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An Analysis of the Bibliometric Network on the Impact of Digital Business on Tourism

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Abstract: ***The purpose of this article is to map the state of E-tourism business tourism research and the connections between these subjects. Using VOSviewer, the bibliometric analysis method helps us visualize and analyze patterns such as co-occurrence of keywords, co-citations of cited authors, and co-citations of cited sources. It also helps us understand the structure related to the topic under study. The Scopus database's 98 publications on e-tourism-related subjects are examined in total. We discover that since 2008, the trend in e-tourism research has not substantially grown. Additionally, we identified study subjects that may be investigated using trending keywords. Furthermore, we identified the most influential writers and publications on the subject of e-business and tourist research, as well as the connections between them. To the best of our knowledge, this study is the first to use VOSviewer for bibliometric analysis on the subject of e-Tourism and tourism concurrently. 98 publications were thoroughly reviewed.***

Keywords: E-Tourism, Tourism, Bibliometric Analysis, SLR, Vosviewer.

1. INTRODUCTION

The internet offers a previously unheard-of degree of connectedness as well as inexpensive, effective, and efficient client communication. Household internet usage is growing, which has an effect on the tourist industry (Setiawan et al., 2018) and has altered how companies manage their operations and communicate with clients (Biclesanu et al., 2021). The significance of internet technology in disseminating information about tourism products is widely acknowledged by enterprises (Law et al. 2015). Nowadays, the tourism industry cannot function in day-to-day operations without incorporating the Internet and websites (Šimunić, Pilepić, and Šimunić 2013). Moreover, the two primary requirements for the domestic tourist sector worldwide are telecommunications and information technology (Morella 2017). An knowledge of the significance of information technology use in corporate operations is

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provided by the statistics. The idea of the business and how it operates at all levels of Technology advancement has an impact on businesses nowadays as well (Morella 2017; Biclesanu et al. 2021). Thus, it can be said that the tourism business is impacted by telecommunications and information technology (Benckendorff, Xiang, and Sheldon 2019). International Tourist Arrivals data shows that the tourism business has improved in recent years. not withstanding the fact that the COVID-19 pandemic caused a decrease that began in 2020 (see Figure 1). Investigators describe how the usage of the internet for marketing has led to the expansion of the tourism industry (Wang et al. 2017). The tourism industry has greatly benefited from the development of modern information technology, and the rise of e-tourism has significantly altered the tourism value chain (Yu 2014). cooperative relationships between The industrial structure has undergone revolutionary changes due to technology and tourism (Munikrishnan et al. 2018). Information and communication technology makes strategic marketing, destination management, and operational tasks easier (Buhalis 2003; Zehrer and Fenkart 2008). Due to its low cost and excellent efficiency, e-business applications for tourism are growing quickly (Guo 2012). In the travel sector, there is a strong need for One of the factors driving the growth of e-commerce centered around travel is tourism (Dharmanto et al. 2019). The As e-Tourism grows, competition intensifies, forcing service providers to upgrade their offerings and services, whether related to travel agencies or the broader travel, lodging, and tourism sectors. But since tourism e-commerce is so young, there is a great deal of uncertainty around its growth (Ping 2018). Consequently, a more thorough inquiry is required, which concentrates more on how e-commerce is used in the travel industry, which does have distinct traits derived from different industries Exploring and utilizing the topic is hindered by e-business studies on volatile tourism. In addition,

It is inevitable that e-business will be integrated with tourism. Mapping on this subject is crucial for that. Along with this mapping, it is envisaged that more scholars would have a summary on the state of the field's research and how a Research topic are connected to each other. It offers a broad outline of the research that will be done in the future. It provides chances to carry out studies on the integration of e-business and tourism, which have not been extensively examined, particularly as it relates to MSMEs. Literature review methods were employed in earlier studies to ascertain the interaction between writers and terms, such Askeyev and Baizholova, and the evolution of a science (2022), which provided quantitative information about the study topic of tourist efficiency difficulties (Askeyev together with Baizholova 2022). Using bibliometric analysis, other scholars contrasted the ideas of "Ecotourism" and “Agrotourism," which led to research on these topics becoming highly well-liked and pertinent in the scientific literature (Vysochan and others, 2022). Lastly, studies that employ a methodical literature review approach on the subject of specifically researchers Thao and Bakucz (2022), whose goal is to ascertain the influence of The impact of tourism expansion on human development and the economy from 1978 to 2022 (Thao and Bakucz) 2022). Several of these studies suggest that applying methods similar to bibliometric analysis can help discover the current research trends on particular subjects, the connections between them, and a summary of upcoming research suggestions.

