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Study of Digital Marketing in Tourism and Hospitality Industry: A Literature Search Using the Keyword Co-Occurrence Mapping Network

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Abstract

Digital marketing is essential to the travel and hospitality industries. These days, it's a helpful tool for creating digital brand names and attracting and retaining clients. It has been demonstrated that using digital technology to implement marketing strategies, such as influencer marketing, social media marketing, and search engine optimization, benefits businesses. Through the process of monitoring customer behavior and assessing their preferences, digital marketing allows businesses to offer personalized and engaging content that encourages online referrals. Digital technology must be included into a number of sectors, including operations, services, communications, revenue management, distribution, and marketing, for the industry to be stimulated and reinvigorated. Hotel businesses need to reevaluate their current economic models and embrace digital marketing as an essential tool if they are to expand. The aim of the current research is to search the keywords in the database dimensions and creating co-occurrence mapping using VOSviewer software. Finally, the importance of digital marketing in tourism and hospitality industry is researched using research database and presented using term co-occurrence mappings.

Keywords: Digital marketing, hospitality industries, customer behavior, benefits businesses.

INTRODUCTION

Digital marketing is a communication channel that focuses on particular audiences and enables real-time measurement and response. It makes use of digital technologies to connect with and interact with consumers, but it also poses difficulties in terms of managing information flow and possible rivalry. Using direct communication channels, digital marketing seeks to build a brand identity and draw in new customers. In today's engagement-focused market, organizations must adopt digital marketing methods in order to succeed.

Types of Digital Marketing

Digital marketing is the use of a variety of techniques and approaches to advertise goods, services, or brands via electronic media. Mobile marketing, social network marketing, using Facebook, Twitter, and Instagram, search engine optimization (SEO), pay-per-click advertising (PPC), social media marketing, email marketing, content marketing, and affiliate marketing are a few of the forms of digital marketing that are covered in the abstracts. These tactics seek to connect with a certain audience, encourage behaviors like buying a product or subscribing to a newsletter. Digital marketing gives companies of all sizes the opportunity to become more visible, connect with more clients, and eventually boost sales.

Tourism and Hospitality Industry

The tourist and hospitality sector contributes significantly to the global economy by creating jobs, opening up investment opportunities, and earning foreign exchange. The sector does, however, also have to contend with issues like the harm that waste and excessive resource usage due to the environment. The hospitality industry is becoming more and more dependent on circular economy and sustainable

development strategies to address these problems. Furthermore, the COVID-19 pandemic has had a significant effect on the sector, emphasizing the significance of crisis resilience and mitigation plans for firms in the hospitality and tourism sectors. Moreover, the industry stands to benefit from the potential for improved decision-making, customer experience, and service innovation with the adoption of AI technology. In general, the tourist and hospitality sectors' future depends on their ability to embrace technology, measure sustainability performance, and comprehend the traits of crisis-resilient firms.

Importance of Digital marketing in Tourism and Hospitality Industry

Digital marketing is essential for the travel and hospitality sectors in the digital age since it enables firms to interact and communicate with potential clients. Digital platforms like social media, SEO, and influencer marketing can help hotels and other tourism-related businesses attract and retain customers. Using digital marketing strategies, companies may promote their goods and services, enhance their websites and content, and analyze customer behavior and comments. In today's digital economy, digital marketing is becoming an essential instrument for expanding markets and fostering consumer loyalty, creating new opportunities for business growth. The COVID-19 pandemic has highlighted the importance of digital marketing, leading to a quick shift in marketing strategies toward digital. Generally speaking, digital marketing is essential to the tourism and hospitality industries for attracting new customers, retaining current ones, and adapting to changing market conditions. Thanks to modern innovations, travelers can now visit new locations. It is up to the traveler to choose their mode of transportation.

Digital marketing is quite beneficial to the hotel industry because it provides a range of strategies for attracting and retaining customers. For the travel and tourist industry, digital marketing is essential. Achieving a balance between digital and conventional marketing is crucial. Digital marketing is advised for client loyalty and market expansion. It's critical to monitor the immediate results of digital marketing. Digital technologies and marketing are helpful tools for growing a business in the travel and hospitality industry. Reactivity, adaptability, dynamism, accessibility, and engagement are essential elements of marketing strategies in the digital economy.

Technology is being embraced by the travel and hospitality industries. For corporate leadership stories, resilience in leadership is crucial. Digital marketing plays a significant role in increasing the promotion of tourism. A range of digital marketing tools are used by travelers to research possible tourism destinations. Absence of research on the application of digital marketing to encourage environmentally friendly travel - An integrated conceptual framework has been suggested for additional investigation. Thanks to digital tools, the hospitality and tourism industry is growing quickly. - Three significant trends are digital marketing, self-booking, and the online travel sector. The main objective of tourism websites should be to maintain the interest of visitors. Personalized content and user interaction are essential for e-WOM.

