

Combining Social Media and Digital Tourism: Bibliometric Analysis

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Abstract

Over the past decade, social media and digital tourism have been a highly debated topic. Subsequent enquiries have encompassed a multitude of supplementary aspects. The main aim of this study is to analyse potential research areas in social media and digital tourism and identify developing themes, trends and future research areas. The study uses bibliometric analysis to examine the literature using the VOS viewer. The database for the current research was created using Scopus. The main areas of interest in social media and digital tourism research were hospitality industry, digitalisation, digital transformation, digital tourism, e-tourism, digital economy, digital marketing, destination marketing, social media marketing, electronic word of mouth, online reviews, user generated content, behavioural intentions, customer satisfaction, sustainability, digital museum, digital media, digital services, social media, Facebook, integrated communication technology, augmented reality, digital technology, technology acceptance model, theory of affordances, theory of planned behaviour, smart destination and tourism. During the study period, there was a steady rise in research on social media and digital tourism. The future research can be conducted by joining social media with hospitality, banking and healthcare sectors.

Key words: Social Media, Digital Tourism, Bibliometric Analysis.

INTRODUCTION

The last three decades have increasingly observed digitalisation in almost all industries (Pearson et al., 2023). The tourism and travel industry is not immune to the expansion of the online travel market and the rising demand for digital travel services. The online tourism agencies such as Tripadvisor, Airbnb, and MakeMyTrip allow users to plan their journeys and book travel trips (Anuj et al., 2023). Modern information and technology communications allow consumers to do more technological activities. These may include using a smartphone app to locate new tourist attractions, check into a hotel room, or virtual tours of the location or room the tourists wish to visit or stay in. According to Statista's Digital Market Outlook, sales through travel apps are projected to increase by 0.8 billion U.S. dollars between 2023 and 2027 (Statista, 2023).

Tourism is one of the first to adopt new technologies and concepts (Aria & Cuccurullo, 2017). Social media networks have aided the tourism industry in improving tourist experiences all over the world (Deb et al., 2022). Regarding tourists and social networks, it is intriguing that nearly 85 percent of millennials plan their travels based on the social posts of others (Socialinsider, 2023a). Whereas, according to Socialinsider (2023b), 43% of people will not go on vacation if they are not confident that their followers will see their holiday posts, while 34% will reserve a hotel based on user-generated content. People from around the world continue to discuss their travel plans and experiences on social media. Each week in 2019, social media users sought one million travel-related hashtags (Ruiz et al., 2018). The social media usage increased by 72% during the pandemic, as it became integral to tourism businesses' operations (Pachucki et al., 2022). According to Aljumah et al., (2022), the marketing strategies of travel agencies, hotels, travel agents, and online travel agencies have also undergone fascinating changes. The average interaction rate in the travel industry remains the highest on Instagram, at 1.41 percent (Madureira, & Alturas, 2022). Twitter's engagement rate is 0.04%, while TikTok's rate is 8.74% and Facebook's rate is 0.27%. The fact that more people are responding to travel-related postings on TikTok suggests that the tourism industry may be able to profit in the future from this social media platform (Machirori, 2023). Li et al. (2020) reported that the number of internet users in Japan amounts to 14.2 million individuals, whereas in Taiwan, the figure reaches 70 million. The online presence of millennials has been extensively documented, thus establishing a strong connection between their online activities and their involvement in the tourist sector (Roziqin et al., 2023).

It seems that social media has a pivotal role in tourism. Numerous scholarly articles have been written and published over time regarding the topic of digital tourism. Such studies focused on new data analysis methodologies (Palomoa et al., 2017), social media (Ortega et al., 2018) mobile devices (Mehraliyev et al., 2019), mobile technology (Chen et al., 2020) in tourism. There is a lack of evidence in the research conducted on social media and digital tourism together in the form of bibliometric analysis. Hence, bibliometric analysis is an excellent method to learn about the scientific output, linkages, sources, authors, their affiliations and countries, co-occurrence, cooperation, emerging trends, and future directions in the field of social media and digital tourism (Gläser & Laudel, 2015). This bibliometric study is intended to aid academicians, practitioners, and collaborators in future research. The objectives of this study include; to identify the leading

countries of digital tourism and social media research; to identify the leading authors of digital tourism and social media research and; to explore the global trends in digital tourism and social media research. In addition, this bibliometric study has been divided into various sections. The first section provides background information about the importance of social media, its use in the tourism industry and the rise of digital tourism, along with research questions. The first section also contains a review of past bibliometric studies related to our topic to assess the need for more research. The second section provides a literature review of social media and digital tourism. The third section concerns the methodology adopted for the current study to address the research questions. The fourth section presents and discusses the bibliometric findings, followed by a conclusion and limitations.

LITERATURE REVIEW

Social Media

Social media comprises a variety of technologies, which allow users to share information and ideas. More than 4.7 billion people use social media platforms such as Instagram, YouTube, Facebook, X platform (formerly Twitter), which makes it almost 60% of the world's population. In 2023, 94.8% of people accessed websites, messaging and chat apps (Ortiz-Ospina, & Roser, 2023). A recent study revealed that nearly 80% of airline marketers initiate paid advertising campaigns on Facebook (Kitsios et al., 2022). This is done, among other reasons, to reach more people and increase appointments. Social media significantly influences tourism (Lei et al., 2023). The best method to comprehend is to learn what individuals do before moving. This environment, where travellers are encouraged to explore a tourist area and submit their photographs and videos, was created with the help of social media (Gaffar et al., 2022). According to Hospitalitynet (2023), 32% of millennials and 30% of Gen Z believe that direct company engagement is the most essential factor when purchasing (Firman et al., 2023). Today, travel companies use social media tools to enhance customer service and be accessible 365 days a year. Social media has afforded individuals the opportunity to learn more about the locations they visit. A tourist spends an average of 400 seconds online before reserving a hotel room. Approximately 90% of those seconds are devoted to mobile experiences (Hospitalitynet, 2023).

Digitalisation in Tourism

According to Camilleri (2018), the internet enables individuals to access information, make choices, and create and disseminate content that has the potential to alter perceptions of a particular location. Almeida et al. (2020) proposed the establishment of a new digital tourist ecosystem characterised by sustainability and ethical practices. Digitalisation involves converting analogue processes and data into machine-readable representations (OECD, 2020). According to BBC (2020), digital transformation has encompassed all aspects of the tourism sector, from corporate operations and travel sales to service delivery, information searches, online itinerary planning, and post-trip client engagement. The sharing economy is being catalysed, leading to the dissolution of barriers, fostering hyper-personalisation, transforming the practices of location marketing, and fostering social cohesion. An increase in profitability within the airline, travel, and tourist industries would result in a commensurate rise in their whole market valuation, potentially

reaching a substantial sum of 305 billion USD (UNWTO, 2020). UNWTO (2020) further reported that international visitors increased from 1,408 million in 2018 to 1,458 million in 2019. There has been a 3.5% rise.

Digital technologies are employed within the "digital tourism" domain to enhance the tourist experience (Adeola & Evans, 2019). In areas of branding, market research, and consumer interaction, e-commerce, and digital marketing are primarily the focus of research. Despite this, the tourism industry is undergoing a significant transformation due to the widespread use of the internet and mobile devices. In recent years, direct connections between consumer and supplier channels have become more common (Wang et al., 2018). The phenomenon known as "digital amnesia" occurs when people become engrossed in their digital devices, significantly affecting society. To effectively coordinate their travel itineraries, retain their reservation details, or exchange photographs with acquaintances, individuals need consistent communication (Greenwood & Quinn, 2017). There is a significant latent opportunity for future travel service providers to allocate resources towards the incorporation, integration, and utilisation of digital technologies to improve consumer experiences.

Digital Tourism

Wu (2020) pointed out that digital tourism encompasses an information service system constructed upon networks, technologies, and databases. According to Ziyadin et al. (2018), the process involves the execution of complex activities, including but not limited to formulating plans, conducting surveys, and assessing the various resources available for tourism. The auxiliary service facilities of significance include several aspects, such as land utilisation at different levels and resource conservation. Additionally, they encompass the marketing of tourism product designs and transportation concerns (Bounab et al., 2020). The convergence of the rapidly evolving technology in the hotel industry and the implementation of strategic planning gives rise to e-tourism, sometimes called digital or electronic tourism (Happ, & Ivancsóné, 2020). Using digital technologies to augment the travel experience might be seen as an alternative interpretation of "digital tourism".

