

User-generated content (UGC) in tourist attractions and destinations: systematic literature review and perspectives for management

Marcelo Chemin* Universidade Federal do Paraná (Brasil)

Carlos Pereira da Silva** CICS.NOVA, New University of Lisbon (Portugal)

Sidney Vincent de Paul Vikou***

Universidade Federal do Paraná (Brasil)

Abstract: User-generated content (UGC) is one of the tourism industry's most strategic Big Data sources. This systematic review aims to understand what has been proposed in the scientific literature regarding utilising UGC in managing tourist attractions and destinations. Following a PRISMA protocol, 158 scientific articles (Web of Science, Scopus, EBSCO Host) were reviewed, providing practical implications for the field's management through the analysis of UGC data. We discovered a growing body of scientific production spread across various fields of knowledge and geographical coverage, conducted in different scenarios and contexts of attractions and destinations. This shows the versatility of the application where we have identified eight central themes, including experience, image, space, perception, satisfaction, narrative, brand, and demand. UGC holds significant potential as a supplementary source in problem identification. Application perspectives encompass five areas of attraction and destination management: visitors, resources, product/marketing, site, and crises.

Keywords: Big data; Destination management organization (DMO); Tourism Management; PRISMA; Social media.

Contenido generado por el usuario (CGU) en atractivos y destinos turísticos: revisión sistemática de la literatura y perspectivas para la gestión

Resumen: Contenido generado por el usuario (CGU) es una de las fuentes de datos big data consideradas más estratégicas para el turismo. Esa revisión sistemática objetiva conocer lo propuesto en la literatura científica sobre el aprovechamiento de CGU en la gestión de atractivos y destinos turísticos. Bajo un protocolo PRIS-MA fueron revisados 158 artículos (Web of Science, Scopus, EBSCO Host) que ofrecieron implicaciones prácticas para la gestión del área a partir del análisis de datos CGU. Descubrimos una producción científica en crecimiento, difusa en términos de las áreas de conocimiento y cobertura geográfica, realizada en distintos escenarios y contextos de atractivos y destinos, lo que demuestra aplicación versátil. Identificamos ocho temas: experiencia, imagen, espacio, percepción, satisfacción, narrativa, marca, demanda. El CGU tiene gran potencial como fuente complementar en la identificación de problemas. Perspectivas de aplicación abarcan cinco áreas de la gestión de atractivos y destinos; visitantes, recursos, producto/marketing, sitio, crisis.

Palabras clave: Big data; Organizaciones de gestión de destinos (OGD); Gestión del Turismo; PRISMA; Medios sociales.



^{*} Universidade Federal do Paraná (Brasil); https://orcid.org/0000-0002-8200-9839; E-mail: marcelochemin@ufpr.br

^{**} CICS.NOVA, New University of Lisbon (Portugal); https://orcid.org/0000-0003-1613-4321; E-mail: cpsilva@fcsh.unl.pt
*** Universidade Federal do Paraná (Brasil); https://orcid.org/0000-0002-4672-8561; E-mail: viksidney@gmail.com

Cite: Chemin, Marcelo; Silva, Carlos P. & Vikou, Sidney Vincent P. (2025). User-generated content (UGC) in tourist attractions and destinations: systematic literature review and perspectives for management. *Pasos. Revista de Turismo y Patrimonio Cultural*, 23(2), 539-562. https://doi.org/10.25145/j.pasos.2025.23.036.

1. Introduction

Big data represents a growing field of publications in tourism (Li et al. 2018; Lyu et al. 2022). As a social and technological phenomenon, it has been driven, first and foremost, by the advancement of Information and Communication Technologies (ICTs), which have transformed the internet into a social environment. Secondly, it stems from the widespread consumption of social media (tools, apps, platforms), accompanied by the creation of distinctive languages, symbols, and cultural practices, as exemplified by the "sharing" action. Thirdly, the popularity of smartphones has enabled unprecedented levels of virtual interaction among individuals.

The vast volume of data, generated at high speed and through various modalities (Hartmann et al. 2022; Mariani et al. 2018), simultaneously portrays both the social sphere operating on the internet (Cosentino & Alikasifoglu, 2019) and a high level of cultural acceptance (Naab & Sehl, 2017). There are three categories of big data sources: user-generated content (UGC), devices, and operations. UGC, which is the focus of this study, corresponds to the data set stemming from users' voluntary interactions on social media platforms. (Mirzaalian & Halpenny, 2019).

Device and operation data involve sensitive ethical and legal issues, consisting of passive traces that impact privacy (Li et al. 2018; Lyu et al. 2022; Mariani et al. 2018). In contrast, UGC is voluntary; its creation on social media follows a logic of personal contribution, with posts often falling outside the realm of one's profession (Naab & Sehl, 2017). It is also independent of an editor's role, and low entry barriers facilitate its production.(Zhuravskaya et al. 2020).

The voluntary nature of UGC does not diminish its social and scientific complexity. It serves as a valuable source of information, offering low-cost and non-intrusive insights (Lu & Stepchenkova, 2015; Baka, 2016), allowing for an understanding of tourists' opinions, ideas, preferences, and behaviours (Mariani et al. 2018). It also represents a powerful tool with the potential to spread false and inaccurate information, propagate misinformation, trigger institutional destabilisation, fuel social conflicts, and contribute to processes of democratic erosion. (Cosentino & Alikasifoglu, 2019; Hänska-Ahy & Shapour, 2013; Zhuravskaya et al. 2020).

The tourism and hospitality sector is regarded as one of the most promising domains for UGC on the internet (Schuckert et al. 2015; Baka, 2016). The sharing of narratives and images related to vacations, leisure activities, emotions, and experiences of consuming services receives widespread social approval on various media platforms. This content is often perceived as trustworthy, expressing freedom, success, and authenticity. (Ukpabi & Karjaluoto, 2018; Le et al. 2019; Hartmann et al. 2022).

According to the literature review publications consulted, research on this topic has shown continuous growth in various directions. Reviews focusing on UGC and communication have been identified (Naab & Sehl, 2017), as well as those centred around tourism and hospitality (Lu & Stepchenkova, 2015; Ukpabi & Karjaluoto, 2018), often confined to specific types of UGC data, such as reviews (Schuckert et al. 2015) or photography (Li et al. 2023). Additionally, reviews focusing on social media analysis within the tourism and hospitality context have been identified (Mirzaalian & Halpenny, 2019), alongside broader scope reviews where tourism and hospitality UGC are presented in the context of big data. (Li et al. 2018; Lyu et al. 2022; Mariani et al. 2018).