The way that travel and hospitality are advertised has been completely transformed by social media and digital marketing. Travel influencers are crucial for promoting travel and hospitality. The travel and hospitality industries depend heavily on digital technologies. Numerous digital technologies are used in the sector. Digital marketing outperforms traditional marketing in terms of success. Digital marketing makes it easier to understand customer needs and preferences. Digital tourism boosts earnings and improves the quality of services. - New digital channels for businesses involved in travel. Given the significance of having a digital presence, the tourism industry needs to go through a rapid digital shift. Digital marketing tools for travel-related firms are recommended. The tourist sector must be flexible and ever-evolving.

Digital customer networks impact consumer decisions and perceptions. Customer service is enhanced and consumers are efficiently reached by digital marketing. For the tourism industry, digital marketing is essential. - Digital marketing can help the tourism industry overcome obstacles during the COVID-19 pandemic. Data mining and digital marketing have a significant impact on the potential of digital approaches in the tourism industry because of the dynamic nature of customer demands. Digitization helps businesses become more flexible and responsive. Social networking, the sharing economy, and customer reviews all have a favorable and substantial impact on the research question. Personalized offers and procedure charges are useful and may become practical in the future, albeit they do not materially alter this study.

Important factors influencing the preferences of travelers are the importance of digital marketing to the travel industry. The digital revolution in travel logistics offers a new means of communication between service providers and consumers. Customizing services is essential for gaining a competitive edge in the tourism sector. E-marketing has changed the travel and tourism sector, and digital marketing broadens your reach. The development of tourism can be divided into two main stages: innovation and digitalization. New technical conditions have brought about a revolution in both information technology and tourism research. The study provides a methodology for examining how e-marketing is used in the tourism industry. The aim of this study is to analyze the factors and complexity that affect e-marketing adoption.

Convergent mobile technologies, Google AdWords, affiliate marketing, email marketing, SEA, SEM, SEO, and social media marketing are the top online marketing platforms. The emphasis now is on SMEs, B2B marketing, and agribusiness instead of MNCs, the software sector, and construction. Travel and digital marketing could form a strategic alliance that could propel the tourism sector forward. Digital marketing is leading to the emergence of intelligent tourism ecosystems." Companies in the travel and tourism sector can expand and overcome challenges by using a thorough, strategic approach to digital marketing. The importance of mobile-friendly applications and websites in drawing in younger users the way millennials use technology and social media has an impact on the travel business. Digitalization has brought about a significant upheaval in the tourism industry. Achieving broad reach necessitates proficient digital marketing.

The expansion and development of the travel and tourism industry depends heavily on digital marketing. Digital marketing strategies should be used by travel firms to attract and retain customers. Younger tourists are driving the tourism industry's technological advancements. Digitalization is the driving force behind significant developments in the travel industry. "Digital technologies offer opportunities for value growth and capture. Digital strategies can improve the marketing, distribution, and promotion of tourism destinations. - Actions have the power to increase awareness of a destination by influencing management and planning. The development of digital technologies has a significant impact on tourism. The digital transformation brings with it both advantages and disadvantages.

Low-cost, effective marketing products that enhance hotel websites and boost sales. The recommendation of certain measures to assess successful digital marketing tactics in travel-related venues Digital technologies have a big influence on how well tourists are served by customer service representatives. - Tourism service companies must welcome customer participation if they hope to achieve or surpass their clients' expectations. The digital revolution has had a big impact on the travel and tourism sector. Technological developments will keep having an impact on the tourism industry. Digital marketing is an essential part of international communication and marketing. New technology has changed the way customers think and act.

Travelers go to social media and online gurus for advice. Digital technology have had a major impact on activities related to tourism. Modern reservation systems are currently operational. The travel and tourism industry has seen a change because to digital technology. - In the digital age, time management skills are critical. Digital marketing has changed business tactics and affected industries. - Traditional and digital marketing are not the same. ICT is essential for SMEs in the tourism industry to differentiate themselves from competitors. - Understanding the needs and competitors in the market should be the cornerstone of every value proposition.

The variable of digital marketing tools has a 75.2% influence on tourists' interest in visiting. The impact of digital technology on the decision-making of tourists. putting all application types under the "travel" heading. To remain competitive, the tourism industry must embrace e-commerce and digital marketing, and adapt to new approaches to sales and promotion. The tourism business has the potential to benefit from digitalization through higher sales, the sharing economy, and reduced process costs. It was found that social media, client testimonials, and tailored offers—the other potential drivers—had no discernible impact.

RESEARCH OBJECTIVE
1. To conduct a keyword search in database dimensions
2. To create a map by term co-occurrence in software VOSviewer

METHODOLOGY
Numerous research studies have made use of techniques for term co-occurrence analysis with VOSviewer software and keyword search employing dimension databases. For instance, VOSviewer was used to examine bibliographic networks and show interactions between keywords and authors in the study on emerging infections by Shkola *et al.*, This analysis provided insights into the mechanisms influencing the development of emergent diseases. Vo also worked on a project using Latent Semantic Indexing (LSI) and investigated novel methods for LSI computation in higher dimensions. The intention was to enable search engines to rank documents according to the unique meaning of multi-word phrases and to extend the use of LSI to higher dimensions. Desiana and Soebagyo also utilized VOSviewer to examine data on impromptu group discussions in math classes, finding themes and chances for additional research. These studies show that VOSviewer software and dimension databases work well for term co-occurrence analysis and keyword search across a range of study topics.