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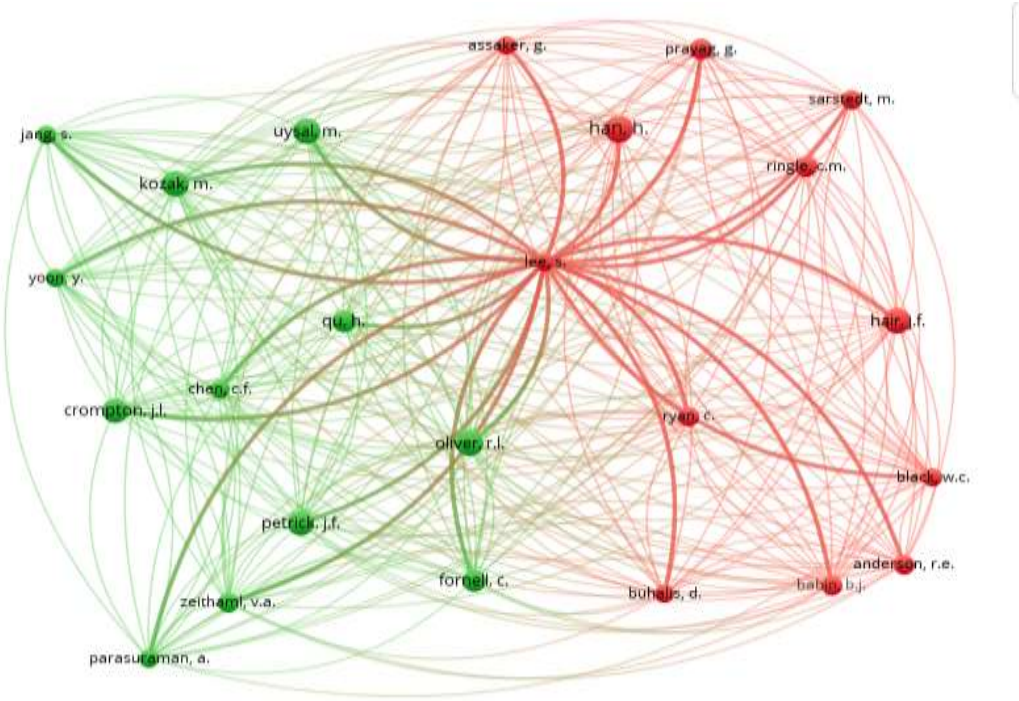

This study aimed to map the position of research and the relationships between the themes by reviewing publications on the theme of e-business and tourism found in the Scopus database. In order to fulfil the goals of this investigation, the subsequent research questions (RQ) are taken into account:

RQ1. What are the patterns in the advancement of tourism and e-business studies, as well as the dissemination of every nation?

RQ2. What is the pattern of keyword relationships in articles about tourism and e-business? What are the ramifications of the most frequently occurring keywords?

RQ3. Using a network of references, what is the pattern of relationships between referenced authors?

What are the consequences of co-citations, or shared citations?

2. METHODS OF RESEARCH

This work uses the Systematic Mapping Study (SMS) approach. The systematic library review method known as SMS provides a comprehensive overview and analysis of the evolution of science-based scholarly publications carried out by grouping, examining publishing patterns, and gathering information about a study topic depending on as per Petersen et al. (2008) and Purnomo et al. (2020). There are numerous categories in the systematic mapping study, specifically informatics, bibliometric network, and scientometric analysis (Hilal, Abdekhodaee and Maqsood (2019). We apply bibliometric network analysis in this article. There are five phases. employed in this investigation, which followed Dohale et al. (2020) in terms of adoption, were search, locate, select, review, and evaluate the publications (Dohale et al. 2020), making any required modifications in light of the goal of this investigation (see

