, 14(18), Article 11225. <https://doi.org/10.3390/su141811225>
- Santos, M. V. B., Mota, I., & Campos, P. (2022). Analysis of online position auctions for search engine marketing. *Journal of Marketing Analytics*. <https://doi.org/10.1057/s41270-022-00170-x>
- Saura, J. R., Palacios-Marqués, D., & Barbosa, B. (2022). A review of digital family businesses: setting marketing strategies, business models and technology applications. *International Journal of Entrepreneurial Behaviour and Research*. <https://doi.org/10.1108/IJEER-03-2022-0228>
- Sen, R. (2005). Optimal search engine marketing strategy. *International Journal of Electronic Commerce*, 10(1), 9-25. <https://doi.org/10.1080/10864415.2005.11043964>
- Shih, B. Y., Chen, C. Y., & Chen, Z. S. (2013). An empirical study of an internet marketing strategy for search engine optimization. *Human Factors and Ergonomics In Manufacturing*, 23(6), 528-540. <https://doi.org/10.1002/hfm.20348>

- Shivalingaiah, D., & Naik, U. (2008). Comparative study of web 1.0, web 2.0 and web 3.0.
- Skiera, B., Eckert, J., & Hinz, O. (2010). An analysis of the importance of the long tail in search engine marketing. *Electronic Commerce Research and Applications*, 9(6), 488-494. <https://doi.org/10.1016/j.elerap.2010.05.001>
- Spais, G. S. (2010). Search Engine Optimization (SEO) as a dynamic online promotion technique: The implications of activity theory for promotion managers. *Innovative Marketing*, 6(1), 7-24. <https://www.scopus.com/inward/record.uri?eid=2-s2.0-79954506727andpartnerID=40andmd5=f03148bf7378df5f5ec4626daecd728e>
- Tesfom, G., Birch, N. J., & Culver, J. N. (2018). Do Mobile Phone Service Consumers in the US Have Media Preference as Their Source of Information on Competing Mobile Phone Service Plans? *Journal of Promotion Management*, 24(4), 578-599. <https://doi.org/10.1080/10496491.2017.1380107>
- Tomar, M., Pandey, A. K., Ahuja, V., & Bansal, S. (2019). How does e-marketing influence consumer's decision? A descriptive review. *Journal of Advanced Research in Dynamical and Control Systems*, 11(8 Special Issue), 2665-2680. <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85078619685andpartnerID=40andmd5=070801f35323e9be7758fa22ae6410fd>
- Umit Kucuk, S., & Krishnamurthy, S. (2007). An analysis of consumer power on the Internet. *Technovation*, 27(1-2), 47-56. <https://doi.org/10.1016/j.technovation.2006.05.002>
- Van Eck, N., & Waltman, L. (2010). Software survey: VOSviewer, a computer program for bibliometric mapping. *scientometrics*, 84(2), 523-538.
- Varma, M., Dhakane, N., & Pawar, A. (2020). Evaluation of impact of instagram on customer preferences: The significance of online marketing. *International Journal of Scientific and Technology Research*, 9(2), 548-554. <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85079647514andpartnerID=40andmd5=1c1ef4d6562d66e165fbc6ad7b2602cd>
- Wiid, J. A., & van Rooyen, N. (2018a). The use of AdWords - A contributor or an inhibitor of marketing success? *African Journal of Hospitality, Tourism and Leisure*, 7(4). <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85056516715andpartnerID=40andmd5=2007831e0f5ce09d28972d28a1eb41bf>
- Wiid, J. A., & van Rooyen, N. (2018b). Who uses Adwords in overnight accommodation establishments? *African Journal of Hospitality, Tourism and Leisure*, 7(5). <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85058120155andpartnerID=40andmd5=4929f111809f9ed9c080a197e3c6f1c2>
- Xiang, Z., & Law, R. (2013). Online Competitive Information Space for Hotels: An Information Search Perspective. *Journal of Hospitality Marketing and Management*, 22(5), 530-546. <https://doi.org/10.1080/19368623.2012.671563>
- Xiang, Z., & Pan, B. (2011). Travel queries on cities in the United States: Implications for search engine marketing for tourist destinations. *Tourism Management*, 32(1), 88-97. <https://doi.org/10.1016/j.tourman.2009.12.004>
- Xiang, Z., Pan, B., Law, R., & Fesenmaier, D. R. (2010). Assessing the visibility of destination marketing organizations in google: A case study of convention and visitor bureau websites in the United States. *Journal of Travel and Tourism Marketing*, 27(7), 694-707. <https://doi.org/10.1080/10548408.2010.519672>
- Yang, Y., Zhang, J., Qin, R., Li, J., Wang, F. Y., & Qi, W. (2012). A budget optimization framework for search advertisements across markets. *IEEE Transactions on Systems, Man, and Cybernetics Part A: Systems and Humans*, 42(5), 1141-1151, Article 6095652. <https://doi.org/10.1109/TSMCA.2011.2172418>
- Zumstein, D., Brauer, C., & Zelic, A. (2022). Benefits, challenges and future developments in digital analytics in German-speaking countries: An empirical analysis. *Applied Marketing Analytics*, 7(3), 246-259. <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85125323281andpartnerID=40andmd5=dc062777fab4d771bea9aab96a06ff6a>
- Zupic, I., & Čater, T. (2015). Bibliometric methods in management and organization. *Organizational research methods*, 18(3), 429-472.