### *1. Keyword search in dimension database*
A dimension database, like Dimensions, integrates many forms of data, such as grants, patents, publications, citations, and clinical data, to solve a range of research-related issues. Its goal is to build an all-encompassing representation of research objects in a heterogeneous network together with their relationships. Text mining and machine learning approaches are used to extract and standardize data from many sources in order to do this. In the context of data warehouses, the database facilitates data management and processing by allowing users to access and evaluate this integrated information. It offers a centralized platform for finding

and accessing research outputs, including funding, publications, citations, clinical trials, and patents. The availability of these databases makes it possible to

conduct in-depth analysis of publication information and looks at trends in the collaboration and area of study over time.

Table and figure showing publications in years

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Publications (total)	0	0	4	3	0	6	4	5	9	8
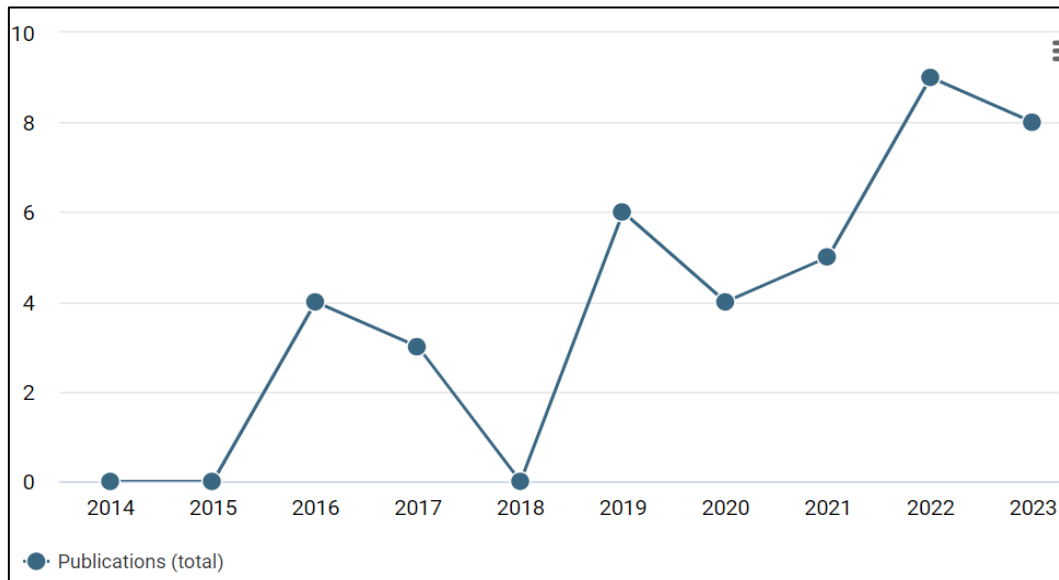
Source: Dimensions.ai

Findings from Dimension database
- Highest number of publication in the year 2022, i.e. 9 publications
- 8 publications in 2023
- 6 publications in 2019
- 5 publications in 2021
- 4 publications in 2016 and 2020
- 2014, 2015 and 2018 are the years with no publications

Thus the dimensions database keyword shows that the initial years have less publication compared to the recent years in the field of hospitality and tourism industry that shows more publication can be done in the industry and there is a lot of research gap for the researchers in this industry.

2. Term co-occurrence in VOSviewer
For the examination of keyword co-occurrence, VOSviewer software is utilized. By examining the co-occurrence of terms in pertinent literature, it assists in identifying hotspots and future prospects for research in a given topic. Text keyword extraction based on Word2Vec and word co-occurrence, CO_2 capture absorbers, depression during the COVID-19 pandemic, and keyword expansion utilizing mass diffusion are only a few of the investigations that have used the program. The process entails applying diffusion or clustering algorithms, building a word network based on co-occurrence associations, and extracting final or extended keywords. When VOSviewer is used instead of alternative statistical or graph-based methods, the findings demonstrate increased accuracy and performance.

Terms in occurrence more than 5 times

S. No	Term	Occurrences >5	Relevance
1	Study	34	0.24
2	technology	17	0.33
3	sector	16	0.65
4	Tourism industry	15	0.34
5	Hospitality industry	15	0.46
6	service	15	0.44

S. No	Term	Occurrences >5	Relevance
7	perspective	13	0.25
8	process	13	0.72
9	paper	13	0.86
10	journal	12	0.26
11	strategy	12	0.66
12	customer	11	0.38
13	consumer	11	0.23
14	platform	11	1.55
15	destination	10	0.18
16	experience	10	0.30
17	country	10	0.68
18	innovation	10	1.26
19	method	10	1.20
20	Tourism research	9	0.30
21	purpose	9	1.55
22	guest	9	1.22
23	literature	9	1.28
24	Social medium	8	0.16
25	case	8	0.24
26	trend	8	0.85
27	http	8	0.77
28	context	8	0.25
29	finding	8	0.20
30	tourismo	7	1.85
31	understanding	7	0.70
32	International journal	6	0.34
33	annal	6	0.34
34	mouth	6	0.14
35	Social network	6	0.23
36	type	6	0.42
37	view	6	0.49
38	need	6	0.62
39	implication	6	0.55
40	Information technology	6	0.51
41	email	6	3.08
42	pesquiasa	6	1.96
43	basis	6	2.29
44	analise	6	1.96