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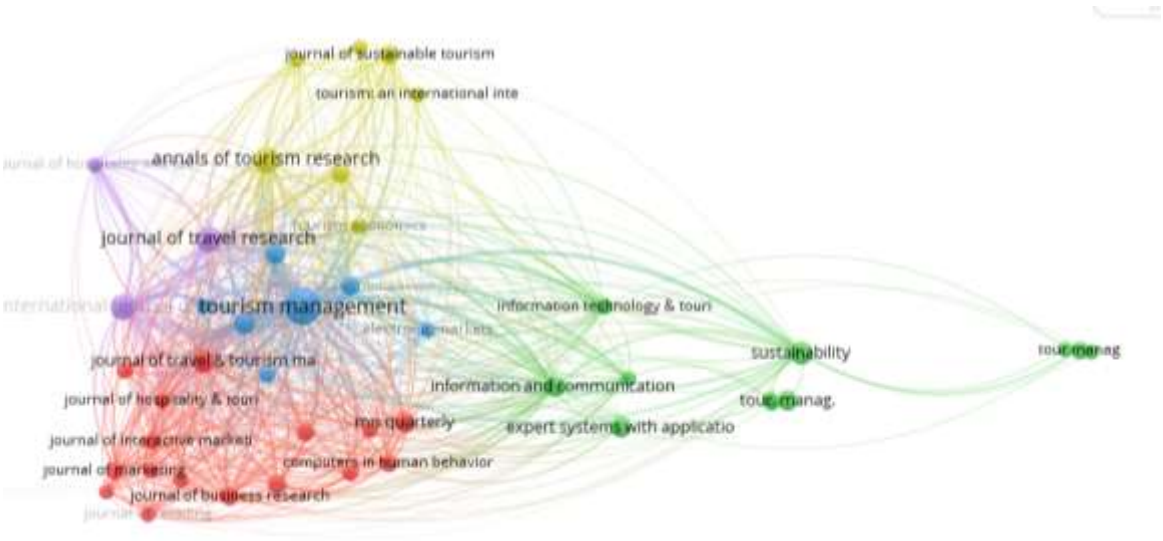

Figure 2).

Step 1: Examining the publications
We identify and examine the documents that have been downloaded from our Scopus database to ascertain the nature of the research, the kinds of instruments and techniques that were employed, and the kind of industry that the If any, research was done to emphasize each study's important contribution. In conclusion, we guarantee that the the scientific publication that was downloaded from the database is available to the public. Consequently, it is information that is available to the public. that can be handled and examined without the need for additional authorization.

Stage 2: Review of the literature
Co authorship analysis, cooccurrence analysis, and co citation analysis can all be created using comma-separated values (CSV) files. In this paper, VOSviewer version 1.6.15 was utilized to generate networks and visualize such networks because of its ease of use, interoperability with a wide range of databases Scopus. VOSviewer is particularly sensitive to bibliometric map graphical representations. The Large bibliometric maps can be easily interpreted with the help of the VOSviewer tool (van Eck and

Waltman (2009). Furthermore, VOSviewer is compatible with a wide range of hardware and operating systems. platforms that may be accessed straight from the internet, are free of charge. The following phase, which involves interpreting the map visualization, is predicated on three features: circles dimensions, separation, and hue. The relationship between the two authors is closer the closer their distance from one another is. the pair of writers. Additionally, the greater the diameter of the writer's circle, the greater the incidence of writing credit. Regarding colour, a close relationship is indicated by the same author's colour.
Step 3: Prospects for future investigation

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We'll look at the areas of unmet research need from the prior literature analysis. phase. We suggest future study directions based on such gaps in the literature. Lastly, we offer Research implications for theory and practice from this study

3. Findings and Discussion a. E-business and tourism research trends

We display trends in scientific research from year to year using the Scopus Analyze Search Results tool. year. There are 98 publications total on e-business and tourism, of which 59 have articles. 43 kinds and conference or proceedings papers. The years with the most publications were 2010 and 2017, each containing 19 papers. 2005 and 2017 had the fewest publications overall, with the number of documents, each containing one article. The tourism-related E-business research trends that we outline in figure 3.



We discovered that the two papers that make up the research on e-business in tourism that are listed in the Scopus database only began to emerge in 2003. Silva and Rocha (Silva and Rocha 2003) wrote the first document, which was titled "Semantic Web complex ontology mapping". The second piece was titled "The Competitive Networks of Tourism E-Mediaries: New Strategies, New Advantages" and was written by Dale (Dale 2003). In 2020, two publications come up in the search, including a study that addresses the utilization of tourism artificial intelligence (AI)-powered schedule models to produce more logical and varied itinerary options suggestions that can be incorporated into e-business smart service systems (Zheng et al. 2020). Halawani's study also addresses the integrated paradigm of e-business use and how it affects hotels. features of social media (Halawani, Soh, and Halawani 2020). This explanation leads to the conclusion that since 2003, e-business technology has been included into tourism-related activities and continues to grow, particularly in terms of the technology employed, with artificial intelligence (AI) technologies being discussed in 2020. incorporated into travel-related activities. Furthermore, using social media for business, which is among the most technologically advanced breakthroughs that are thought to be extremely valuable for a variety of businesses, including travel and tourism. Additionally, we discovered that 39 nations are represented in all of the available records. China leads the world in e-business and tourist subjects with 34 out of 117 documents. China additionally made a contribution to one of the