A brief overview of some of these reviews provides insights into the context they uncovered. For instance, Lu and Stepchenkova (2015) examined how UGC data were utilised in empirical tourism and hospitality research. They organised the main topics, methods, and software used. Among the 122 analysed studies, 63 worked with data from tourism companies, 58 from destinations, and one from attractions. Prominent themes included service quality, destination image and reputation, electronic word-of-mouth, experience and behaviours, and mobility patterns. Li et al. (2018) collected 144 publications concerning the application of big data in tourism research, describing research strategies based on each of the three categories of data sources. UGC data stood out as a source in 47% of the studies. Ukpabi & Karjaluoto (2018) examined 54 studies from 2005 to 2016 on the use of UGC for travel planning. The adoption of user-generated content for travel planning is determined by three crucial factors: the source, user, and content. The analysis of 146 by Lyu et al. (2022) found that 72% of big data studies in tourism and hospitality use user-generated content, primarily focusing on lodging, food, and transportation companies.

The existing production is characterized by research focused on the systematization of User-Generated Content as a source of strategic information for tourism and hospitality businesses (Schuckert et al., 2015; Lu & Stepchenkova, 2015; Baka, 2016; Mariani et al., 2018). However, we still lack a systematic understanding of the use of UGC in tourist attractions and destinations. In line with Li et al. (2018) and

Lyu et al. (2022), new reviews on the subject are needed to strengthen the utility of UGC, explore its applications in other directions, and enhance theoretical foundations.

In this context, the literature can be expanded if a review systematizes applications in tourist attractions and destinations, highlighting the specific challenges and management issues in these tourist environments. Furthermore, a review that maps thematic domains facilitates the decision-making process for future studies on the adoption of concepts and theories, which, in turn, promotes theoretical advancement. Therefore, this study was designed to address these gaps in the literature.

The research question is: What has been proposed in the scientific literature regarding using UGC to manage tourist attractions and destinations? The aim is to explore the scientific literature on the utilization of UGC in the management of tourist attractions and destinations. We conducted a systematic literature review based on the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) protocol to accomplish this. The preference for PRISMA over other protocols stems from its recognized comprehensiveness, widespread use across various disciplines globally, and its potential to enhance review consistency. It serves as one of the most exhaustive checklists for evaluating current and future trends across any field. In this sense, in addition to characterizing the scientific production, we present research landscapes, thematic domains, and contributions to management.

The study's contribution lies in three directions: firstly, in expanding the frontier of knowledge about UGC as a strategic source in tourist attractions and destinations. Secondly, in theoretical terms, future research can benefit from the systematization of thematic domains. Thirdly, managers can use the summarization of tourist attractions and destination management in their routines. It serves as a resource to reinforce that their decisions also consider the evidence originating from social media.

2. Methodology

This review follows a systematic quantitative approach (Le et al. 2019; Vada et al. 2020) and is based on the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) protocol (Page et al. 2021). The PRISMA protocol enjoys widespread acceptance, although it is relatively recent within the context of tourism research (Mirzaalian & Halpenny, 2019. Le et al. 2019; Li et al. 2023; Pahlevan Sharif et al. 2019; Yang et al. 2017).

As the initial step, the research team developed a protocol encompassing the research question, objectives, rationale, criteria, and procedures. Concerning the criteria, the researchers determined that a specific time frame would not limit relevant literature documents due to the topic's relatively new nature. Moreover, the studies must be scientific articles published in peer-reviewed journals and available in English, Spanish, or Portuguese. The articles were expected to explore UGC data from tourist attractions or destinations and provide practical management implications. These implications serve as inputs for planning actions or shaping public policies in the context of tourism. The following were reasons for exclusion: (i) conceptual, theoretical, and review articles; (ii) lack of relevance or emphasis on tourism; (iii) study design not related to the theme or outside the intended focus on tourism management; (iv) articles focused on companies or facilities related to lodging, food, transportation, travel agencies, tourism services, events, products, and services of different nature; (v) lacking indication of a specific attraction or destination as a geographical scope; and finally, articles that (vi) do not provide insights for the management of the studied theme.

The chosen data sources included Scopus, Web of Science, and EBSCO Host. These three databases, particularly Scopus and Web of Science, are commonly used in tourism reviews due to their extensive coverage and robustness within the scientific domain (Li et al. 2018; Lyu et al. 2022; Mariani et al. 2018; Mirzaalian & Halpenny, 2019). The search string developed involved an exploratory phase on Google Scholar to identify relevant terms and a progressive sequence of trials across the three databases. This iterative process aimed to determine the most effective equation for retrieving relevant documents. The final composition was applied as Title-Abstract-Keywords on August 22, 2022: ("User-Generated Content" OR "travel review*" OR "online review*") AND ("tourism destination" OR "visitor attraction" OR "tourist attraction" OR attraction OR city OR heritage OR historic* OR monument OR industrial OR garden OR aquarium OR fort* OR church OR chapel OR cathedral OR temple OR monastery OR tower OR bridge OR castle OR mountain OR cave OR island OR river OR lake OR waterfall). It is worth noting that only one author was involved in the data extraction process.

The protocol did not establish filtering within the field of tourism journals. Based on the retrieved articles, the decision was made to focus on tourist attractions and destinations.

The review process was conducted following the PRISMA Flowchart (Figure 1).



Figure 1: PRISMA Flowchart of the systematic literature review

The documents retrieved in the Identification phase (n=2094) were imported into Rayyan (Ouzzani et al. 2016), an online tool for systematic literature reviews. Rayyan identifies duplicates (n=701) and facilitates collaboration among the team during the blind review. During the Screening phase, inclusion and exclusion criteria were applied based on the assessment of titles, abstracts, and keywords of 1,393 articles by two authors independently. The researchers involved in this phase had a prior meeting to align the application of the criteria. However, after completing the process, some disagreements arose, necessitating a final deliberation meeting.

The 218 articles accepted in the Screening phase were exported to StArt - State of the Art through Systematic Review Version 3.0.4 Beta (UFSCar/LaPES), a computational tool designed to assist in systematic reviews, particularly in data management and analysis.