Terms in occurrence equal to 5 times

S. No	Term	Minimum Occurrence =5	Relevance
1	abstract	5	1.79
2	Digital marketing	5	0.87
3	person	5	1.05
4	Key word tourism	5	1.87
5	Communication technology	5	2.50
6	brasil	5	3.42
7	curriculo	5	3.42
8	avaliado	5	3.18
9	Sau paulo	5	3.42
10	Tourism management	5	0.82
11	discussion	5	0.30
12	respondent	5	0.09
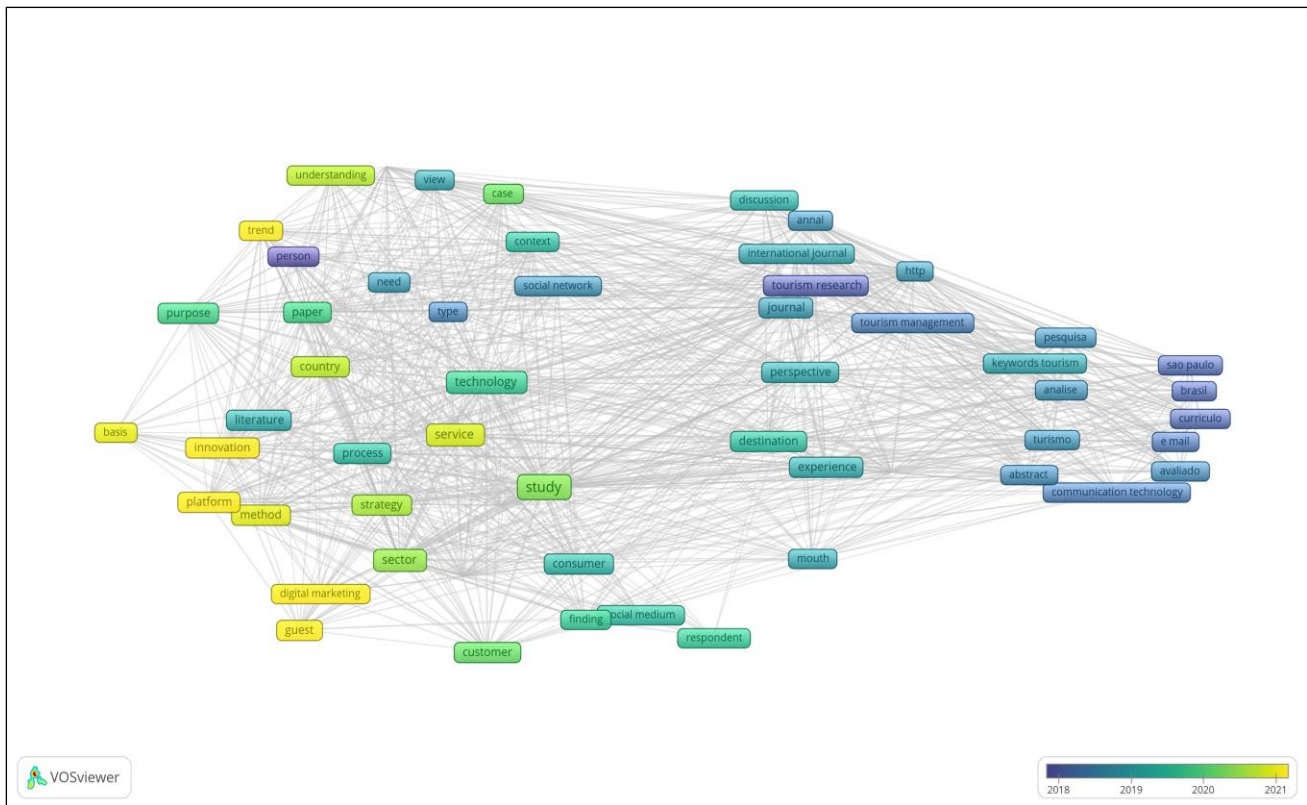
Source: VOSviewer software

Findings from VOSviewer
- A network Map is created by inserting text data, which is RIS format.
- Terms are extracted from Title and abstract from the paper.
- Binary counting method has been used for minimum occurrences of term is 5, out of the 5408 terms, 93 terms meet the threshold.
- For each of 93 terms, a relevance score will be calculated.
- Based on this score, the most relevant terms will be selected. The default choice is to select the 60% most relevant terms.56 number of terms to be selected.
- From the term co-occurrence mapping in VOSviewer software 2 clusters has been formed.
- The terms are classified into 2 tables,
- The first table contains the 44 terms which are occurring more than 5 times
- The second table contains the 12 terms which are occurring 5 times.