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most recent papers (2020) in our database, specifically the study by Zheng et al. titled "Navigating according to Zheng et al. (2020), "through the complex transport system: A heuristic approach for city tourism recommendation." There are fourteen documents in Australia's second sequence, and eleven documents from the British. Other Only one piece was given by any country, including Iran, Canada, the Czech Republic, Ghana, India, and Indonesia. Russia, Saudi Arabia, Pakistan, Poland, Lebanon, Montenegro, New Zealand, and , South Korea, Sweden, and up to three articles that are not named (Undefined) (see to Figure 4). It suggests that there is still need for greater research on e-business in the tourism industry, notwithstanding the lack of consistency in previous findings. Profoundly

b. Keyword co-occurrence analysis

According to the most popular keywords, co-occurrences are used to show data (keywords) in pairs within a single network group unit (van Eck and Waltman 2010). The computation is helpful in determining which units are frequently used in the study's field is shown simultaneously, allowing for the examination of concepts (keywords) and themes (collectives) (Herrera-Franco et al. 2021; van Eck and Waltman 2010). We employ the co-occurrence analysis type. unit of analysis: complete counting method and all keywords. Given that a few keywords are spelled differently, but submit a thesaurus file to mix the keywords that share the same meaning (Appendix 2). An total of 770 keywords were taken out of the database; 23 of them showed up in the document at the same time. Five times. China, an ontological framework and research are examples of irrelevant keywords that are eliminated in the final step.

Consequently, there are four groups or clusters, with two clusters being the least. Cluster 1 (red) with the keyword "e-business" is the most extensive study field based on the number of nodes, according to the co-occurrence network of author keywords results. With 56 appearances, the keyword "e-business" stands out as the most frequent entry in cluster 1. Rotchanakitumnuai et al. look into how e-business is being implemented in the travel and tourist sector. Numerous tourism-related firms overlook the small details on their websites and fail to recognize the value and significance of informational websites (Rotchanakitumnuai, Kaewkitipong, and Ractham 2011). Another study (Kaewkitipong and Brown 2007) focuses on the benefits of e-business technology in the travel services sector in Thailand. Guo's research focuses on evaluating the effectiveness of e-businesses used in the travel and tourist sector. Guo offers a number of ways to enhance customers' e-business service performance (Ping 2011). Liying and Ke (2009) conducted a study wherein the researchers examined the e-business tourist perspective in China using direct marketing. Finally, this cluster also draws attention to problems that the tourism industry will face as a result of the widespread use of ICTs. Using e-business technology and putting innovative business models into practice can help businesses gain a competitive edge in global markets (Vidas-Bubanja 2008). A portion of the research's focus is on providing an overview of the topic of study for network groups in cluster 1, specifically talking about the topic of e-business implementation, which is connected to the terms "tourism e-business," "industry," "commerce," "information system," and "business models."

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With a keyword count of six items, Cluster 2 (green) reflects the subject of the second study area. Of all the clusters that are currently in place, the term "ecommerce" appears 72 times, making it the largest node. Researchers in the cluster noted that in order to yield the most benefits, e-commerce in the travel and tourist sector must be planned cooperatively (Yang and Jiang 2009). Furthermore, Song and Wu established a curriculum on internet-based e-commerce tourism in response to their concerns on the availability of internal and external resources in the tourist industry for promoting travel and disseminating information (Song and Wu 2016). Additional studies highlight how information technology is being used to create electronic business systems for the travel and tourist sector. A portion of the study's focus covers an overview of cluster 2's research on network groups, specifically talking about the use of technology and e-commerce to develop smart tourism.