Subsequently, the articles were read entirely, and 60 were excluded for not aligning with the research scope. For instance, some studies collected UGC data in combination with another strategy (e.g., survey, interview); however, when presenting practical contributions, it was impossible to differentiate those specifically

derived from UGC data. In other articles, even though they were within the scope of tourist destinations, they emphasised collecting UGC data from service companies. These cases led to further exclusions.

In the 158 articles identified as eligible, data were extracted concerning production characteristics (journal, year, authors, title, abstract, keywords), collected data (sources, types, time series), study areas (attractions, destinations, location, typology, profile), themes, and contributions (implications for the studied area). In addition to StArt, we utilised Mendeley's reference management software and conducted data handling and analysis in Microsoft Excel. Thematic analysis was selected as the methodology for analyzing topics and organizing them into themes and contributions. This approach entails identifying recurring patterns of meaning or topics throughout the data, facilitating a thorough examination of the underlying themes inherent in the research material.(Schuckert et al. 2015; Leask, 2016; Lyu et al. 2022; Yang et al. 2017).

3. Results

3.1. Characteristics of the Studies

The study presents an analysis of 158 articles over a nine-year period, illustrating a discernible growth trend in scientific production (Figure 2).

The distribution of publications by year, showcases a surge in output, and the top 10 most frequent journals, including Sustainability, Tourism Management, and Current Issues in Tourism, collectively contribute to 37% of the articles (Table 1). This indicates a diverse range of journals within tourism, as well as those focused on environmental issues, management, planning, marketing, technology, informatics, and geography. The multidisciplinary nature of the field is underscored by the broad spectrum of scientific output.



Figure 2: Distribution of the Number of Publications by Year

Table 1: The Top Ten Most Frequent Journals and Number of Publications per Year

Journal	2014	2015	2016	2017	2018	2019	2020	2021	2022	Total	%
Most frequent		2	3	4	4	12	8	16	10	59	37
Sustainability				2	1	3	3	3	2	14	24
Tourism Management		1	1	1	1	3		1	2	10	17
Current Issues in Tourism							1	4	2	7	12
Journal of Destination Marketing & Management		1	1					4		6	10
Annals of Tourism Research					2		1	1		4	7
Asia Pacific Journal of Tourism Research			1	1		1			1	4	7
Journal of Outdoor Recreation and Tourism						1	1	1	1	4	7
Journal of Hospitality and Tourism Management							2	1	1	4	7
PASOS. Revista de Turismo y Patrimonio Cultural						2			1	3	5
Journal of Place Management and Development						2		1		3	5
Others	1		2	9	11	11	14	20	31	99	63
Overall total	1	2	5	13	15	23	22	36	41	158	100

Furthermore, the study delves into the production profile through the analysis of keyword frequency (Table 2), revealing 547 different keywords. Noteworthy connections emerge between conceptual variations of UGC, themes in tourism, data sources, and methodological aspects.

Most Used Keywords	n°
User-generated content	55
Online reviews	28
Tripadvisor	19
Social media	18
Destination Image	18
Text mining	17
Sentiment analysis	16
Big data	11
Latent Dirichlet allocation	10
Content analysis	6
Tourism	6
Instagram	6
China	6
Online travel reviews	6
Travel blogs	5
Tourist experience	5
Destination management	5
Total	237

Table 2: Keywords Found in the Articles (Occurrences above 4)

The research delineates two predominant strategies for sourcing UGC data. Of the sample, 79% (n=125) exclusively utilized a single source, while 21% (n=33) amalgamated two or more sources, exemplified by studies like Marine-Roig & Anton Clavé (2015) and Li et al. (2017), which combined over ten sources. TripAdvisor emerged as the most popular data source in both strategies due to its digital ubiquity and extensive coverage, collecting textual and image data from various businesses, services, attractions, and destinations (Table 3).

Position	Data Source	Nº (articles)
1	TripAdvisor	86
2	Ctrip	18
3	Flickr	16
4	Instagram	14
5	Twitter	12
6	Google Maps	9
7	Qunar	9
8	Mafengwo	8
9	Weibo	7

Table 3: Data Sources (with more than five occurrences)

The geographical dimensions of the research were explored by analyzing the location and profiles of tourist attractions and destinations. The findings showcased a diverse geographical coverage and a typological variety in attraction and destination profiles, with studies ranging from individual units to complexes. Despite coverage from over 70 countries, a concentration was observed in European (n=107) and Asian (n=72) countries, particularly Spain, Italy, China, and Thailand. The research demonstrated a preference for renowned tourism websites associated with countries prominently featured in tourism rankings, indicating a tendency to choose traditional and reputable platforms (Table 4).

Position

1

2

3

4

5

6

7

8

9

10

11

12

Switzerland

Portugal

Canada

Country Name	Frequency as a country in the study area (nº)	Examples
China	40	Ski resorts in the host city of the 2022 Winter Olympics, Great Wall of China, Hong Kong, Pingtan Islands, Macau, Sanqingshan Mountain, Ocean Park, Hong Kong Disneyland, Wangjianglou Park, Dapeng Peninsula, Yunnan Province, Jiuzhaigou Valley.
Spain	23	Alicante, Valencia, Barcelona, Basilica of the Sagrada Familia, Historic Centers (Córdoba, Ávila, Segovia), Santiago de Compostela, Granada, Cabrera Island, Cíes Islands.
Italy	15	Rome, Venice, Milan, Florence, Opera del Duomo Museum, Naples, Florence, Parma, Ferrara, St. Mark's Square, Ducal Palace, Historic squares, and railway stations (Turin, Milan, Venice, Bologna, Florence, Pisa, Siena, Vatican City - Rome, Naples, Catania), Archaeological site of Pompeii.
USA	15	San Marcos Castle, Disneyland (California), Empire State Building, Mount Baker-Snoqualmie National Forest, Lake Superior (Minnesota), Strataca Museum: Kansas Underground Salt.
Australia	8	Melbourne, Queensland, Australian Convict Sites, Gold Coast, Kosciuszko and Uluru-Kata Tjuta National Parks.
France	8	Paris, Verdun Battlefield, "City of Wine" Museum, Louvre and d'Orsay Museums.
England	6	Big Ben, British Museum, Churchill War Rooms, Houses of Parliament, Hyde Park, National Gallery, St James's Park, Tower of London, National Gallery Museum.
Greece	6	The historic centre of Athens, Coastal village of Kavos, Plaka neighbourhood (Athens), Island of Crete.
Thailand	5	Patong OTOP Shopping Paradise, Sunday Walking Street Market, Naka Market, Central Phuket, Banzaan Fresh Market, Khaosan and Yaowarat Niahtlife and Entertainment Streets

NFI forest sites (Zurich Dolder, Zurich Uetliberg, Aarau,

Ebmatingen, Neuchâtel, Locarno, Arosa, Scuol, S-chanf, Ovronnaz), villages/municipalites Boltigen, Lenk, St. Stephan,

Toronto, Jasper National Park, Athabasca Glacier, Ontario

Lisbon, Coimbra, Arrábida Park, Algarve.