Digital tourism websites have been used by IT users globally as a means to promote and stimulate travel (Mathew, & Soliman, 2021). Modern technology has become necessary in contemporary society, primarily driven by the accessibility of internet-based information and the rapid expansion of communication channels. The use of cell-phones and intelligent tourism has the potential to enhance the overall experience of travellers. The impact of technological gadgets on the value of mobile trip reservations within the travel industry is evident (Yuan et al., 2016).

Digital Tourism and Social Media

Veiga et al. (2017) asserted that millennials possess the capacity to fundamentally transform the operational dynamics of the tourism sector due to their proficient digital literacy skills. Liu et al. (2019) claimed that individuals have the potential to promote tourism in certain destinations by

using social media platforms to disseminate their personal experiences during their visits to destinations. The tourism sector has seen tremendous disruption (Buhalis et al., 2019). For example, capturing and sharing selfies on online platforms on leisure trips has emerged as a prevalent recreational activity in contemporary times.

Watkins et al. (2018) reported that the tourism sector is seeing growth due to the proliferation of digital information and communication technologies. The use of an online system has the potential to reduce promotion expenses, enhance staff productivity, and streamline the ordering process. Desovic, & Eggert (2011) asserted that consumers engage in the sharing and exploration of objective evaluations pertaining to hotel and restaurant service quality, as well as environmental circumstances, via various social media platforms such as Facebook, Twitter, and blogs. The use of technology facilitates the acquisition of knowledge pertaining to many aspects of travel, such as information on destinations, weather and climatic patterns, accommodations, scenic attractions, geopolitical and economic circumstances, travel arrangements, online buying and payment mechanisms, as well as techniques for preserving memories (Kumar, & Kumar, 2020).

RESEARCH METHODOLOGY

Bibliometrics analysis has been applied as it is a crucial, trustworthy, objective, and economically advantageous method for measuring, tracking, and evaluating scientific results (Pagán et al., 2023; Gössling et al. 2020). We found some bibliometric studies concerned with our topic such as the use of new data analysis methods (Palomoa et al., 2017), smart tourism (Ortega et al., 2018), mobile technology (Chen et al., 2020), user-generated content on social media in hospitality sector (Kitsios et al., 2022), digital transformation in tourism (Kumar et al., 2023), information communication technology in tourism industry (Molina-Collado et al., 2022), trends in digital tourism (Roziqin et al., 2023; Kalia et al., 2022), digital disconnection (Arenas et al., 2022) and tourism content marketing (Nguyen et al., 2023). We did not notice any bibliographic research that focused on “social media” and “digital tourism,” therefore, we started developing the research questions. We assumed “social media and digital tourism” as the main keywords along various variants of important keywords “digital” for example, “online tourism, internet tourism, e-tourism, etourism, electronic tourism, digital tourism, tourism technology, smart tourism, tourism e-commerce, information technology and tourism, tourism information system, tourism website, tourism destination website, social media, Facebook, Tiktok, Instagram, Twitter (X)” for searching the Scopus database. We took the assistance of the Boolean operator “AND” in the “title, abstract, keywords” tab. 565 results were received after searching the main theme social media AND digital tourism. After removing books, book chapters, and conference papers, only 380 articles were found, out of which only 372 were English articles. Again we applied a source type journal and found 371 articles. Hence, 371 articles were finalised for the bibliometric analysis. The period of study was from 2000 to 2023 and it was noticed that the first study highlighting social media and digital tourism together was conducted in 2009. Scopus database was chosen because it is easy to use and has wide coverage (Garousi, 2015). The database of Scopus provides 75 million records

from over 5,000 publishers and 24,600 titles in various fields (Scopus, 2022). It contains papers indexed and ranked in Scopus and Web of Science (WOS) (Firdaus et al., 2019).

Fig. 1 Share of Publications by Continents

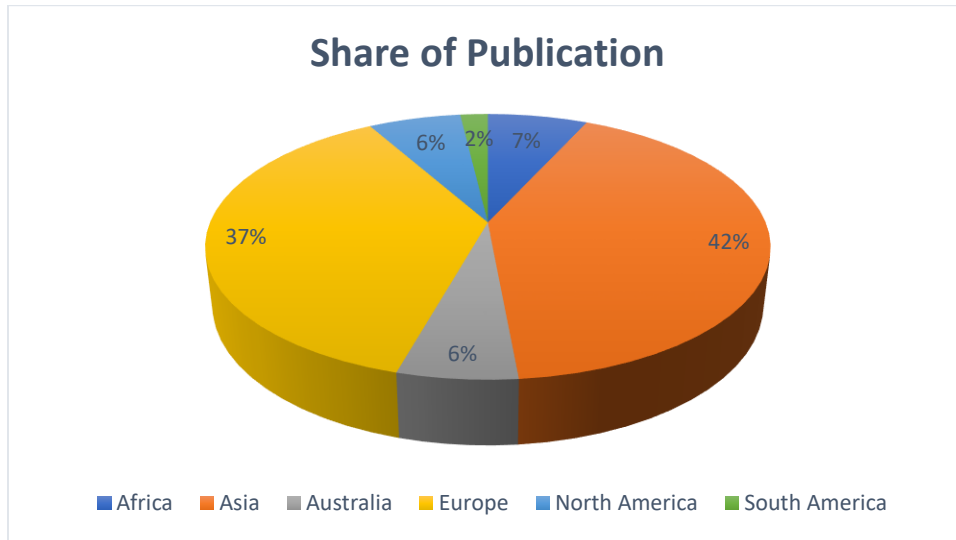
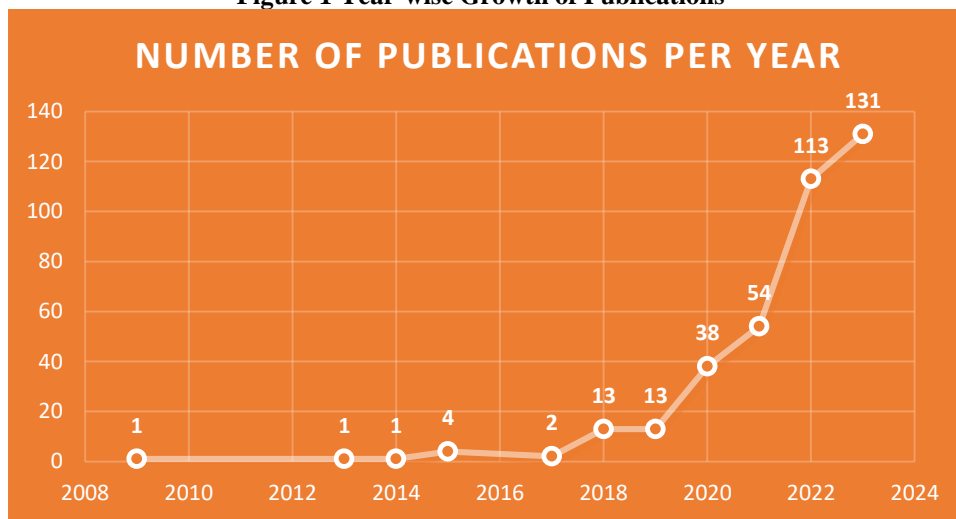


Figure 1 shows the continent-wise share of publications in the field of social media and digital tourism. Top three contributing continents include Asia, Europe and Africa as they account for 42%, 37% and 7% of share respectively. Likewise, North America and Australia accounted for 6% and 6% share respectively. While the South America was the least in the list accounting for only 2% of the share. Year-wise Growth of Publications.

Figure 1 Year-wise Growth of Publications



As per the figure 2, the publication of studies combining social media and digital tourism started since 2009. There was no publication in 2010, 2011 and 2012. However, 2009, 2013 and 2014 observed one publication each year. There was rapid increase in 2015 as the number of publications was 4. Whereas, 2016 had zero publication. In 2017, there were two publicaitons. Number of publications in 2018 and 2019 was 13 and 13 respectively. In 2020, 2021, 2022 and 2023, the publications were 38, 54, 113 and 131 respectively. It is apparent that trend of social media and digital toruism research has seen a big boost in recent years.