The third study area's topic is represented by Cluster 3 (blue), which has four items with keywords. With 17 occurrences, the keyword "tourism" is the largest node on the cluster. The study by Zheng et al. improved the artificial intelligence system model for choosing tourist transportation options. To enhance the travel experience for clients, the model can be incorporated into the e-business service system of application providers and travel agencies (Zheng et al. 2020). An integrated model of e-business usage and its influence on the social media attributes of hotels in Lebanon was created by Halawani et al. (Halawani, Soh, and Halawani 2020). A portion of the research's focus covers an overview of cluster 3's network group research issue, which is the discussion of internet integration and use for tourism.
The fourth study area's topic is represented by Cluster 4 (yellow), which has three items with keywords. The largest node in the cluster is the keyword "website". Ping G researchers examined the tourism e-commerce model's quality evaluation index system, primarily by assessing website functionalities (Ping 2018). Li and Feng investigated the relationship between online customer reviews and business success, using the quality of the information as a moderator and the website's reputation as an intermediary variable. According to Li and Feng's (2018) findings, the website's reputation had a noteworthy mediating effect on both online customer reviews and business performance.

Rotchanakitumnuai evaluates the effectiveness of e-tourism Thailand's multi-channel electronic services, encompassing a range of online platforms like social media, websites, mobile apps, and the Internet of Things, as well as its influence on cognitive imagery. The findings indicate that passengers value the direct responsiveness provided by IoT devices and applications, which might generate affective and cognitive imagery, when it comes to the quality of service (Rotchanakitumnuai 2017). The study conducted by Lu et al. (2012) investigates the ways in which electronic service aspects on websites affect customer satisfaction and influence their behavior. A portion of the research's focus covers an overview of cluster 4's network group research issue, which is the integration of tourism marketing through websites and electronic media. The usage of websites in restaurants has also been noted by other study, particularly with regard to particular features of web interface design that are employed to meet consumer expectations (Gunden, Morosan, and DeFranco 2020) and accessibility concerns (Singh et al. 2020).

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c. Co-citation Network for Referenced Materials

Examining direct citations from the source is crucial for scholars who want to learn more about a subject, share their knowledge, and find correct and trustworthy material in a certain field. Numerous earlier research examined the co-citation relationships between journals that were cited using the co-citation of cited sources approach. were consulted for information on specific research subjects. Research has focused on the intellectual structure of zakat as reported in articles with Scopus index (Alshater et al. 2021). In Singh & Yumnam's (2021) study that resulted in a visualization of the references included in a piece that was printed in The Malaysian Journal of MJLIS stands for library and information science (Yumnam and Singh 2021). Raman et al.'s study from 2022 used to Examine the co-citation patterns of referenced sources in blended learning papers in higher education (Raman et al., 2021). Burak's (2021) study on network mapping pertaining to e-logistics concludes with the International The most often cited source on e-logistics is the Journal of Physical Distribution & Logistics Management. investigation (Burak 2021). In this study, we aim to map the reference sources that are most frequently found on the subject of e- tourism and e-business study, and the relationships between these reference sources (Mehraj, Ul Islam, et al., 2023) .We go over the composition of the co-citation network, or network of citations, between e-business and tourism-related cited sources (journals) generated by VOSviewer. Information and management journals, with 60 co-citations, are the largest "node" among the 15 items/journals displayed in Cluster 1 (red). The journal is based on a network pattern generated by VOSviewer and is located in the same cluster as the journal of small company and enterprise development. The journal "information and management" is cited in 14 out of the 117 publications, one of which is Bingbing et al. (2019), which addresses the use of filter bubble phenomena in B2B to enable tailored recommendation technology (Bingbing, Tianlong, and Yan 2019).

One article/document, titled "Psychological reactance to online recommendation services," is cited in the article (Lee and Lee 2009). We discovered the article focused more on leveraging technology than it did on tourism. Additionally, a study by Munikrishnan et al. explores the elements promoting and impeding conventional travel brokers' embrace of ICT technology 2018's Munikrishnan et al. The article references two papers from the journal "information and management" (Mehrtens, Cragg, and Mills 2001; Kuan and Chau 2001), both of which address the adoption of technology (Mehraj, Qureshi, et al., 2023). The journal "information and management" is one of the most cited journals and has made significant contributions to the field of e-business and tourist research, particularly in information technology, according to the statistics presented.Cluster 2 (verdant): Out of all the journals that publish articles about e-business and tourism, "tourism management" journals have the highest number of co-citations (143), making them the largest "node" among the eight categories.