CONCLUSION

Companies can use it to entice and retain customers, monitor their online activity, and assess their feedback and inclinations. The use of digital technologies and marketing strategies including influencer, content, social media, and search engine optimization are now essential to the industry's expansion. With the incorporation of digital tools and applications in operations, services, communications, revenue management, distribution, and marketing, the sector has transformed into a technology-enabled service industry. Digital marketing also helps in building a digital brand identity and attracting new clients by leveraging huge data from social media and websites. It provides hotel companies with the opportunity to reevaluate their present business strategies and accelerate their expansion through the application of effective digital marketing strategies. Taking everything into account, digital marketing is critical to the growth, sustainability, and revitalization of the travel and hospitality industry.

REFERENCES

- Guzel, A., Musina., Aigul, Akhmadiyeva., Aliya, Alimovna, Atazhanova. (2023). Key trends of digitalization in the tourism industry. Вестник БИСТ, doi: 10.47598/2078-9025-2023-1-58-28-34
- Rahul, Bhandari. (2023). Optimizing Digital Marketing in Hospitality Industries. doi: 10.33050/sabda.v2i1.263
- Dr., Nikhil, S. (2023). Revolutionizing Travel and Tourism: Exploring the Role of Digital Marketing in Todays Landscape. International Journal For Science Technology And Engineering, doi: 10.22214/ijraset.2023.49652
- Manuela, Mece. (2023). Tourism Industry "prefers" Digital Marketing. International journal of scientific

and research publications, doi: 10.29322/ijsrp.13.05.2023.p13752

- Natalia, Balatska., Larysa, Radkevych., Yurii, Robul., Olga, Vdovichena., A., Strenkovska. (2022). Digital Technologies and Digital Marketing: New Opportunities for Tourism and Hospitality Business. 6(47):424-432. doi: 10.55643/fcaptp.6.47.2022.3924

- Sarna, S., & Tyagi, A. (2023). Transforming the Hospitality and Tourism Industry: A New Paradigm Shift of Leadership Approach. In *Leadership Approaches in Global Hospitality and Tourism* (pp. 179-198). IGI Global. doi: 10.4018/978-1-6684-6713-8.ch010

- Musliha., Hendri, Hermawan, Adinugraha. (2022). Digital marketing in tourism destinations. Jurnal ekonomi dan bisnis Airlangga, 32(2):130-137. doi: 10.20473/jeba.v32i22022.130-137

- Eliyas, Ebrahim, Aman., Árpád, Papp-Váry. (2022). Digital Marketing as a Driver for Sustainable Tourism Development. Multidiszciplináris kihívások, sokszínű válaszok, 3-33. doi: 10.33565/mksv.2022.02.01

- Antonina, Verhun. (2022). Digital Tools for the Development of the Hospitality and Tourism Industry in the Context of a Digitized Economy. Economic Affairs, 67(4s) doi: 10.46852/0424-2513.4s.2022.20

- Damianos, P., Sakas., Dimitrios, Reklitis., Marina, C., Terzi., Costas, Vassilakis. (2022). Multichannel Digital Marketing Optimizations through Big Data Analytics in the Tourism and Hospitality Industry. Journal of Theoretical and Applied Electronic Commerce Research, 17(4):1383-1408. doi: 10.3390/jtaer17040070

- Richard, George. (2021). Digital Marketing in Tourism and Hospitality. 369-415. doi: 10.1007/978-3-030-64111-5_12

- Elena, Yurievna, Nikolskaya., Elena, Vadimovna, Zakharova., Dmitriy, Valerievich, Galkin., Natalia, Iosifovna, Kovaleva., Nataliia, Alekseevna, Panova. (2021). The Impact of Digital Technologies on the Transformation of the Tourism and Hospitality Industry. 11(4):623-632. doi: 10.47059/REVISTAGEINTEC.V11I4.2133

- Helena, Zentner., Mario, Spremić. (2021). Typology of Digital Business Models in Tourism. International Journal of E-services and Mobile Applications, 13(2):21-42. doi: 10.4018/IJESMA.2021040102

- Chayanan, Kerdpitak. (2021). Digital Marketing And Technology Innovation On Tourism Business Performance. doi: 10.5281/ZENODO.4918302

- I, V, Barashok., L, L, Rudenko., E, V, Shumakova., Iu, V, Orlovskaia. (2021). Digitization: New possibilities for the Tourism industry. 666(6):062059-. doi: 10.1088/1755-1315/666/6/062059

- Richa, Mishra., M., Sajnani., Prashant, Gautam. (2021). Understanding the Need for Faster Digital Transformation in Tourism as a Result of Growing Technology Usage among the Tourists. Turkish Online Journal of Qualitative Inquiry, 12(7):813-824.