Subject-wise Publication

Figure 2 Subject-wise Publication

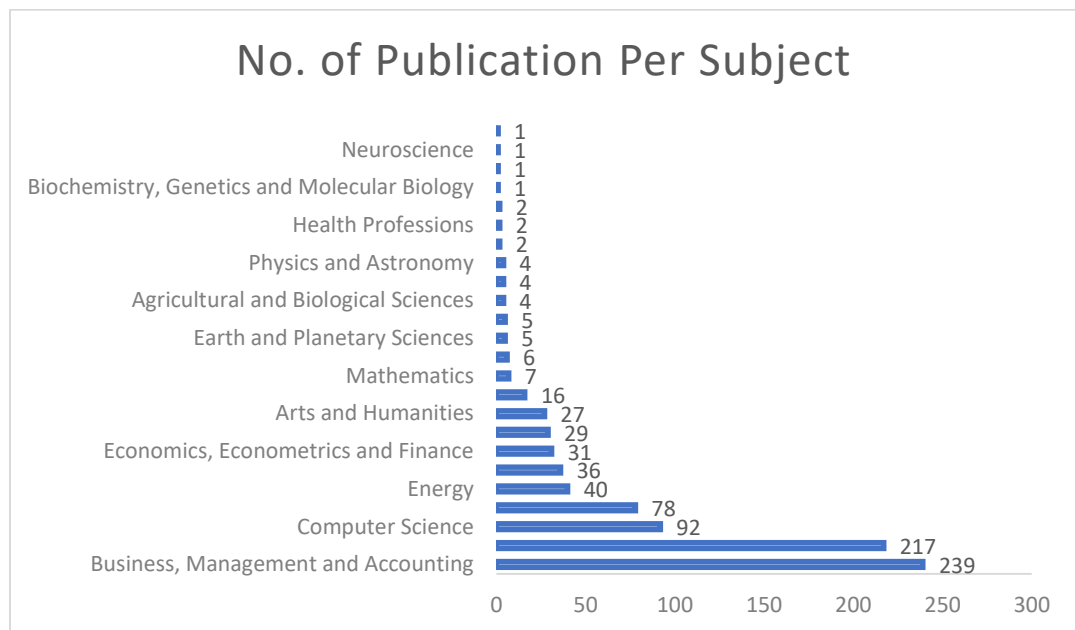


Figure 3 shows about the number of publication per subject conducted in the context of social media and digital tourism. Health Professions, Multidisciplinary, Biochemistry, Genetics and Molecular Biology, Immunology and Microbiology, Neuroscience and Nursing were found the least subjects where social media and digital tourism has been used as a research area. Likewise Business, Management and Accounting, Social Sciences, Computer Science, Environmental Science, Energy, Engineering, Economics, Econometrics and Finance, Decision Sciences, Arts and Humanities and Psychology were found to be the leading subject areas wherein social media and digital tourism has been studied richly.

Affiliation-Wise Share of Publications

Figure 3 Affiliation-Wise Share of Publications

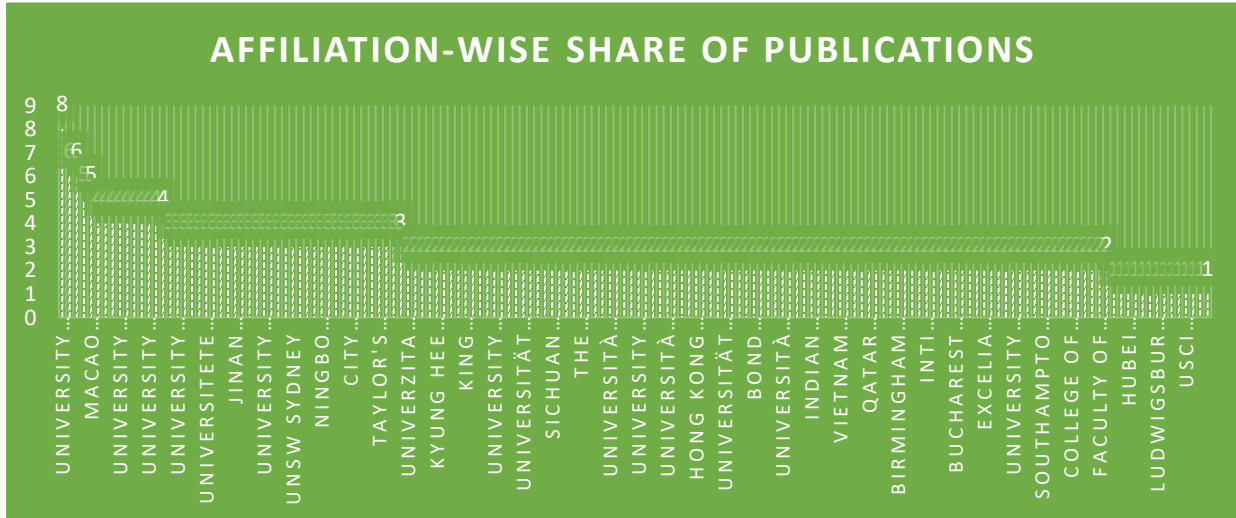


Figure 4 shows affiliation of social media and digital tourism studies with different institutions. University of Johannesburg, The Hong Kong Polytechnic University, Universiteit Gent, James Cook University, Macao Institute for Tourism Studies, Karlstads Universitet, University of Birmingham, University of Surrey, University of Central Florida, Universiti Putra Malaysia, Masaryk University, North-West University, University of Economics Ho Chi Minh City, International Hellenic University, College of Business, Law and Governance and University of East Anglia were found to be the top institutions, whose authors and researchers worked on the research of social media and digital tourism.

Author-Wise Publications

Figure 4 Author-Wise Publications

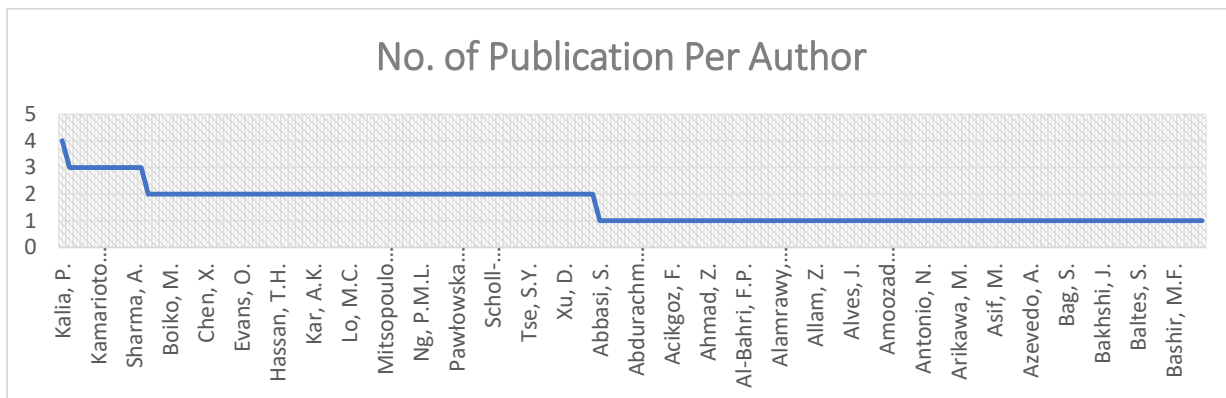
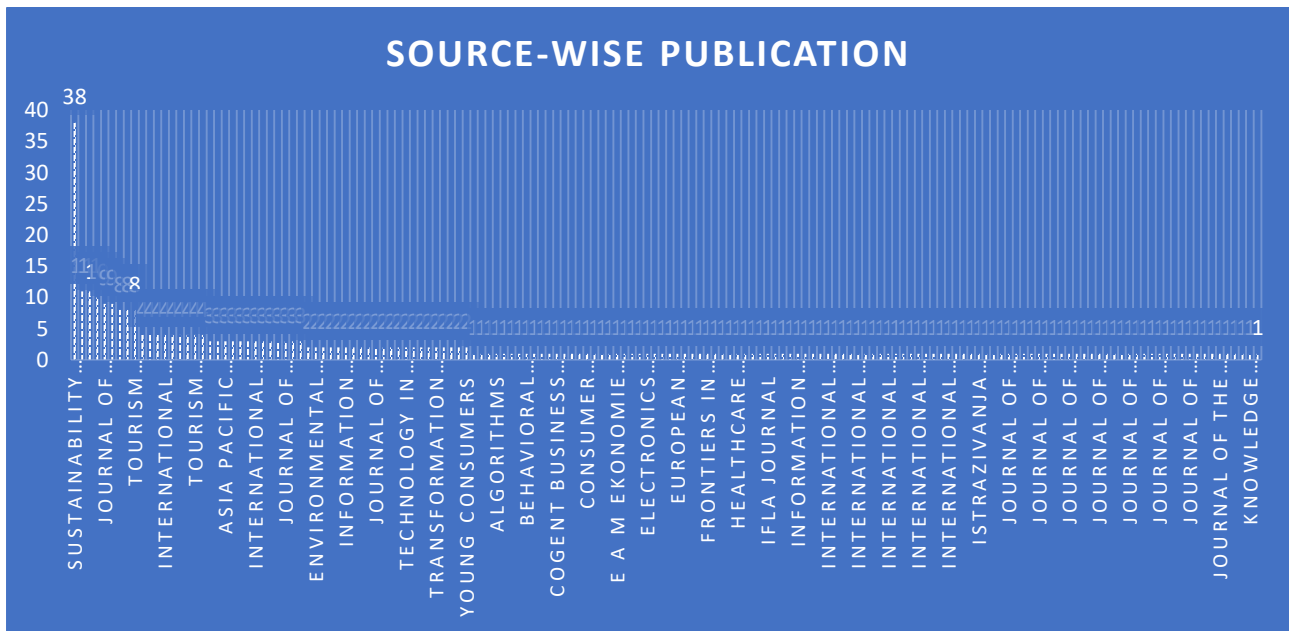