Place, Whistler Blackcomb Ski Resort.

Table 4: Countries and Their Respective Attractions/Destinations (countries with more than four occurrences).

The research delineates two primary strategies for establishing study areas in UGC research. In 45% of the articles, a single attraction or destination is chosen, while the remaining 55% opt for sets, varying from tens to thousands, demonstrating the expansive scale achievable in CGC studies. Notable examples include Yang et al.'s (2019) analysis of 4,185 attractions in China and Kirilenko et al.'s (2019) database of 10,664 attractions in Florida.

Zweisimmen

5

5

5

The study explores diverse typologies of attractions, with national or state parks being the most investigated (Table 5). Museums and theme parks also emerge as common study areas, reflecting a comprehensive analysis of tourist attractions. Destinations are examined on various scales, including national, regional, island, and municipal levels. UNESCO World Heritage Sites (WHS) are frequently chosen as study areas due to their tourism relevance, positive effects on visitation, and the wealth of available data.

Position	Study area	Nº (Studies)
	Attractions	
1	National/State Park	19
2	Museum	15
3	Theme Park	10
4	Urban Park	5
5	Historical/Cultural Site	4
6	Ski Resort	3
7	Beach	3
8	Square	3
9	Historic Center	3
10	Monument/Military Architecture	3
11	Archaeological Site	3
12	Forest	3
13	Monument/Civil Architecture	3
14	Local Market	3

Table 5: Types of Attractions Defined as	Study Areas - above three occurrences.
---	--

The synthesis reveals a rich variety of attractions and destinations in the analyzed articles, underscoring the diversity in typologies, profiles, and spatial configurations (Figure 3).

Figure	3:	Research	Scen	arios
--------	----	----------	------	-------



3.2. Topics and Contributions

The process of analysing the papers identified eight core themes for classifying the articles (Table 6).

Central theme	References	No. Of Articles	Percentage
Experience	Alexander et al. (2018), Bigne et al. (2020), Chiu & Cho (2021), Chiu & Leng (2017), J. M. Luo et al. (2020), Kim et al. (2019), Kolar (2017), Pereira et al. (2022), Phucharoen et al. (2022), Sangkaew & Zhu (2022), Shang et al. (2022), Simeon et al. (2017), Skotis & Livas (2022), Taecharungroj et al. (2021), Taecharungroj & Mathayomchan (2019), Woyo & Amadhila (2018), Yu et al. (2021), Zanibellato et al. (2018), Abrahams et al. (2022), Ababu-Montoya & Ruiz-Molina (2020), Antonio et al. (2020), Cuomo et al. (2021), Gursoy et al. (2022), Kirova (2021), Nowacki & Kowalczyk-Anioł (2022), Osmond & Chen (2016), Paraskevaidis & Weidenfeld (2019), Ronck & Price (2019), T. Zhang, Li, Milman, et al. (2022), Mirzaalian & Halpenny (2021), Liu et al. (2022), Lee et al. (2022), Y' Yang et al. (2021)	37	23%
Image		37	23%
	Alrawadieh et al. (2018), Alrawadieh et al. (2018), Bui et al. (2022), Cerdeira & Fernandes (2020), Corpas & Castillo (2019), Garay Tamajón & Morales Pérez (2022), W. Huang et al. (2021), Iglesias-Sánchez et al. (2020), Jiang et al. (2021), Lei et al. (2022), Lozano-Monterrubio & Huertas (2020), Y. Luo et al. (2021), M. T. Liu et al. (2020), Marine-Roig & Anton Clavé (2015), Macrine-Roig & Anton Clavé (2016), McCreary et al. (2020), R. Wang et al. (2019), Ren & Hong (2017), Skinner et al. (2022), Song et al. (2021), Tseng et al. (2015), Fayzullaev et al. (2021), Iordanova & Statinton (2019), Marine-Roig & Ferrer-Rosell (2018), Meng et al. (2021), Paül i Agustí (2018), Paül i Agustí (2019b), Feng et al. (2021), Hu et al. (2014), Paül i Agustí (2018), Sued (2018), Clarke & Hassanien (2020), Peng et al. (2022), Ciu & Zhang (2021), L. Wang et al. (2022), Celata et al. (2020), Y. Guo et al. (2016)		
Space		30	19%
	Bassols Gardella et al. (2021), Fisher et al. (2018), Tao Liu et al. (2021), Martin-Fuentes et al. (2020), Miah et al. (2017), P. Liu et al. (2018), Pantano et al. (2017), Paül i Agusti (2021), Väisänen et al. (2021), Van der Zee & Bertocchi (2018), Vu et al. (2018), F.M. Wartmann et al. (2021), Ghosh & Chatterjee (2022), Hlengwa (2021), Jang & Park (2020), Su et al. (2021), Alieva et al. (2022), Fisher et al. (2019), Hartmann et al. (2022b), Oteros- Rozas et al. (2018), Kádár & Gede (2021), Kirilenko et al. (2019), Spyrou et al. (2017), Sun et al. (2020), Heikinheimo et al. (2017), Y. Huang et al. (2022), Sidor et al. (2020), Y. Yang et al. (2019), Flurina M. Wartmann & Mackaness (2020), Martí et al. (2021)		
Perception		13	8%
	Catahan & Woodruffe-Burton (2019), K. Kim et al. (2019), K. Zhang et al. (2020), Tang et al. (2022), X. Li et al. (2022), Aggarwal & Gour (2020), Bigne et al. (2021), Stellacci & Moro (2022), Koufodontis & Gaki (2022), Pickering et al. (2020), Huai & Van de Voorde (2022), Kleshcheva (2021), Agostino et al. (2021)		
Satisfaction		13	8%
	Cherapanukorn & Sugunnasil (2022), Egresi & Prakash (2019), H. Guo et al. (2022), Kirilenko et al. (2021), Prakash et al. (2019), W. Kim et al. (2021), Zeng (2017), T. Zhang, Li, & Hua (2022), Egresi (2017), Farhadloo et al. (2016), Nilashi et al. (2022), Shao et al. (2019), Albayrak et al. (2021)		
Narrative		12	8%
	Bigi et al. (2022), Borrego & Comalat Navarra (2020), Teles da Mota & Pickering (2021), Kydros & Vrana (2021), Lau et al. (2022), Ma & Jiang (2020), Plank (2016), Toral et al. (2018), Viñán-Ludeña & de Campos (2022), Basaraba (2021), Wise et al. (2019), N. Li et al. (2017)		
Brand		9	6%
	Munawir et al. (2019), Nowacki (2019), Pasquinelli et al. (2022), Seyyedamiri et al. (2022), Uchinaka et al. (2019), Ranfagni et al. (2022), Taecharungroj (2019), Wilk et al. (2021), Shin et al. (2017)		
Demand		7	4%
	Fronzetti Colladon et al. (2019), Li et al. (2020), Hu et al. (2022), Hernández et al. (2018), Qi et al. (2018), S. Wang et al. (2022), Xu et al. (2022)		
	Overall Total	158	100%