- V., Svitlychna. (2021). Overcoming crisis phenomena of tourism enterprises through application of modern marketing technologies. 2(162):105-111. doi: 10.33042/2522-1809-2021-2-162-105-111

- Teresa, Dieguez., Nguyen, Thi, Ly., Luís, Pinto, Ferreira., Francisco, Silva. (2021). Digital Customer Network Strategy Influences on Hotel Business. 420-431. doi: 10.1007/978-3-030-78170-5_36

- Luzia, Arantes., Bruno, Sousa. (2021). Digital Marketing and Tourism : Case Study Applied to Barcelos. doi: 10.23919/CISTI52073.2021.9476556

- Felix, Hafner., Ralf-Christian, Härting., Raphael, Kaim. (2020). Potentials of digital approaches in a tourism industry with changing customer needs – a quantitative study. 21:553-557. doi: 10.15439/2020F102

- Ralf-Christian, Härting., Marcel, Bäuerle., Kevin, Bilge., Lisa, Fleischer., Nadja, Landgraf., Marcel, Wicher. (2021). Potentials of Digital Business Models in Tourism—A Quantitative Study. 311-321. doi: 10.1007/978-981-16-2994-5_26

- Mbarek, Rahmoun., Yasser, Baeshen. (2021). Marketing Tourism in the Digital Era and Determinants of Success Factors Influencing Tourist Destinations Preferences. 16(1):163-181. doi: 10.24191/APMAJ.V16I1-07

- E., V., Arbatskaya., L., V., Khoreva., V., V., Shcherbakov. (2020). Shared Use of Digital Logistics Services by Consumers and Manufacturers of Tourist Services. Economics and Management, 26(3):255-263. doi: 10.35854/1998-1627-2020-3-255-263

- Natalia, Nikolaevna, Natocheeva., Liliya, Shayakhmetova., Aigul, Bekkhozhaeva., Nazgul, Khamikhan., Dolores, Pshembayeva. (2020). Digital Technologies as a Driver for the Development of The Tourism Industry. 159:04002-. doi: 10.1051/E3SCONF/202015904002

- Chandra, Sekhar, Patro. (2021). Digital Tourism: Influence of E-Marketing Technology. 234-254. doi: 10.4018/978-1-7998-7095-1.CH014

- Maiya, Suyunchaliyeva., Nazym, Shedenova., Beket, Kazbekov., Sandygul, Akhmetkaliyeva. (2020). Digital Economy: Information Technology and Trends in Tourism. 159:04029-. doi: 10.1051/E3SCONF/202015904029

- Giancarlo, Fedeli. (2020). Marketing visitor attractions in the digital age: a study of the e-marketing adoption in the visitor attraction sector. 19-25.

- Zurina, Patrick., Ong, Choon, Hee. (2020). A Bibliometric Analysis of Global Online Marketing

Research Trends. The International Journal of Academic Research in Business and Social Sciences, 10(5):770-787. doi: 10.6007/IJARBSS/V10-I5/7248

- Alejandra, Vera, González., Juan, Carlos, Ortíz, Navarro., Andrés, Mauricio, Mantilla, Fuentes., Guido, Marcelo, Salazar, Lozada., Olivia, del, Pilar, Espinosa, Ochoa. (2019). Digital Marketing as a Promotional Tourism Strategy in Ecuador. A Systematic Mapping. International journal of business and social science, 10(7) doi: 10.30845/IJBSS.V10N7P12

- B.S., Gunarekha., Binoy, T., A. (2018). Digital marketing transformation for the smart tourism ecosystem: a study. Journal of emerging technologies and innovative research, 5(12):216-222-216-222.

- Ioannis, Komodromos. (2019). New generation of consumers in the tourism industry: Secondary Research.

- Swetha, K.H. (2018). Digitalization in Travel Agency and Tour Operations. Journal of emerging technologies and innovative research, 5(12):94-97-94-97.

- Gunjan, Gupta. (2019). Inclusive Use of Digital Marketing in Tourism Industry. 411-419. doi: 10.1007/978-981-13-3329-3_38

- Phanos, Matura. (2018). Digital Marketing Mix Strategies in the Tourism Industry in Zimbabwe: A Masvingo Tourism Destination Perspective. International Journal of Engineering and Management Research, 8(6):211-219. doi: 10.31033/IJEMR.8.6.22

- Tonino, Pencarelli., Linda, Gabbianelli., Elisabetta, Savelli. (2021). The tourist experience in the digital era: the case of Italian millennials. Sinergie Italian Journal of Management, 38(3):165-190. doi: 10.7433/S113.2020.10

- Nataraja, T., C., Mahesh., R. (2018). An Overview of Digital Transformation Initiatives in Tourism, Aviation and Hospitality Industry. Journal of emerging technologies and innovative research, 5(12):55-68-55-68.

- Thays, Cristina, Domareski, Ruiz., Franciele, Cristina, Manosso., Gisah, Moreira, Akel., Eduardo, Henrique, Moscardi. (2019). Estratégias de marketing digital: uma análise dos destinos turísticos. 12(26):34

- Snezhinka, Konstantinova. (2019). Digital transformation in tourism. 35(1):188-193.

- Shaik, Javed, Parvez., H., M., Moyeenudin., Sija, Arun., R, Anandan., Senthil, Kumar, Janahan. (2018). Digital marketing in hotel industry. International journal of engineering and technology, 7:288-290. doi: 10.14419/IJET.V7I2.21.12383

- Cristina, Callejón-Gómez., María-Mercedes, Rojas-de-Gracia. (2021). Digital Marketing Best Practices for Management in Tourism Destinations. 182-198. doi: 10.4018/978-1-7998-7095-1.CH002

- Abdullah, Promise, Opute., Bridget, Irene., Gervsius, Iwu. (2020). Tourism Service and Digital Technologies: A Value Creation Perspective. 9(2):1-18.