Figure 5 reveals how each author contributed to the research of social media and digital tourism. The maximum number of publications in this field were from Kalia, P, which conducted 4 studies. Consequent authors with maximum publications include Cenni, I., Chen, T., Cheung, M.L., Jiang, S., Kamariotou, M., Kitsios, F., Leung, W.K.S., Matiza, T., Pearce, P.L., Sharma, A. and Sharma, S. who conducted three and three studies independently. Adeola, O., Alturas, B., Ammirato, S., Boiko, M., Bonacini, E., Cai, W., Chan, W.C., Cheah, J.H., Chen, X., Cheung, C.T.Y., Chin, W.L., Choi, Y., Dias, Á.L., Evans, O., Felicetti, A.M., Goethals, P., Goh, E., Gretzel, U., Hassan, T.H., Helal, M.Y., Jansson, A., Jothi, J.A.A., Kallmuenzer, A., Kar, A.K., Kaur, K., Khan, M.M., Khan, N., Li, J., Lo, M.C., McKenna, B., Mele, G., Melo, D., Mishra, R.K., Mitsopoulou, E., Mohamad, A.A., Moustaka, E., Navío-Marco, J., Ndou, V., Ng, P.M.L., Nyagadza, B., Palazzo, M., Palumbo, R., Paredes, O., Pawłowska-Legwand, A., Pencarelli, T., Ruiz-Gómez, L.M., Saleh, M.I., Saura, J.R., Scholl-Grisseemann, U., Siano, A., Slabbert, E., Sotiriadis, M., Syvertsen, T., Tse, .Y.. Urolagin, S., Valeri, M., Wassler, P., Wei, W., Xu, D., Yang, X., Zhang, K., Zhang, L. and Zia, A. conducted two and two studies independently.

Source-Wise Publication

Figure 5 Source-Wise Publication



The figure 6 shows source of publications conducted in the field of social media and digital tourism. Sustainability Switzerland was the topmost source followed by International Journal Of Information Management Data Insights, Tourism Management and Current Issues In Tourism. The other significantly contributors in this field include, Journal Of Vacation Marketing, Tourism Recreation Research, Journal Of Hospitality And Tourism Insights, Journal Of Travel Research, Tourism Management Perspectives, African Journal Of Hospitality Tourism And Leisure,

Frontiers In Psychology, Information Technology And Tourism, International Journal Of Environmental Research And Public Health, International Journal Of Tourism Research, Journal Of Hospitality And Tourism Technology, Problems And Perspectives In Management, Tourism Economics, Tourism Review, Annals Of Tourism Research, Applied Sciences Switzerland and Asia Pacific Journal Of Tourism Research.

Most Cited Authors

160 authors worked on social media and digital tourism. Table 1 presents the authors who collaborated together to produce two or more publications. Whereas, table 2 denotes one author per one publication and their citation score.

Table 1 Authors having more number of publications

Author	Documents	Citations
kitsios f.; mitsopoulou e.; moustaka e.; kamariotou m.	2	41
cenni i.; goethals p.	2	14
jansson a.	2	11
palumbo r.	2	9
syvertsen t.	2	5
matiza t.; slabbert e.	2	2

According to table 1, it is apparent that two studies conducted by Kitsios f.; mitsopoulou e.; moustaka e.; kamariotou m. have earned most of all citations. Similarly, Cenni I.; Goethals P. and Jansson A. conducted two studies together consecutively and received 14 and 11 citations respectively. However, Palumbo R. and Syvertsen T. received the least number of citations.

Table 2 Authors having one publication

Author	Documents	Citations
dredge d.; gyimóthy s.	1	289
navío-marco j.; ruiz-gómez l.m.; sevilla-sevilla c.	1	180
pencarelli t.	1	178
oliveira e.; panyik e.	1	127
kim m.j.; lee c.-k.; preis m.w.	1	116
tribe j.; mkono m.	1	115
philip l.; williams f.	1	99
mistilis n.; buhalis d.; gretzel u.	1	89
li j.; pearce p.l.; low d.	1	77
akhtar n.; khan n.; mahroof khan m.; ashraf s.; hashmi m.s.; khan m.m.;	1	76
hishan s.s.	1	76

According to table 2, it is apparent that one study conducted by one or more authors has obtained great number of citations. Dredge D.; Gyimóthy S., Navío-Marco j.; Ruiz-Gómez L.M.; Sevilla-Sevilla C. and Pencarelli T. are among the top highly cited authors in the field of social media and digital tourism.

Authors by Total Publication, Citation, H-Index, and I-Index

Table 3 Top Ten Authors

Author	Total Publications	Citation	H-Index	I-Index
Kalia, P.	4	736	16	25
Chen, T.	3	9469	26	32
Sharma, S.	3	12734	47	142
Sharma, A.	3	6180	34	127
Cheung, M.L.	3	1915	21	27
Jiang, S.	3	2616	14	14
Kamariotou, M.	3	1999	27	46
Kitsios, F.	3	3114	33	79
Leung, W.K.S.	3	761	13	15
Matiza, T.	3	554	8	7
Sharma, A.	3	6180	34	127

The above table denotes the data about top ten authors who have contributed to social media and digital tourism research. Kalia, P. being on the top of list has four publications, 763 citations, 16 H-index score and 25 I-index score. Chen, T has three publications with 9469 citations, 26 H-index and 32 I-index scores. Sharma, S. has three publications, 12734 citations, 47 H-index and 142 I-index scores. Sharma, A. has three publications, 6180 citations, 34 H-index and 127 I-index scores. Cheung, M.L. ranking as third author has three publications, 1915 citations, 21 H-index and 27 I-index scores. Jiang, S. has three publications, 2616 citations, 14 H-index and 14 I-index scores. Kamariotou, M. has three publications, 1999 citations, 27 H-index and 46 I-index scores. Kitsios, F. has three publications, 3114 citations, 33 H-index and 79 I-index scores. Leung, W.K.S. has three publications, 761 citations, 13 H-index and 15 I-index scores. Matiza, T. has three publications, 554 citations, 8 H-index and 7 I-index scores.

Thematic Evaluation

Table 4 Countries with Occurrences and Total Link Strength

Countries		
keyword	occurrences	total link strength
china	3	10
india	2	8
egypt	2	6
northern cyprus	2	6
ecuador	2	5
poland	2	4
greece	2	3

As per the table 4, China is top among the top countries, where the research about social media and digital tourism is conducted. The country has three Occurrences and 10 total link strength. India, Egypt, Northern Cyprus, Ecuador, Poland and Greece had two and two Occurrences with 8, 6, 6, 5, 4 and 3 total link strength respectively.

Table 5 Industries with Occurrences and Total Link Strength

keyword	Industry	
	occurrences	total link strength
hospitality industry	10	27
tourism industry	8	19
restaurants	2	7
hotel	2	4
hotel websites	2	2

According to the table 5, hospitality is among the top industries having 21 Occurrences and 46 total link strength, where the research about social media and digital tourism is conducted. Tourism, restaurant, hotel, and hotel websites had 8, 2, 2, and 2 Occurrences with 19, 7, 4, and 2 total link strength respectively.