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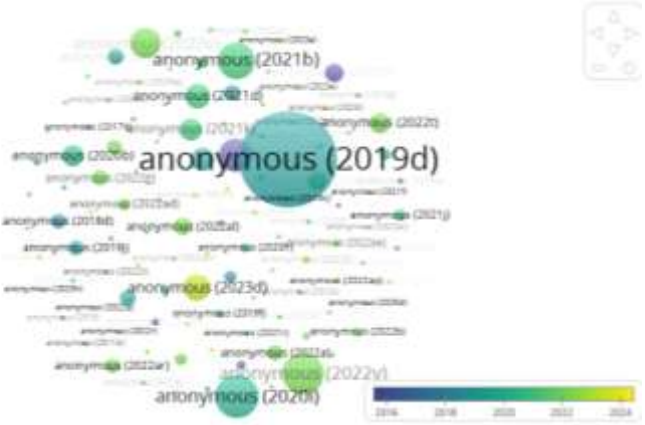

The international journals of Conte, holiday marketing, and travel research are next to publications of tourism management that are based on network patterns generated by VOSviewer. The journal "Tourism Management" is cited in 49 out of 98 articles. One of these, by Zheng et al. (2020), addresses the use of artificial intelligence (AI) in tourism itinerary models to generate more diverse and reasonable recommendations for itineraries that can be incorporated into smart service systems as part of e-business. Nineteen articles and papers from the journal "tourism management" are cited in the article (Basheer et al., 2023). Numerous articles, such as "Designing personalized urban tourism itineraries with hotel selection: a heuristic approach" (Zheng et al., 2020). Furthermore, Zheng et al. (2019) cite another work that addresses the use of GPS (global positioning system) for tourist mobility. We discovered that a few of these articles went into greater detail regarding the use of technology in tourism management. These statistics point to the journal "Tourism Management" as one of the most cited, contributing significantly to the field of e-business and tourism research, particularly in the area of tourism management.

We discuss the structure of the co-citation network, or network of citations, that VOSviewer creates between cited sources (journals) pertaining to e-business and tourism. With 60 co-citations, information and management journals make up the largest "node" out of the 15 items/journals shown in Cluster 1 (red). The journal is housed in the same cluster as the journal of small business and enterprise development and is based on a network pattern created by VOSviewer. Out of the 117 publications, 14 mentions the journal "information and management"; one of these is Bingbing et al. (2019), which discusses how B2B uses filter bubble phenomena to provide tailored recommendation technology (Bingbing, Tianlong, and Yan 2019). The paper (Lee and Lee 2009) cites one document/article titled "Psychological reactance to online recommendation services." We found that the article was less about tourism and more about utilizing technology. Furthermore, Munikrishnan et al.'s study investigates the factors that facilitate and hinder traditional travel brokers' adoption of ICT.

This year's Munikrishnan et al. Two articles that discuss the adoption of technology are cited in the article. They are published in the journal "information and management" (Mehrtens, Cragg, and Mills 2001; Kuan and Chau 2001). The figures show that the journal "information

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and management" is among the most cited and has significantly advanced the fields of e-business and tourism research, especially in information technology.Cluster 2: evergreen "Tourism management" journals are the largest "node" among the eight categories, with the highest number of co-citations (143) among all the journals that publish articles about e-business and tourism.

3. CONCLUSION

Publications of tourist management that are based on network patterns produced by VOSviewer are next to worldwide journals of Conte, vacation marketing, and travel research. Out of 117 articles, 49 cite the journal "Tourism Management". The application of artificial intelligence (AI) in tourism itinerary models to produce more varied and rational suggestions for itineraries that can be integrated into smart service systems as part of e-business is covered in one of these, by Zheng et al. (2020). The article cites nineteen publications and articles from the magazine "tourism management". A multitude of articles, including "Personalized urban tourism itineraries: a heuristic approach" (Zheng et al., 2020). Zheng et al. (2019) also mention a different study that discusses the application of GPS (global positioning system) to traveler mobility. A few of these publications, it turned out, went into further depth about how technology is used in tourism management. According to these figures, the journal "Tourism Management" is one of the most cited, making a substantial contribution to the study of e-business and tourism, especially in the subject of tourism management.