Table 6: Systematisation by Theme

3.2.1. Experience

The papers focus on characterising the experience, assessing the utilisation of visitation concerning a specific theme, feature, or website, or understanding associated feelings and emotions. Characterisation encompasses articles aiming to comprehend the visitor's experience from a particular or holistic perspective. (Phucharoen et al. 2022).

A common aspect is identifying attributes or topics, which can later be classified according to their popularity or relevance. Shang et al. (2022) identified attributes considered essential in ski resorts, and Luo et al. (2020) determined the main topics of the experience at Disneyland.

Some articles examined the positive and negative aspects of the experience (Taecharungroj & Mathayomchan, 2019; Woyo & Amadhila, 2018), while others investigated underlying determinants of what is considered positive or negative (Taecharungroj et al. 2021), or focus on highlights, novelties, surprises, or reasons for the visit (Kolar, 2017). In this regard, Alexander et al. (2018) identified themes and areas of greater visitor attention in London museums. Memorable experiences can also be captured (Bigne et al. 2020; Yu et al. 2021), and difficulties, complaints, and critical points can be explored, as shown by Phucharoen et al. (2022) when examining experiences in shops and markets in Phuket (Thailand), identifying complaints about vendor harassment.

Similarly, Abrahams et al. (2022) examined utilising the Last Chance Tourism concept in glaciers. Zhang et al. (2022) analysed the adoption and application of technological resources during visits to Chinese parks. Kirova (2021) explored the role of technology in the interactive formation of value and sources of co-creation and co-destruction at the 'La Cité du Vin' wine museum in Bordeaux, France, to identify risks to the experience stemming from excessive reliance on technological resources at the expense of sensory and human aspects. Another approach is to focus on the utilisation of communication and interpretive resources, as seen in the study on the geological and mining heritage of the "City of Salt" in Strataca, Kansas (USA), by Ronck and Price (2019), or the relationship between the setting and the experience according to Osmond and Chen's (2016) study, recreational use varies based on site and personal characteristics of the users.

Papers that explore the theme of experience and characterising or working from the perspective of visitor utilisation can also delve into feelings and emotions. For example, Bornarel et al. (2021) analysed the experience at a sensitive site, the Verdun (France) battlefield from World War I, consisting of different memorials, forts, and trenches. Interest can also lie in understanding affective sensitivities in statements of loyalty (Mirzaalian & Halpenny, 2021), monitoring quality before or after an event (Yang et al. 2021), verifying reflections of flow intensity and estimating carrying capacity based on emotional aspects (Tokarchuk et al. 2022), or comprehending strong emotional determinants, as seen in the study by Baniya et al. (2021) at Angkor Wat (Cambodia), identifying sunrise and sunset as singular emotional moments.

3.2.2. Image

Studies on images aim to understand how attractions and destinations are portrayed on social media. Typically, the initial goal is to identify the image's themes and components (cognitive, affective, and conative). Clarke and Hassanien (2020) assessed these components in the image of Toronto, Canada. Peng et al. (2022) examined the cognitive and affective aspects in ski resorts during the 2022 Winter Olympic Games. These themes or components can be classified (primary/secondary, central/peripheral, among others).

The majority of studies in this group focus on analyzing destination or attraction images. They involve attribute extraction (Wang et al. 2019), identifying strengths and weaknesses (Luo et al. 2021), dominant themes (McCreary et al. 2020), and formation and identity (Skinner et al. 2022). Another aspect includes analyzing destination images based on sources, channels, and more. For example, Alrawadieh et al. (2018) examined Istanbul through the lens of Western bloggers, while Iglesias-Sánchez et al. (2020) investigated the role of Instagram in promoting and co-creating the image of the Algarve (Portugal) and the Costa del Sol (Spain).

Studies have also examined the effects of specific political moments or events on destination images, such as the protests for Catalonia's independence in 2017 (Lozano-Monterrubio & Huertas, 2020), as well as long-term monitoring, as observed in Liu et al.'s (2020) article on Macau. Other approaches include analyzing images across multiple destinations and assessing perspectives on regional integration and cooperation (Song et al. 2021).

Another approach involves studying image representation. Sued (2018) investigated aesthetic and thematic patterns in the visual representation of tourist cities to catalog themes, temporal preferences, and chromatics. Analyzing representation can help identify conflicts in communication forms and patterns among different actors, as demonstrated in Feng et al.'s (2017) study at the Great Wall of China. It can also examine how a destination is represented by various actors in terms of urban and rural space projection, as shown by Paül I Agustí (2019a). Additionally, researchers can explore the representation of a destination's image in another country of interest, as discussed by Hu et al. (2014) in their analysis of Switzerland on a Chinese platform.

Similarly, studies have focused on reputation (Celata et al. 2020; Guo et al. 2016) and compared images from different sources. These studies compare official, market, and tourist images to identify overlaps, differences, convergences, disparities, and discrepancies (Fayzullaev et al. 2021; Iordanova & Stainton, 2019; Marine-Roig & Ferrer-Rosell, 2018; Paül i Agustí, 2018, 2019b).