Table 6 Covid-19 with Occurrences and Total Link Strength

Keyword	Covid-19	
	Occurrences	total link strength
covid-19	21	46
Pandemic	3	9
post-covid-19	2	6
pandemic crisis	2	5

According to the table 6, Covid-119 is among the top terms having 21 occurrences and 46 total link strength, where the research about social media and digital tourism is conducted. Pandemic, post-covid-19, and pandemic crisis had 3, 2, and 2 occurrences with 9, 6, and 5 total link strength respectively.

Table 7 Generations with Occurrences and Total Link Strength

Keyword	Generations	
	occurrences	total link strength
Millennial	3	10
generation z	3	8

According to the table 7, millennial is top among generations having 3 occurrences and 10 total link strength, which have been used in the research about social media and digital tourism. Whereas, generation z had 3 occurrences with 8 total link strength.

Table 8 Digital with Occurrences and Total Link Strength

Digital		
keyword	Occurrences	total link strength
Digitalisation	16	36
digital detox	10	24
digital transformation	7	18
digital heritage	3	9
digital traveler	2	7
digital well-being	2	6
digital storytelling	2	5
digital challenge	2	5
digital disconnection	2	4
digital divide	2	4
digital innovation	2	3
digital-free travel	2	3

As per the table 8, Digitalisation is the top keyword having 16 occurrences and 36 total link strength, which has been used in the research about social media and digital tourism. Digital detox digital transformation digital heritage, digital traveller, digital well-being, digital storytelling, digital challenge, digital disconnection digital divide digital innovation and digital free travel had 10, 7, 3, 2, 2, 2, 2, 2, 2 and 2 occurrences with 24, 18, 9, 7, 6, 5, 5, 4, 4, 3 and 3 total link strength respectively.

Table 9 Digital Tourism with Occurrences and Total Link Strength

Digital Tourism		
keyword	Occurrences	total link strength
digital tourism	25	64
e-tourism	9	22
digital free tourism	3	8

As per the table 9, digital tourism is top among the keywords having 25 occurrences and 64 total link strength, which has been used in the research about social media and digital tourism. Whereas, e-tourism and digital free tourism had 9 and 3 occurrences with 22 and 8 total link strength respectively.

Table 10 Economy with Occurrences and Total Link Strength

Economy		
Keyword	occurrences	total link strength
digital economy	4	5
economic development	2	6
Economy	2	4
experience economy	2	4
sharing economy	2	2

According to the table 10, digital economy is among the top terms having 4 occurrences and 5 total link strength, which has been used in the research about social media and digital tourism. Economic development, economy, and sharing economy had two and two occurrences with 6, 4, and 2 total link strength respectively.

Table 11 Marketing with Occurrences and Total Link Strength

Marketing		
Keyword	occurrences	total link strength
digital marketing	14	38
destination marketing	7	15
social media marketing	6	13
Marketing	3	8
tourism marketing	3	2
Seo	2	7
tourism communication	2	9

According to the table 11, digital marketing is among the top terms having 14 occurrences and 38 total link strength, which has been used in the research about social media and digital tourism. Destination marketing, social media marketing, marketing, tourism marketing, SEO, and tourism communication had 7, 6, 3, 3, 2 and 2 occurrences with 15, 13, 8, 2, 7 and 9 total link strength respectively.

Table 12 Method with Occurrences and Total Link Strength

Method			
Keyword	occurrences	total link strength	link
literature review	16	33	
Sem	9	21	
bibliometric analysis	9	25	
content analysis	5	10	
machine learning	5	14	
mediation analysis	5	12	
sentiment analysis	5	16	
qualitative research	5	13	
critical discourse analysis	4	4	
conceptual map	3	4	
data mining	3	7	
text mining	3	9	
topic modelling	3	5	
Ardl	2	7	
Autoethnography	2	2	
Citespace	2	5	
Clusters	2	6	
co-citation	2	5	

cross-linguistic analysis	2	5
Doi	2	3
intercultural analysis	2	4
Leximancer	2	5
logistic regression	2	1
mixed methods study	2	1
Netnography	2	3
social network analysis	2	6
thematic analysis	2	5

As per the table 12, literature review, structural equation modelling, and bibliometric analysis are the top keywords having 16, 9 and 9 occurrences and 33, 21 and 25 total link strength respectively, which have been used as a methodological technique in the research about social media and digital tourism. Content analysis, machine learning mediation analysis, sentiment analysis, qualitative research, critical discourse analysis, conceptual map, data mining, text mining, topic modelling, ardl, autoethnography, citespace, clusters, co-citation, cross-linguistic analysis, doi, intercultural analysis, leximancer, logistic regression, mixed methods study, netnography, social network analysis and thematic analysis had 5, 5, 5, 5, 5, 4, 3, 3, 3, 3, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2 and 2 occurrences with 10, 14, 12, 16, 13, 4, 4, 7, 9, 5, 7, 2, 5, 6, 5, 5, 3, 4, 5, 1, 1, 3, 6 and 5 total link strength respectively.

Table 13 Stimulus with Occurrences and Total Link Strength

Stimulus		
keyword	occurrences	total link strength
e-wom	10	26
reviews	10	29
cultural heritage	7	12
tripadvisor	7	17
innovation	5	13
tourist experiences	5	12
destination image	4	11
mobility	4	9
perceived values	4	8
privacy concerns	4	10
trust	4	4
immersive experience	4	5
perceived risk	3	5
self-presentation concern	3	7
tourism policies	3	8
user engagement	3	9
reputation	2	10
destination brand equity	2	2
extended reality	2	5
governance structure	2	8
infrastructures	2	8
interaction design	2	4

micro-entrepreneurship	2	3
personalisation	2	5
recommender system	2	8
resilience	2	9
technology readiness	2	3
technostress	2	5
tourism ecosystem	2	7
tourism governance	2	2
tourism information	2	4
tourist gaze	2	2
travel vlog	2	0
websites	2	5
tourism research	2	8

As per the table 13, e-wom, reviews, cultural heritage and tripadvisor are the top keywords having 10, 10, 7 and 7 occurrences and 26, 29, 12, and 17 total link strength respectively, which have been used as stimulus in the Stimulus Organism Response (SOR) theory in the research about social media and digital tourism. Innovation, tourist experiences, destination image, mobility, perceived values, privacy concerns, trust, immersive experience, perceived risk, self-prsentation concern, tourism policies, reputation, user engagement, destination brand equity, extended reality, governance structure, infrastructures, interaction design, micro-entrepreneurship, personalisation, recommender system, resilience, technology readiness, technostress, tourism ecosystem, tourism governance, tourism information, tourist gaze, travel vlog, websites, and tourism research had 5, 5, 4, 4, 4, 4, 4, 4, 3, 3, 3, 3, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2 and 2 occurrences with 13, 12, 11, 9, 8, 10, 4, 5, 5, 7, 8, 9, 10, 2, 5, 8, 8, 4, 3, 5, 8, 9, 3, 5, 7, 2, 4, 2, 0, 5, and 8 total link strength respectively.

Table 14 Organism with Occurrences and Total Link Strength

Organism		
keyword	occurrences	total link strength
user-generated content	11	30
authenticity	5	13
co-creation	4	8
sense of presence	3	7
tourism experience	3	10
transformation	3	7
culture	2	10
e-commerce	2	6
engagement	2	10
entrepreneur	2	5
heritage	2	8
information search	2	5
interaction	2	6
military expenditures	2	7
mobile sensing	2	1
terrorism	2	8
user experience	2	6
virtual travel experience	2	5
memorable tourism experiences	2	4

As per the table 14, user generated content, authenticity, and co-creation are the top keywords having 11, 5, and 4 occurrences and 30, 13, and 8 total link strength respectively, which have been used as organism in the Stimulus Organism Response (SOR) theory in the research about social media and digital tourism. Sense of presence, tourism experience, transformation, culture e-commerce, engagement, entrepreneur, heritage, information search, interaction, military expenditures, mobile sensing, terrorism, user experience, virtual travel experience, and memorable tourism experiences had 3, 3, 3, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2 and 2 occurrences with 7, 10, 7, 10, 6, 10, 5, 8, 5, 6, 7, 1, 8, 6, 5 and 4 total link strength respectively.