4. REFERENCES

1. Basheer, S., Walia, S., Farooq, S., Shah, M. A., & Mir, F. A. (2023). Exploring the Metaverse (pp. 195–204). https://doi.org/10.4018/978-1-6684-8898-0.ch012
2. Mehraj, D., Qureshi, I. H., Singh, G., Nazir, N. A., basheer, S., & Nissa, V. u. (2023). Green marketing practices and green consumer behavior: Demographic differences among young consumers. Business Strategy & Development. https://doi.org/10.1002/bsd2.263
3. Mehraj, D., Ul Islam, M. I., Qureshi, I. H., Basheer, S., Baba, M. M., Nissa, V. u, & Asif Shah, M. (2023). Factors affecting entrepreneurial intention for sustainable tourism among the students of higher education institutions. Cogent Business & Management, 10(3). https://doi.org/10.1080/23311975.2023.2256484
4. Akhtar, N., Khan, N., Mahroof Khan, M., Ashraf, S., Hashmi, M. S., Khan, M. M., & Hishan, S. S. (2021). Post-covid 19 tourism: Will digital tourism replace mass tourism? Sustainability (Switzerland), 13(10). https://doi.org/10.3390/su13105352
5. Akpojaro, J., & Bello, R.-W. (2019). Smart Healthcare System: A Primer. In Peer-Reviewed, Refereed, Indexed Journal with IC (Issue 5). https://www.kernelsphere.com/four-internet-things-communications-models/
6. Ayuningtyas, D., & Ariwibowo, D. A. (2020). The strategic role of information communication technology in succeeding medical tourism. Enfermeria Clinica, 30, 170–173. https://doi.org/10.1016/j.enfcli.2020.06.039

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http://journal.hmjournals.com/index.php/JSRTH
DOI: https://doi.org/10.55529/jsrth.31.40.52

7. Basheer, S., Walia, S., Farooq, S., Shah, M. A., & Mir, F. A. (2023). Exploring the Metaverse (pp. 195–204). https://doi.org/10.4018/978-1-6684-8898-0.ch012
8. Bolger, R. K. (2021). Finding wholes in the metaverse: Posthuman mystics as agents of evolutionary contextualization. Religions, 12(9). https://doi.org/10.3390/rel12090768
9. Buhalis, D. (2020). Technology in tourism-from information communication technologies to eTourism and smart tourism towards ambient intelligence tourism: a perspective article. Tourism Review, 75(1). https://doi.org/10.1108/TR-06-2019-0258
10. Buhalis, D., Leung, D., & Lin, M. (2023). Metaverse as a disruptive technology revolutionising tourism management and marketing. In Tourism Management (Vol. 97). Elsevier Ltd. https://doi.org/10.1016/j.tourman.2023.104724
11. Bui, T. X. (2023). 56th Hawaii International Conference on System Sciences (HICCS), Hyatt Regency Maui, January 3-6, 2023. University of Hawaii at Manoa.
12. Cai, W., & McKenna, B. (2021). Knowledge Creation in Information Technology and Tourism Research. In Journal of Travel Research (Vol. 60, Issue 4). https://doi.org/10.1177/0047287520903142
13. Cai, W., McKenna, B., Wassler, P., & Williams, N. (2021). Rethinking Knowledge Creation in Information Technology and Tourism. In Journal of Travel Research (Vol. 60, Issue 6). https://doi.org/10.1177/0047287520946100
14. Chang, C. L., McAleer, M., & Ramos, V. (2020). A charter for sustainable tourism after COVID-19. Sustainability (Switzerland), 12(9). https://doi.org/10.3390/su12093671
15. Damar, M. (2021). Metaverse Shape of Your Life for Future: A bibliometric snapshot.
16. El-Said, O., & Aziz, H. (2022). Virtual Tours a Means to an End: An Analysis of Virtual Tours' Role in Tourism Recovery Post COVID-19. Journal of Travel Research, 61(3). https://doi.org/10.1177/0047287521997567
17. González-Rodríguez, M. R., Díaz-Fernández, M. C., & Pino-Mejías, M. Á. (2020). The impact of virtual reality technology on tourists' experience: a textual data analysis. Soft Computing, 24(18), 13879–13892. https://doi.org/10.1007/s00500-020-04883-y
18. Gursoy, D., Malodia, S., & Dhir, A. (2022). The metaverse in the hospitality and tourism industry: An overview of current trends and future research directions. Journal of Hospitality Marketing and Management, 31(5), 527–534. https://doi.org/10.1080/19368623.2022.2072504
19. Higgins-Desbiolles, F., Bigby, B. C., & Doering, A. (2022). Socialising tourism after COVID-19: reclaiming tourism as a social force? Journal of Tourism Futures, 8(2). https://doi.org/10.1108/JTF-03-2021-0058
20. Jeong, M., & Shin, H. H. (2020). Tourists' Experiences with Smart Tourism Technology at Smart Destinations and Their Behavior Intentions. Journal of Travel Research, 59(8), 1464–1477. https://doi.org/10.1177/0047287519883034