- Nikmah, Suryandari. (2020). Digital Revolution and the Development of Tourism Business. 308-328. doi: 10.2991/ASSEHR.K.200325.025

- Mahmoud, Alghizzawi. (2019). The role of digital marketing in consumer behavior: A survey. 3(1)

- Slađana, Starčević., Snežana, Konjikušić. (2018). Why millenials as digital travelers transformed marketing strategy in tourism industry. 3(1):221-240.

- M.S., Shmarkov., L.I., Shmarkova., E.A., Shmarkova. (2019). Digital technologies in the organization and management of tourist organizations. 98-101. doi: 10.2991/MTDE-19.2019.18

- Tanaya, Majumder. (2019). Tourism in the Digital ERA. 01(06):01-07. doi: 10.35337/EIJFMR.2019.1601

- Gurneet, K. (2017). The importance of digital marketing in the tourism industry. *International Journal of Research,* 5(6):72-77. doi: 10.29121/GRANTHAALAYAH.V5.I6.2017.1998

- Juan, Carlos, Bocarando, Lara., Juan, Carlos, Pérez, García., Catalina, Ovando, Chico. (2017). Tourism SMEs in a Digital Environment: Literature Review. European Scientific Journal, ESJ, 13(28):429-429. doi: 10.19044/ESJ.2017.V13N28P429

- Ina, Heliany. (2019). Wonderful Digital Tourism Indonesia Dan Peran Revolusi Industri Dalam Menghadapi Era Ekonomi Digital 5.0. 1(1):21-35. doi: 10.31334/JD.V1I1.551

- Renata, Bitkulova. (2017). Digital marketing in travel industry. Case: Hotel landing page optimization.

- Klaasvakumok, J., Kamuri., Merlyn, Kurniawati. (2020). The Influence of Digital Marketing Tools on Tourist Visiting Interest to Fatukopa Hill, TTS Regency. 392-396. doi: 10.2991/AEBMR.K.201212.055

- Svetlana, Bozhuk., Natalya, Pletneva., Tatiana, Maslova., Konstantin, Evdokimov. (2020). Problems of transformation in the tourism industry in the digital economy. 73:01003-. doi: 10.1051/SHSCONF/20207301003

- Sandro, Carvalho., João, Vidal, Carvalho. (2020). The Implications of Digital Marketing and e-Commerce in the Tourism Sector Growth. 161-170. doi: 10.1007/978-981-15-2024-2_15

- Ralf-Christian, Härting., Christopher, Reichstein., René, Haarhoff., Nina, Härtle., Jürgen, Stiefl. (2019). Driver to Gain from Digitalization in Tourism—Insights from South African Experts. 293-306. doi: 10.1007/978-981-13-1165-9_26

- Qiannan, Fu., Jiahao, Ge., Yanhua, Xu., Xiaoyu, Liang., Yu-Peng, Yu., Suqin, Shen., Yan, Ma.,

Jianzhen, Zhang. (2022). The evolution of research on depression during COVID-19: A visual analysis using Co-Occurrence and VOSviewer. Frontiers in Public Health, 10 doi: 10.3389/fpubh.2022.1061486

Liu, Hanlin., Liu, Bin. (2023). Analysis of Relevant Studies Involving CO_2 Capture Absorber Based on VOSviewer. doi: 10.57237/j.wjese.2023.02.004

Li, Xiaofei., Liu, Jiawen., Han, Guang. (2018). Text keyword extraction method based on combination of Word2Vec and word co-occurrence.

Xicheng, Yin., Hongwei, Wang., Pei, Yin., Hengmin, Zhu., Zhenyu, Zhang. (2020). A co-occurrence based approach of automatic keyword expansion using mass diffusion. Scientometrics, 124(3):1885-1905. doi: 10.1007/S11192-020-03601-7

XU, Shao-hua. (2009). A Method of Automatic Keyword Extraction based on Co-occurrence Model. Transactions of Shenyang Ligong University,

Wang, Fuping., Zhai, Xiaoqing., Yang, Sheng., Chen, Naishuai., Sun, Qian. (2021). Dimension data processing method and apparatus, computer device, and storage medium.

Dimensions, Resources. (2019). A Guide to the Dimensions Data Approach. doi: 10.6084/M9.FIGSHARE.5783094.V7

Wang, Fuping., Zhai, Xiaoqing., Yang, Sheng., Chen, Naishuai., Sun, Qian. (2020). Dimension data processing method and device, computer equipment and storage medium.

(2023). Generating large-scale network analyses of scientific landscapes in seconds using Dimensions on Google BigQuery. doi: 10.48550/arxiv.2301.10736

Susilowati, E., Andayani, S., Suryaningrum, D. H., Ardiyanti, A., Rahayu, I. Y., Kurniawan, C. C., ... & Putri, A. F. (2022). Bibliometric analysis of ethics and online learning using VOSviewer Software. *Asian Journal of Research in Education and Social Sciences*, 4(3), 137-150. doi: 10.55057/ajress.2022.4.3.14

Ihor, Shkola., M., I., Andriichuk., Alina, Petruniok. (2022). Using VOSviewer to analyze articles, indexing in pubmed database, about emerging infections. 134(4):53-61. doi: 10.32345/usmyj.4(134).2022.53-61

Mong-Hang, Vo. (2006). Automatic Extraction of Keywords and Co- occurrence Keyword Sets.