Table 15 Response with Occurrences and Total Link Strength

Response			
keyword	occurrences	total strength	link
behavioural intention	17	41	
customer satisfaction	14	37	
sustainability	13	34	
consumer behaviour	11	24	
disconnection	8	25	
Development	8	14	
motivation	7	16	
tourist behavior analysis	7	15	
engagement	6	11	
knowledge management	4	7	
impulse buying	3	8	
travel	3	8	
brand trust	2	1	
customer experience	2	6	
functional value	2	5	
glocalization	2	4	
meaningfulness	2	5	
memorable experiences	2	7	
nostalgia	2	7	
performance	2	6	
technology influence	2	4	

As per the table 15, behavioural intention, customer satisfaction, sustainability are the top keywords having 17, 14, and 13 occurrences and 41, 37, and 34 total link strength respectively, which have been used as response in the Stimulus Organism Response (SOR) theory in the research about social media and digital tourism. Behavioural intention, customer satisfaction, sustainability, consumer behaviour, disconnection, development, motivation, tourist behavior analysis, engagement, knowledge management, impulse buying, travel, brand trust, customer experience, functional value, glocalization, meaningfulness, memorable experiences, nostalgia, performance and technology influence had 11, 8, 8, 7, 7, 6, 4, 3, 3, 2, 2, 2, 2, 2, 2, 2 and 2 occurrences with 24, 25, 14, 16, 15, 11, 7, 8, 8, 1, 6, 5, 4, 5, 7, 7 and 6 total link strength respectively.

Table 16 Platform with Occurrences and Total Link Strength

keyword	Platform	
	occurrences	total link strength
digital museum	8	15
digital media	5	9
museums	5	16
metaverse	4	9
airbnb	3	4
internet	3	12
mobile applications	3	3

According to the table 16, digital museum is among the top platforms having 8 occurrences and 15 total link strength, which has been used in the research about social media and digital tourism. Digital media, museums, metaverse, airbnb, internet and mobile applications had 5, 5, 4, 3, 3, and 3 occurrences with 9, 16, 9, 4, 12 and 3 total link strength respectively.

Table 17 Service with Occurrences and Total Link Strength

Keyword	Service	
	occurrences	total link strength
digital services	4	6
service offerings	2	5
service innovation	2	4
service quality	2	4

According to the table 17, digital services is among the top services having 4 occurrences and 6 total link strength, which has been used in the research about social media and digital tourism. Service offerings, service innovation and service quality had 2, 2, and 2 occurrences with 5, 4, and 4 total link strength respectively.

Table 18 Social Media with Occurrences and Total Link Strength

keyword	Social Media	
	occurrences	total link strength
social media	32	75
facebook	4	15
communitas	2	3
instagram	2	2
tiktok	2	5
twitter	2	11

According to the table 18, social media is among the top keywords having 32 occurrences and 75 total link strength, which has been used in the research about social media and digital tourism. Facebook, communitas, Instagram, Tiktok and twitter had 4, 2, 2, 2 and 2 occurrences with 15, 3, 2, 5 and 11 total link strength respectively.

Table 19 Technology with Occurrences and Total Link Strength

Technology		
keyword	occurrences	total link strength
ict	15	32
augmented reality	10	27
digital technology	9	27
natural language processing	5	10
artificial intelligence	4	4
smart technologies	3	6

According to the table 19, ict is among the top keywords having 15 occurrences and 32 total link strength, which has been used in the research about social media and digital tourism. Augmented reality, digital technology, natural language processing, artificial intelligence and smart technologies had 10, 9, 5, 4 and 3 occurrences with 27, 27, 10, 4 and 6 total link strength respectively.

Table 20 Theory/Model with Occurrences and Total Link Strength

Theory/Model			
keyword	occurrences	total strength	link
technology acceptance model	5	17	
affordances	3	8	
theory of planned behavior	3	8	
attribution theory	2	5	
diffusion of innovation	2	4	

According to the table 20, technology acceptance model is among the top theories having 5 occurrences and 17 total link strength, which has been used in the research about social media and digital tourism. Affordances, theory of planned behaviour, attribution theory and diffusion of innovation had 3, 3, 2 and 2 occurrences with 8, 8, 5, and 4 total link strength respectively.

Table 21 Tourism Type with Occurrences and Total Link Strength

Tourism Type		
keyword	occurrences	total link strength
smart destination	18	48
virtual tourism	7	20
sustainable tourism	6	18
cultural tourism	5	10
small tourism businesses	5	14
Ecotourism	3	4
international tourism	2	4
local community tourism	2	3
nature-based tourism	2	4

Pilgrimage	2	7
tourism 4.0	2	6
tourist 2.0	2	3

According to the table 21, smart destination is top among the tourism types having 18 occurrences and 48 total link strength, which has been used in the research about social media and digital tourism. Virtual tourism, sustainable tourism, cultural tourism, small tourism businesses, ecotourism, international tourism, local community tourism, nature based tourism, pilgrimage, tourism 4.0 and tourism 2.0 had 7, 6, 5, 5, 3, 2, 2, 2, 2, 2 and 2 occurrences with 20, 18, 10, 14, 4, 4, 3, 4, 7, 6 and 3 total link strength respectively.

Table 22 Others with Occurrences and Total Link Strength

Others		
keyword	occurrences	total link strength
tourism	53	139
big data	7	17
blockchain	4	6
decision-making	3	4
accommodation	2	3
business processes	2	5
competitive advantage	2	5
compliments	2	5
crisis management	2	6
crowdsourcing	2	4
dmo	2	6
social commerce	2	1
strategies	2	6
well-being	2	5

According to the table 22, tourism, is top among the other keywords having 53 occurrences and 139 total link strength, which has been used in the research about social media and digital tourism. Big data, blockchain, decision-making, accommodation, business processes, competitive advantage, compliments, crisis management, crowdsourcing, dmo, social commerce, strategies, and well-being had 7, 4, 3, 2, 2, 2, 2, 2, 2, 2, 2, 2 and 2 occurrences with 17, 6, 4, 3, 5, 5, 5, 6, 4, 6, 1, 6 and 5 total link strength respectively.

DISCUSSION

Social media and digital tourism has a strong foundation in the field of business administration. Researchers in the field of digital tourism and social media have made significant progress. Social media is a significant factor that provides a competitive edge for digital tourism, as it prioritises the client. The capacity of a business to maintain an active and influential presence on social media is crucial for the ongoing survival and success of tourism and hospitality firms. From 2009 to 2023, there was a steady growth in the number of publications in the social media and digital tourism sector, highlighting the importance of this area of study.

The study's findings indicate that academics from Asia generated the highest number of publications, followed by those from North America and Europe. Asian academics consistently demonstrate high productivity, as seen by the substantial number of publications they write each

year. In addition, researchers from Australia and North America, but their shares are quite small. Most of the themes analysed emphasise the importance of social media in the realm of digital tourism.

Sustainability Switzerland was the topmost source followed by International Journal Of Information Management Data Insights, Tourism Management and Current Issues In Tourism. A significant percentage of scholars were inspired to publish their research findings in these publications, according to reports. The authors attempted to ascertain the factors and outcomes of social media on digital tourism. The data set analysis revealed that the research conducted by Kitsios f., Mitsopoulou e., Moustaka e., and Kamariotou m. had the highest influence, as measured by the ratio of local to worldwide citations.

The chronological growth of social media and digital tourism publications from 2000 to 2023, showed peaks in the year 2023. Organisations have acknowledged the significance of social media reviews and word-of-mouth, leading some researchers to go into studying the relationship between information technology, behavioural intentions, digital technology and social media in the realm of digital tourism. Current research has focused significantly on the elements that impact the behavioural intentions of visitors, as well as the significance of electronic word of mouth, online reviews and trust as indicators of visitor pleasure.

This study offers digital tourism managers valuable insights into new social media trends, with the objective of improving tourist happiness and engagement. Functional models are derived from both theoretical and practical techniques. Increasing the focus on social media will result in benefits for the tourist sector in terms of sustainability, competitiveness, and operational efficiency. This study introduces new areas for future exploration and assists management academics and researchers in understanding the shift in paradigm and key areas of focus in digital tourism research.

Implications

The research yields some noteworthy discoveries that have tangible ramifications. Having already been adversely affected by the 2020 pandemic, the tourist sector can only anticipate a revival through the adoption of efficient business techniques. Tourism groups are largely responsible for ensuring the effective application of social media and digitisation. Consumers' decision-making is greatly impacted by evaluations disseminated on social media and other communication networks, since they offer insight into their deepest thoughts. Therefore, it is crucial to maintain continuous customer involvement on social media platforms to improve visitor pleasure and cultivate loyalty. In addition, managers can employ state-of-the-art information technology systems to evaluate the attitudes of visitors and communicate the value of their products or services in order to maintain competitiveness in the market. The integration of digital tourism and social media platforms is a significant challenge for any firm striving to sustain a competitive edge.