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21. Jovanović, A., & Milosavljević, A. (2022). VoRtex Metaverse Platform for Gamified Collaborative Learning. Electronics (Switzerland), 11(3). https://doi.org/10.3390/electronics11030317
22. Kamata, H. (2022). Tourist destination residents' attitudes towards tourism during and after the COVID-19 pandemic. Current Issues in Tourism, 25(1). https://doi.org/10.1080/13683500.2021.1881452
23. Kamboj, S., & Joshi, R. (2021). Examining the factors influencing smartphone apps use at tourism destinations: a UTAUT model perspective. International Journal of Tourism Cities, 7(1), 135–157. https://doi.org/10.1108/IJTC-05-2020-0094
24. Kusuma, P. A., Mutiarin, D., & Damanik, J. (2021). STRATEGI PEMULIHAN DAMPAK WABAH COVID PADA SEKTOR PARIWISATA DI DAERAH ISTIMEWA YOGYAKARTA. Journal of Tourism and Economic, 4(1). https://doi.org/10.36594/jtec.v4i1.110
25. Kye, B., Han, N., Kim, E., Park, Y., & Jo, S. (2021). Educational applications of metaverse: Possibilities and limitations. In Journal of Educational Evaluation for Health Professions (Vol. 18). https://doi.org/10.3352/jeehp.2021.18.32
26. Lapointe, D. (2020). Reconnecting tourism after COVID-19: the paradox of alterity in tourism areas. Tourism Geographies, 22(3). https://doi.org/10.1080/14616688.2020.1762115
27. Lu, J., Xiao, X., Xu, Z., Wang, C., Zhang, M., & Zhou, Y. (2022). The potential of virtual tourism in the recovery of tourism industry during the COVID-19 pandemic. Current Issues in Tourism, 25(3). https://doi.org/10.1080/13683500.2021.1959526
28. Mehraj, D., Qureshi, I. H., Singh, G., Nazir, N. A., basheer, S., & Nissa, V. u. (2023). Green marketing practices and green consumer behavior: Demographic differences among young consumers. Business Strategy & Development. https://doi.org/10.1002/bsd2.263
29. Narin, N. G. (2021). A Content Analysis of the Metaverse Articles. Journal of Metaverse , 1(1).
30. Papa, A., Mital, M., Pisano, P., & Del Giudice, M. (2020). E-health and wellbeing monitoring using smart healthcare devices: An empirical investigation. Technological Forecasting and Social Change, 153. https://doi.org/10.1016/j.techfore.2018.02.018
31. Park, S., & Kim, S. (2022). Identifying World Types to Deliver Gameful Experiences for Sustainable Learning in the Metaverse. Sustainability (Switzerland), 14(3). https://doi.org/10.3390/su14031361
32. Park, S. M., & Kim, Y. G. (2022). A Metaverse: Taxonomy, Components, Applications, and Open Challenges. IEEE Access, 10. https://doi.org/10.1109/ACCESS.2021.3140175
33. Subasinghe, M., Magalage, D., Amadoru, N., Amarathunga, L., Bhanupriya, N., & Wijekoon, J. L. (2020). Effectiveness of artificial intelligence, decentralized and distributed systems for prediction and secure channelling for Medical Tourism. 11th Annual IEEE Information Technology, Electronics and Mobile Communication Conference, IEMCON 2020, 314–319. https://doi.org/10.1109/IEMCON51383.2020.9284898

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DOI: https://doi.org/10.55529/jsrth.31.40.52

34. Suh, W., & Ahn, S. (2022). Utilizing the Metaverse for Learner-Centered Constructivist Education in the Post-Pandemic Era: An Analysis of Elementary School Students. Journal of Intelligence, 10(1). https://doi.org/10.3390/jintelligence10010017
35. Tiwari, A., Dhiman, V., Iesa, M. A. M., Alsarhan, H., Mehbodniya, A., & Shabaz, M. (2021). Patient Behavioral Analysis with Smart Healthcare and IoT. Behavioural Neurology, 2021. https://doi.org/10.1155/2021/4028761
36. Toubes, D. R., Vila, N. A., & Fraiz Brea, J. A. (2021). Changes in consumption patterns and tourist promotion after the covid-19 pandemic. Journal of Theoretical and Applied Electronic Commerce Research, 16(5). https://doi.org/10.3390/jtaer16050075

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