3.2.3. Space

These articles investigate tourists' movement and spatial behavior in destinations and attractions. They cover investigations into spatial behavior based on gender and spatial consumption preferences (Paül I Agustí, 2021), spatial behavior in large-area attractions like national parks (Väisänen et al. 2021), and spatial behavior related to recreation in forests (F.M. Wartmann et al. 2021). Specific routes are also explored, such as the study by Martin-Fuentes et al. (2020), which examines the impact of cinema on inducing visits to filming locations in Barcelona, Spain. Another focus is researching spatial distribution based on the digital popularity of destinations and observing tourists' movement (Liu et al. 2021).

Some articles investigate the media's role in stimulating touristification and place-making processes (Ghosh & Chatterjee, 2022; Hlengwa, 2021; Jang & Park, 2020; Su et al. 2021). Landscape studies are another theme within the Space group, involving mapping visual preferences (Fisher et al. 2019), describing distinctive landscape features, identifying motives and attributes (Alieva et al. 2022), and analyzing enjoyment. For example, Oteros-Rozas et al. (2018) investigated the enjoyment of landscape resources and services in European sites to understand recreation in these spaces.

Another focus is identifying points of interest, involving projection analysis and classification by popularity (Heikinheimo et al. 2017; Sidor et al. 2020; Yang et al. 2019), as well as delineating functional areas based on UGC (Martí et al. 2021). Some articles examine spatial networks and reveal clusters and relationships between destinations and attractions, particularly in detecting areas of interest and interactions (Kádár & Gede, 2021; Kirilenko et al. 2019; Spyrou et al. 2017; Sun et al. 2020). Additionally, there are more generic studies that seek spatial characteristics within a destination or attraction (Y. Huang et al. 2022) or aim to understand specific themes, such as Wartmann and Mackaness (2020), who analyzed the spatiality of sensations of tranquility.

3.2.4. Perception

Drawing from concepts and terms introduced in previous groups (e.g., emotions), studies categorized under the overarching theme of perception distinguish themselves by highlighting subjects' viewpoints and opinions. Results often correlate with visitor profile characteristics. Tang et al. (2022) analyzed Oze National Park (Japan) perception, considering demographic features. Huai and Van de Voorde (2022) examined environmental feature perception in urban parks across distinct cultures. Zhang et al. (2020) investigated differences in tourist profiles (e.g., Europe, North America, and Asia) regarding perceptions of natural scenes, architecture, food, plants, culture, and entertainment, including mountains.

Perception studies aim to delve into a deeper level of user expression in media. Perception is often linked to motivational aspects' manifestation (Kleshcheva, 2021) and quality and valence dimensions (positive/negative) (Aggarwal & Gour, 2020; Agostino et al. 2021). More intimate and aesthetic perspectives have been explored, as shown by Stellacci and Moro (2022), who seek to understand the connection with place and individuals' sensations in activities such as walking through Italian heritage cities. Pickering et al. (2020) analyzed preferences and value attribution to infrastructure and natural components of Kosciuszko National Park (Australia) across different climatic seasons. Tourists' media awareness was addressed by Koufodontis and Gaki (2022), discussing the UNESCO World Heritage Site's status in various cities.

3.2.5. Satisfaction

Articles focusing on satisfaction address users and media content from a commercial perspective. They highlight visitors as customers engaged in consumption routines, including the experience of shopping at attractions and destinations. Shao et al. (2019) examined satisfaction with shopping at the National Gallery (London), and Egress (2017) chose to evaluate the satisfaction of international tourists in Istanbul (Turkey) with their shopping experience at retail centres.

Research on satisfaction shows significant interest in seeking dimensions of satisfaction (Egresi & Prakash, 2019; W. Kim et al. 2021; Kirilenko et al. 2021), as well as understanding the gradation of value attribution in expressions and identifying corresponding causes. Prakash et al. (2019) analysed the reasons for dissatisfaction among wildlife visitors in national parks in Sri Lanka. Another focus has been the association between satisfaction and the competitive position of attractions, as seen in the research conducted by Albayrak et al. (2021) in theme parks located within the same destination (Hong Kong).

3.2.6. Narrative

We categorise articles as "Narrative" when they focus on how users communicate, their interests, and information strategies in media or discourse. One perspective is the analysis of narratives about destinations or attractions in the media. In this regard, Viñán-Ludeña and de Campos (2022) examined tourism-related content about Granada to understand what was being discussed regarding attractions and services in the destination. Kydros and Vrana (2021) analysed the Twitter user network to see what was being discussed about European museums.

The group also includes studies that investigate how tourists narrate their social understanding of a controversial attraction (Wise et al. 2019), the production, channels, consumption, and content of risk information about destinations and attractions (Plank, 2016), sources of narrated information as trustworthy (Lau et al. 2022), interest and interpretation in heritage sites (Basaraba, 2021).

3.2.7. Brand

A group of articles investigate user-generated brands in media. The main points observed are the components, performance, attributes, impact, or exploration of how tourist attractions and destinations are presented regarding brand projection. Uchinaka et al. (2019) analysed residents' intentions to produce tourist content on social networks, defining a scale for the function of local brand ambassadors. Seyyedamiri et al. (2022) addressed the central elements of the brand love generation. Nowacki (2019) identified characteristic elements of Polish cities. Wilk et al. (2021) examined online destination brand advocacy. Another area of interest can be brand identity (Ranfagni et al. 2022; Taecharungroj, 2019) or brand personality (Shin et al. 2017).

3.2.8 Demand

This group comprises articles focused on demand study, especially regarding profile description and segmentation. For instance, Qi et al. (2018) worked on constructing an empirical typology of international cultural tourists visiting Macau. Hernández et al. (2018) investigated tourist segmentation based on attraction reviews. Predictive studies were also found (Hu et al. 2022; Li et al. 2020) and studies on flows and networks aimed at understanding or monitoring demand (Wang et al. 2022; Xu et al. 2022).