Margherita, Corniani. (2006). Digital Marketing Communication. 2(2):41-61. doi: 10.4468/2006.2.04CORNIANI

Iris, Itzel, Curiel, Jiménez., Ana, Laura, Hernández, Barreto., Janik, Pérez, Granados., Carlos, Abraham, Almazan, Guzman. (2022). Marketing Digital. doi: 10.23882/eb.22.7377

Paulo, Falcão, Alves. (2022). Marketing Digital. Tepexi boletín científico de la escuela superior tepeji del río, 9(17):51-53. doi: 10.29057/estr.v9i17.8077

Pritibala, Sudhakar, Ingle., Anita, Desai., Ravikant, D., Kale. (2020). Digital Marketing: An Overview. 68(30):3645-3649.

Javier, de, Esteban, Curiel., Arta, Antonovica., Gurel, Cetin. (2023). Characteristics of crises resilient organizations in the hospitality and tourism industry. International Journal of Contemporary Hospitality Management, doi: 10.1108/ijchm-12-2022-163073.

Tairan, Kevin, Huang. (2023). Roboethics of tourism and hospitality industry: A systematic review. PLOS ONE, 18(6):e0287439-e0287439. doi: 10.1371/journal.pone.0287439

Irene, Voukkali., Iliana, Papamichael., Pantelitsa, Loizia., Antonis, A., Zorpas. (2023). The importance of KPIs to calibrate waste strategy in hospitality sector. Energy nexus, 11:100211-100211. doi: 10.1016/j.nexus.2023.100211

Dr., Abdul, Majeed. (2023). Management of Hospitality Industry: The Indian Perspective. International Journal For Science Technology And Engineering, 11(3):517-521. doi: 10.22214/ijraset.2023.49472

Mariana, N. (2023). Hospitality, Hotels and Housekeeping, doi: 10.23912/9781911635543-5498

A, Asifulla. (2023). Characteristics of the Digital Marketing using IBM SPSS Statistics. 2, 2(2):46-55. doi: 10.46632/jbab/2/2/6

Adya, Utami, Syukri., Andi, Nonong, Sunrawali. (2022). Digital marketing dalam pengembangan usaha mikro, kecil, dan menengah. Kinerja: Jurnal Ekonomi dan Manajemen, 19(1):170-182. doi: 10.30872/jkin.v19i1.10207

Nurjanah., Siti, Endah, Wahyuningsih. (2023). Digital marketing : kegiatan pemasaran atau promosi brand produk melalui internet atau media sosial. Jurnal daya mas : media komunikasi dan informasi hasil pengabdian dan pemberdayaan masyarakat, 8(1):8-12. doi: 10.33319/dymas.v8i1.101

Yogesh, Kumar, Swami, -. (2023). Why Every Business Needs a Digital Marketing Strategy. International Journal For Multidisciplinary Research, 5(1) doi: 10.36948/ijfmr.2023.v05i01.1805

R., Angel, Rosario., Roshini, R.., Vidhya, Pillai. (2022). A Study on Digital Marketing and Its Types: A Deep Review of Pros and Cons. Integrated Journal for Research in Arts and Humanities, 2(4):140-145. doi: 10.55544/ijrah.2.4.76

Natalia, Balatska., Larysa, Radkevych., Yurii, Robul., Olga, Vdovichena., A., Strenkovska. (2022). Digital Technologies and Digital Marketing: New Opportunities for Tourism and Hospitality Business. 6(47):424-432. doi: 10.55643/fcaptp.6.47.2022.3924

- Manuela, Mece. (2023). Tourism Industry "prefers" Digital Marketing. International journal of scientific and research publications, 13(5):409-421. doi: 10.29322/ijsrp.13.05.2023.p13752
- Damianos, P., Sakas., Dimitrios, Reklitis., Marina, C., Terzi., Costas, Vassilakis. (2022). Multichannel Digital Marketing Optimizations through Big Data Analytics in the Tourism and Hospitality Industry. Journal of Theoretical and Applied Electronic Commerce Research, 17(4):1383-1408. doi: 10.3390/jtaer17040070
- (2023). Transforming the Hospitality and Tourism Industry. Advances in hospitality, tourism and the services industry (AHTSI) book series, 179-198. doi: 10.4018/978-1-6684-6713-8.ch010
- Lubov, V., Krylova., Anatolij, Kulbida. (2022). Digital marketing in the hospitality industry. 401-407. doi: 10.33920/igt-2-2206-05
- Desiana, D., & Soebagyo, J. (2022). Bibliometric Analysis of the Spontaneous Group Discussion Method of Learning Mathematics Using Vosviewer Software. Jurnal Paedagogy, 9(3), 345-353.