The current enquiry will enhance the understanding of innovative paradigms in social media and digital tourism research for academics and the general public. The most influential publications and themes over the past two decades were identified using bibliometric methodologies. This might greatly aid novice researchers in designing studies within the given topic and determining priorities. The findings of the ongoing enquiry will aid readers in comprehending the extensive scope of the scientific field that social media and digital tourism research covers. This study offers a thorough examination of the evolution of research subjects, the methodology utilised by researchers, and the current advancements in the field.

CONCLUSION

The current study utilises the VOS-viewer tool to perform bibliometric analysis on research publications related to social media and digital tourism that were obtained from the Scopus database throughout the period from 2000 to 2023. Bibliometric analysis improves our understanding of the scope and depth of research on social media and digital tourism by systematically evaluating papers published during a certain timeframe. It also helps us determine the contribution of this study to the existing body of knowledge. The present study examined co-occurrence analysis, prominent publications, prevailing topics, the influence of sources, and the growth of social media and digital tourism articles.

There has been a clear increase in the number of research publications on social media and digital tourism over the study period. The majority of studies utilised quantitative research methodologies, suggesting a preference for positivistic epistemology. During the research period, the bulk of literature related to social media and digital tourism utilised quantitative approaches.

An analysis of the abstracts of the publications included in this study indicates that social media and digital tourism has been evaluated in various tourism-related contexts, such as airports, hotels, casinos, ski resorts, high-end hotels, mid-range hotels, home stays, Air BnB, restaurants, travel agency services, and services offered by travel agents. Several research have focused on creating statistical models that elucidate the relationships between important factors, such as tourist engagement and behaviour intention, social media platforms (including Facebook, Twitter, YouTube, email, and Instagram), and experiential marketing. Artificial Intelligence has progressively played a larger role in scientific investigation in recent years. Furthermore, it has been shown that several scholars have started employing artificial intelligence and machine learning to examine visitor behaviour and patterns of social media usage. Theories adopted by researchers include Attribution Theory, Theory of Affordances, Theory of Diffusion of Innovation, Theory of Planned Behavior (TPB) and Technology Acceptance Model.

Upon analysing the trajectory of social media and digital tourism research, the findings suggest that researchers are now unencumbered by the limitations of a singular methodology, such as exclusively testing statistical models in the realm of digital tourism. The latest study discoveries in this field enhance the current knowledge base. The incorporation of artificial intelligence, machine learning, and big data analysis into social media and digital tourism represents the advancement of information technology supported research in the study and assessment of digital tourism.

Limitations and Future Research Areas

Although this research makes a significant contribution to social media and digital tourism research, its scope is limited to the Scopus database. While databases like Web of Science, PubMed, Google Scholar, and others do provide academic publications, none of them were used for this investigation. On the other hand, the Scopus citation data (Baas et al., 2020) is known for being constant and trustworthy, thus it's a good resource for social media and digital tourism research publications because of how long it's been published. Findings from the study are thus credible and applicable.

In addition to illuminating new directions and topics in social media and digital tourism research, our review found major gaps in the current literature. This list covers a wide range of topics, including the following: the connections between digital tourism and social media, the effects of social media and digital tourism on staff morale and customer happiness, the obstacles to digital tourism's spread, and the ways in which social media and digital tourism can help destinations

become more competitive and sustainable. The role of social media and digital tourism in digital media has been understudied in comparison to the large body of literature on the hotel industry. The sharing economy presents an even more compelling case for broadening the scope of social media and digital tourism research beyond the travel sector. Research on social media and digital tourism appears to be conducted in different quantities in established and emerging nations. Due to their inherent shortcomings in attaining competitiveness, developing nations' institutions and enterprises greatly benefit from research on the utilisation, impediments, and facilitators of social media and digital tourism. To further understand and analyse consumer perceptions in various cultural contexts, future research may also look at similar social media and digital tourism studies that were carried out in other parts of the world.

REFERENCES

- Adeola, O., & Evans, O. (2019). Digital tourism: mobile phones, internet and tourism in Africa. *Tourism Recreation Research*, 44(2), 190-202.
- Aljumah, A. I., Nuseir, M. T., & El Refae, G. A. (2022, November). Exploring the Effect of Social Media Marketing and Destination image on Destination Loyalty in Covid-19 Times: Sequential Mediating Role of Brand Love and Brand Loyalty. In *2022 International Arab Conference on Information Technology (ACIT)* (pp. 1-8). IEEE.
- Almeida-Santana, A., David-Negre, T., & Moreno-Gil, S. (2020). New digital tourism ecosystem: understanding the relationship between information sources and sharing economy platforms. *International Journal of Tourism Cities*, 6(2), 335-345.
- Anuj, Upadhyay, R. K., Kargeti, H., & Sharma, A. (2023). Adoption of digital marketing among tourism industry of Uttarakhand in India. *International Journal of Business Excellence*, 29(1), 80-97.
- Arenas Escaso, J. F., Folgado Fernández, J. A., & Palos Sánchez, P. R. (2022). Digital disconnection as an opportunity for the tourism business: A bibliometric analysis. *Emerging Science Journal*, 6 (5), 1100-1113.
- Aria, M., & Cuccurullo, C. (2017). bibliometrix: An R-tool for comprehensive science mapping analysis. *Journal of informetrics*, 11(4), 959-975.
- Baas, J., Schotten, M., Plume, A., Côté, G., & Karimi, R. (2020). Scopus as a curated, high-quality bibliometric data source for academic research in quantitative science studies. *Quantitative science studies*, 1(1), 377-386.
- BBC. (2020). *How digitalisation is revolutionising the travel industry.* <http://www.bbc.com/storyworks/travel/the-new-tourism-trend/technology-redefine-tourism-industry>
- Bounab, Y., Oussalah, M., & Ferdénache, A. (2020, November). Reconciling image captioning and user's comments for urban tourism. In *2020 Tenth International Conference on Image Processing Theory, Tools and Applications (IPTA)* (pp. 1-6). IEEE.
- Buhalis, D., Harwood, T., Bogicevic, V., Viglia, G., Beldona, S. and Hofacker, C. (2019), "Technological disruptions in services: lessons from tourism and hospitality", *Journal of Service Management*, Vol. 30 No. 4, pp. 484-506.

- Camilleri, M. A. (2018). The promotion of responsible tourism management through digital media. *Tourism Planning & Development*, 15(6), 653-671.
- Chen, S., Law, R., Xu, S., & Zhang, M. (2020). Bibliometric and visualized analysis of mobile technology in tourism. *Sustainability*, 12(19), 7975.
- Deb, S. K., Nafi, S. M., & Valeri, M. (2022). Promoting tourism business through digital marketing in the new normal era: a sustainable approach. *European Journal of Innovation Management*.
- Dessovic, R., & Egger, R. (2011). Digital Tourism Assistant: enquiry management solution for destinations. *ETourism Case Studies: Management and Marketing Issues*, 382-390.
- Firdaus, A., Razak, M. F. A., Feizollah, A., Hashem, I. A. T., Hazim, M., & Anuar, N. B. (2019). The rise of “blockchain”: bibliometric analysis of blockchain study. *Scientometrics*, 120, 1289-1331.
- Firman, A., Moslehpour, M., Qiu, R., Lin, P. K., Ismail, T., & Rahman, F. F. (2023). The impact of eco-innovation, ecotourism policy and social media on sustainable tourism development: evidence from the tourism sector of Indonesia. *Economic Research-Ekonomska Istraživanja*, 36(2), 2143847.
- Gaffar, V., Tjahjono, B., Abdullah, T., & Sukmayadi, V. (2022). Like, tag and share: bolstering social media marketing to improve intention to visit a nature-based tourism destination. *Tourism Review*, 77(2), 451-470.
- Garousi, V. (2015). A bibliometric analysis of the Turkish software engineering research community. *Scientometrics*, 105(1), 23-49.
- Gläser, J., & Laudel, G. (2015). A bibliometric reconstruction of research trails for qualitative investigations of scientific innovations. *Historical Social Research/Historische Sozialforschung*, 299-330.
- Gössling, S., Scott, D., & Hall, C. M. (2020). Pandemics, tourism and global change: a rapid assessment of COVID-19. *Journal of sustainable tourism*, 29(1), 1-20.
- Greenwood, C., & Quinn, M. (2017). Digital amnesia and the future tourist. *Journal of Tourism Futures*, 3(1), 73-76.
- Happ, E., & Horváth, Z. I. (2020). A study of digital marketing tools usage habits among Hungarian tourists. *Geo Journal of Tourism and Geosites*, 32(4), 1283-1289.
- Hospitalitynet (2023). Travel brands need to use social media to directly engage with younger cohorts, observes GlobalData. Available at: <https://www.hospitalitynet.org/search.html?q=GlobalData%20Plc>
- Kalia, P., Mladenović, D., & Acevedo-Duque, Á. (2022). Decoding the trends and the emerging research directions of digital tourism in the last three decades: a bibliometric analysis. *SAGE Open*, 12(4), 21582440221128179.
- Kitsios, F., Mitsopoulou, E., Moustaka, E., & Kamariotou, M. (2022). User-generated content in social media: A twenty-year bibliometric analysis in hospitality. *Information*, 13(12), 574.
- Kitsios, F., Mitsopoulou, E., Moustaka, E., & Kamariotou, M. (2022). User-Generated Content behavior and digital tourism services: A SEM-neural network model for information trust in social networking sites. *International Journal of Information Management Data Insights*, 2(1), 100056.