4. Discussion: Perspectives for management

The use of social media has been receiving increasing attention in the literature due to its recognised contribution to management (Ivars-Baidal et al. 2019), strategies (Enrique Navarro Jurado, 2016), and governance (Perea-Medina et al. 2018; Mandić & Kennell, 2021). In light of this, we summarise perspectives on applying User-Generated Content in attractions and destinations. The systematisation derives from the analysis of the purposes, results, and practical implications of the articles. It organises the topics found in five areas of management (Figure 5), commonly applied to both attractions (Leask, 2016) and destinations (Crouch & Ritchie, 1999; Longjit & Pearce, 2013; Pearce, 2016).



Figure 4: Applications of User-Generated Content in Management

Visitor Management: Understanding visitors' experiences and preferences helps managers plan recreational activities that align with tourists' interests. Monitoring reviews allows for error identification and correction. For instance, if a beach known for tranquility and nature contact has an intense program scheduled, reallocating resources can prevent negative feedback and visitor dissatisfaction (Taecharungroj & Mathayomchan, 2019). Investigating challenges tourists face presents another opportunity for visitor management. For attractions focused on technology, media can help identify difficulties based on visitor profiles and equipment types (Kolar, 2017), guiding managers to implement orientation sessions, designate sensitive zones, identify complex devices, and prioritize supervisory alerts (Zanibellato et al. 2018).

Resource Management: Understanding how tourists use and perceive attractions and destinations provides valuable insights for communication strategies, infrastructure improvements, and facility enhancements. Analyzing narratives helps evaluate the effectiveness of guidance, education, and interactive resources, particularly for historical sites suffering from shallow tourism. Assessing the relationship between the scene and the experience informs decisions about facilities, equipment, interpretive resources, and offered activities. UGC can indicate obsolescence or declining reputation of resources (Nowacki & Kowalczyk-Anioł, 2022), prompting managers to introduce new activities, diversify offerings, invest in complementary resources, and remodel facilities. Further research can validate UGC findings and explore the need for sensory-stimulating atmospheres and experiences with greater cognitive impact (Alabau-Montoya & Ruiz-Molina, 2020).

Product and Marketing Management: The primary application of UGC is in managing social media networks and communication channels for attractions and destinations. Monitoring destination and attraction images can be effectively accomplished (Liu et al. 2020), allowing managers and operators to address issues promptly with organized feedback from UGC. UGC provides valuable information about image attributes, facilitating comparative studies between official advertising and media representations

(Fayzullaev et al. 2021; Paül i Agustí, 2018, 2019a) to identify discrepancies and adjust marketing strategies accordingly. Moreover, UGC aids in diversifying products and integrating sites into tourist maps with quality, organized operator participation, and safety. It also serves as a crucial source for sector-specific studies (Kydros & Vrana, 2021), enabling the identification of common points of interest for collaborative exchange and benchmarking among attractions and destinations with similar profiles.

Strategically exploring organic networks formed by residents (Uchinaka et al. 2019) offers another opportunity, as they serve as primary sources of electronic word-of-mouth (eWoM). Social media platforms like Facebook, where virtual groups bring together residents and tourists, can be particularly useful. Destination Marketing Organizations (DMOs), development councils, and operators can encourage and enhance content posted by residents by offering specific courses and training to enrich local history and nature content combined with tourist information.

Site Management: With UGC it's possible to investigate the spatial distribution and intensity of tourist usage, which is valuable for management plans and development strategies. UGC helps map temporal and spatial movement patterns (Van der Zee & Bertocchi, 2018), aiding in planning facilities, transportation, services, infrastructure, and staff allocation. Managers of various attractions can identify areas of high interest and attention (Sidor et al. 2020; Spyrou et al. 2017), allowing them to develop strategies to manage flows, reduce pressure points, and expand visitable areas. Thematic mapping of hotspots and sentiment zoning helps illustrate common interests and potential conflicts, facilitating stakeholder mobilization and integrated management (Martí et al. 2021). Emotion dictionaries and sentiment mapping from social media can further enhance territorial planning by incorporating human and sensory dimensions (Huang et al. 2021).

Crisis Management: The content found in media provides real-time and accumulated manifestations over time, making UGC a valuable tool for crisis monitoring and management. For instance, UGC can help observe the development of political crises in destinations or assess the prolonged effects of events like the recent COVID-19 pandemic (Lozano-Monterrubio & Huertas, 2020; Y. Yang et al. 2021). Managers can use UGC to gather indications from potential tourists regarding their travel plans and collaborate with Destination Marketing Organizations (DMOs) and operators to facilitate rescheduling. Additionally, UGC enables the inventory of critical nodes, categorizing them based on their nature and duration (Kirilenko et al. 2021), empowering managers to take proactive actions and expedite solutions.

In summary, we understand that CGU is a crucial source to be incorporated into attraction and destination information systems, particularly for identifying issues and conflicts experienced by tourists, organisations, governments, and communities. It is cost-effective and useful for decision-making and solution design. Another advantage is its applicability across different territorial scales, whether for individual units or clusters of attractions and destinations.

Given the limitations of CGU data highlighted in the literature (Teles da Mota et al. 2022; Teles da Mota & Pickering, 2021a), particularly in terms of representativeness, we recommend that management should consider using this application in a complementary manner, used for situational studies, scenario construction, and diagnostics. However, the analysis depends on specialised personnel to provide feedback, manage, and interpret the data, which may require training development, new position creation, and specific hiring within interested organisations. Another approach is to establish partnerships with universities.

5. Conclusions

The paper highlights the potential theoretical and practical impact of the review on the use of Consumer-Generated Content (CGC) in tourism. The results provide an advanced foundation for future research, addressing gaps in attraction and destination management, especially in the areas of management literature, territorial intelligence, smart destinations, and governance.

In theoretical terms, the results of this review provide an opportunity for a new step in understanding the utilisation of CGU in tourism, contributing to filling the gap in attraction and destination management. It is understood that with this article as a starting point, other investigations will have a more advanced foundation to explore methodological, conceptual, and theoretical issues, particularly about management literature, territorial intelligence, smart destinations, and governance. This can result in a more accurate integration with these areas of study.

In practical terms, the article effectively extracts a systematically organised set of results from academic research and presents them as practical applications for management. The content is accessible

to professionals and organisations. Furthermore, the potential use of CGU for understanding visitation dynamics in tourism territories, especially in regional and peripheral attractions and destinations or those lacking direct control, records, staff, and management, is highlighted. Destination Management Organisations (DMOs) can gain insights into visitation patterns in these areas by encouraging visitors to share their experiences on social media by installing signposts, pavement markers, or other resources that remind tourists to document aspects of their visit. Measures like these contribute to expanding the CGU dataset, resulting in benefits for management and the planning of future visitors' experiences.