- Kumar, N., & Kumar, R. R. (2020). Relationship between ICT and international tourism demand: A study of major tourist destinations. *Tourism Economics*, 26(6), 908-925.
- Kumar, S., Kumar, V., Kumari Bhatt, I., Kumar, S., & Attri, K. (2023). Digital transformation in tourism sector: trends and future perspectives from a bibliometric-content analysis. *Journal of Hospitality and Tourism Insights*.
- Lei, W. S., Chen, Z., Zhou, X., & King, B. (2023). Organic destination imagery and social media: Mapping tourism dynamics across China's Greater Bay Area cities. *Journal of China Tourism Research*, 19(2), 197-220.
- Li, M. L., Chen, M. S., & Sato, K. (2020). Digital map design elements for local tourism: comparing user cognition between age of 20s and above 60. In *Proceedings of the 8th International Conference on Kansei Engineering and Emotion Research: KEER 2020, 7-9 September 2020, Tokyo, Japan* (pp. 55-65). Springer Singapore.
- Machirori, F. (2023). This is Africa: How young African TikTok trends challenged Afropessimism during COVID-19. *Journal of African Media Studies*, 15(2), 161-177.
- Madureira, L., & Alturas, B. (2022). Impact of social media influencers on the Portuguese tourism and travel industry in a covid-19 era. In *Marketing and Smart Technologies: Proceedings of ICMarTech 2021, Volume 2* (pp. 391-403). Singapore: Springer Singapore.
- Mathew, V., & Soliman, M. (2021). Does digital content marketing affect tourism consumer behavior? An extension of technology acceptance model. *Journal of Consumer Behaviour*, 20(1), 61-75.
- Mehraliyev, F., Choi, Y., & Koseoglu, M. A. (2019). Social structure of social media research in tourism and hospitality. *Tourism Recreation Research*, 44(4), 451-465.
- Molina-Collado, A., Gómez-Rico, M., Sigala, M., Molina, M. V., Aranda, E., & Salinero, Y. (2022). Mapping tourism and hospitality research on information and communication technology: a bibliometric and scientific approach. *Information Technology & Tourism*, 24(2), 299-340.
- Nguyen, P. M. B., Pham, X. L., & Truong, G. N. T. (2023). A bibliometric analysis of research on tourism content marketing: Background knowledge and thematic evolution. *Heliyon*, 9(2).
- OECD. (2020). Preparing tourism businesses for the digital future. *OECD tourism trends and Policies*, 59-85. <https://www.oecd-ilibrary.org/sites/f528d444-en/index.html?itemId=/content/component/f528d444-en>
- Ortega-Fraile, F. J., Ríos-Martín, M. Á., & Ceballos-Hernandez, C. (2018). Tourism and mobile devices: provenance of academic research through a bibliometric study. *Journal of Tourism Analysis: Revista de Análisis Turístico*, 25(1), 91-112.
- Ortiz-Ospina, E., & Roser, M. (2023). The rise of social media. *Our world in data*.
- P.J., S., Singh, K., Kokkranikal, J., Bharadwaj, R., Rai, S., & Antony, J. (2023). Service Quality and Customer Satisfaction in Hospitality, Leisure, Sport and Tourism: An Assessment of Research in Web of Science. *Journal of Quality Assurance in Hospitality & Tourism*, 24(1), 24-50. <https://doi.org/10.1080/1528008X.2021.2012735>
- Pachucki, C., Grohs, R., & Scholl-Grissemann, U. (2022). Is nothing like before? COVID-19-evoked changes to tourism destination social media communication. *Journal of Destination Marketing & Management*, 23, 100692.

- Pagán Castaño, J., Arnal-Pastor, M., Pagán-Castaño, E., & Guijarro-García, M. (2023). Bibliometric analysis of the literature on critical thinking: an increasingly important competence for higher education students. *Economic research-Ekonomska istraživanja*, 36(2).
- Palomo, J., Figueroa-Domecq, C., Flecha-Barrio, D., & Segovia-Pérez, M. (2017). The Use of New Data Analysis Techniques in Tourism: A Bibliometric Analysis in Data Mining, Big Data and Structural Equations Models. *E-Review of Tourism Research (ERTR)*, 8.
- Pearson, S., Brewer, S., Manning, L., Bidaut, L., Onoufriou, G., Durrant, A., ... & Maull, R. (2023). Decarbonising our food systems: contextualising digitalisation for net zero. *Frontiers in Sustainable Food Systems*, 7, 1094299.
- Roziqin, A., Kurniawan, A. S., Hijri, Y. S., & Kismartini, K. (2023). Research trends of digital tourism: a bibliometric analysis. *Tourism Critiques: Practice and Theory*.
- Ruiz-Gómez, L.M., Navío-Marco, J. and Rodríguez-Hevíá, L.F. (2018), “Dynamics of digital tourism’s consumers in the EU”, *Information Technology and Tourism*, Vol. 20s Nos 1/4, pp. 59-81
- Scopus, (2022). *Fact sheet*. Retrieved September 27, 2022, from https://www.elsevier.com/data/assets/pdf_file/0017/114533/Scopus-fact-sheet-2022_WEB.pdf
- Socialinsider (2023). Social Media Industry Benchmarks 2023 Reveal How TikTok’s Engagement Rate Is Decreasing. Available at: <https://www.socialinsider.io/blog/social-media-industry-benchmarks/>
- Statista (2023). Online travel market. Available at: <https://www.statista.com/topics/2704/online-travel-market/>
- Statista (2023). Revenue of the travel apps market worldwide from 2018 to 2027. Available at: <https://www.statista.com/forecasts/1309624/worldwide-revenue-of-travel-apps>
- Unwto. (2020). International tourism down 65% in first half of 2020. *World Tourism Barometer*, 18(5), 1–36. <https://doi.org/10.18111/wtobarometereng.2020.18.1.5>
- Wang, Y., de Almeida Correia, G. H., Van Arem, B., & Timmermans, H. H. (2018). Understanding travellers’ preferences for different types of trip destination based on mobile internet usage data. *Transportation Research Part C: Emerging Technologies*, 90, 247-259.
- Watkins, M., Ziyadin, S., Imatayeva, A., Kurmangalieva, A., & Blembayeva, A. (2018). Digital tourism as a key factor in the development of the economy. *Economic annals-XXI*, (169), 40-45.
- Wu, W. (2020). Analysis of digital tourism, virtual tourism and wisdom tourism. In *Cyber Security Intelligence and Analytics: Proceedings of the 2020 International Conference on Cyber Security Intelligence and Analytics (CSIA 2020), Volume 2* (pp. 18-25). Springer International Publishing.
- Yuan, L. I. U., Rukai, C. H. E. N., Chris, C., & ZhenJie, H. (2016). Key techniques of virtual reality for the development of digital tourism systems. *International Journal of Simulation–Systems*, (18), 17.
- Ziyadin, S., Dauliyeva, G., Kalymbekova, Z., & Turlybekova, A. (2018). Key aspects of digital tourism modernization. In *Innovation Management and Education Excellence through Vision 2020* (pp. 2065-2070).