This review is limited as we searched only three databases and retrieved a single document type in English, Portuguese, and Spanish. In this sense, we recognise that a future research agenda could lead to improvements and contributions in five directions. Firstly, expanding the review could involve including other documents beyond scientific articles, considering results in other languages, and incorporating additional databases. Another direction would involve conducting studies on the ethical and legal issues related to the use of CGU data in tourism management, considering different countries and cultures and evaluating the relevance of this application according to the perspectives of managers and professionals.

Another opportunity is conducting reviews on methodological options, emphasising the perspectives presented here, and highlighting their highly practical nature. Works in this direction could serve as the foundation for scientific communication dedicated to popularising this knowledge, focusing on its use by professionals and DMOs. Another avenue for new reviews could involve investigating concepts and theories relevant to structuring, interpreting, and evaluating the knowledge attainable from CGU data.

The conclusion underscores the importance of investigating methodological and theoretical options to structure, interpret, and evaluate knowledge derived from CGC data, emphasizing its practical impact. Ultimately, this can drive significant advancements in understanding and applying CGC, benefiting professionals and organizations in the management and planning of future visitor experiences.

References

- Abrahams, Z., Hoogendoorn, G., & Fitchett, J. M.(2022). Glacier tourism and tourist reviews: an experiential engagement with the concept of "Last Chance Tourism." Scandinavian Journal of Hospitality and Tourism, 22(1), 1–14. https://doi.org/10.1080/15022250.2021.1974545
- Aggarwal, S., & Gour, A.(2020). Peeking inside the minds of tourists using a novel web analytics approach. Journal of Hospitality and Tourism Management, 45, 580–591.https://doi.org/10.1016/j.jhtm.2020.10.009
- Agostino, D., Brambilla, M., Pavanetto, S., & Riva, P.(2021). The Contribution of Online Reviews for Quality Evaluation of Cultural Tourism Offers: The Experience of Italian Museums. Sustainability, 13(23).https://doi.org/10.3390/su132313340
- Alabau-Montoya, J., & Ruiz-Molina, M.-E.(2020). Enhancing visitor experience with war heritage tourism through information and communication technologies: evidence from Spanish Civil War museums and sites. Journal of Heritage Tourism, 15(5), 500–510. https://doi.org/10.1080/1743873X.2019.1692853
- Albayrak, T., Cengizci, A. D., Caber, M., & Nang Fong, L. H.(2021). Big data use in determining competitive position: The case of theme parks in Hong Kong. Journal of Destination Marketing & Management, 22.https://doi.org/10.1016/j.jdmm.2021.100668
- Alexander, V. D., Blank, G., & Hale, S. A.(2018). TripAdvisor Reviews of London Museums: A New Approach to Understanding Visitors. *Museum International*, 70(1–2), 154–165. https://doi.org/10.1111/muse.12200
- Alieva, D., Holgado, D., de Juan, S., Ruiz-Frau, A., Villasante, S., & Maya-Jariego, I.(2022). Assessing landscape features and ecosystem services of marine protected areas through photographs on social media: comparison of two archipelagos in Spain. *Environment, Development and Sustainability*, 24(7), 9623–9641.https://doi.org/10.1007/s10668-021-01841-y
- Alrawadieh, Z., Dincer, M. Z., Istanbullu Dincer, F., & Mammadova, P.(2018). Understanding destination image from the perspective of Western travel bloggers: the case of Istanbul.*International Journal of Culture, Tourism and Hospitality Research*, 12(2), 198–212.https://doi.org/10.1108/IJCTHR-12-2017-0124
- Antonio, N., Correia, M. B., & Ribeiro, F. P.(2020). Exploring User-Generated Content for Improving Destination Knowledge: The Case of Two World Heritage Cities. Sustainability, 12(22). https://doi. org/10.3390/su12229654
- Arabadzhyan, A., Figini, P., & Vici, L.(2021). Measuring destination image: a novel approach based on visual data mining. A methodological proposal and an application to European islands. *Journal of Destination Marketing & Management*, 20. https://doi.org/10.1016/j.jdmm.2021.100611

- Baka, V.(2016). The becoming of user-generated reviews: Looking at the past to understand the future of managing reputation in the travel sector. *Tourism Management*, 53, 148–162. https://doi.org/10.1016/j. tourman.2015.09.004
- Baniya, R., Dogru-Dastan, H., & Thapa, B.(2021). Visitors' experience at Angkor Wat, Cambodia: evidence from sentiment and topic analysis. *Journal of Heritage Tourism*, 16(6), 632–645. https://doi.org/10.10 80/1743873X.2020.1833892
- Basaraba, N.(2021). A bottom-up method for remixing narratives for virtual heritage experiences. Convergence: The International Journal of Research into New Media Technologies, 28(6).https://doi. org/10.1177/13548565211048968
- Bassols Gardella, N., Ovalle Díaz, A. P., & Rodríguez Hernández, J. C.(2021). Preferencias de los turistas en hoteles y destinos: una aproximación desde el análisis de contenido y los árboles de decisión. *Investigaciones Turísticas*, 0(22), 121.https://doi.org/10.14198/INTURI2021.22.6
- Bigi, A., Cassia, F., & Ugolini, M. M.(2022). Who killed food tourism? Unaware cannibalism in online conversations about traveling in Italy. *British Food Journal*, 124(2), 573–589. https://doi.org/10.1108/ BFJ-04-2021-0401
- Bigne, E., Fuentes-Medina, M. L., & Morini-Marrero, S.(2020). Memorable tourist experiences versus ordinary tourist experiences analysed through user-generated content. *Journal of Hospitality and Tourism Management*, 45, 309–318. https://doi.org/10.1016/j.jhtm.2020.08.019
- Bigne, E., Ruiz, C., Cuenca, A., Perez, C., & Garcia, A.(2021). What drives the helpfulness of online reviews? A deep learning study of sentiment analysis, pictorial content and reviewer expertise for mature destinations. *Journal of Destination Marketing and Management*, 20. https://doi.org/10.1016/j. jdmm.2021.100570
- Bornarel, F., Delacour, H., Liarte, S., & Virgili, S.(2021). Exploring travellers' experiences when visiting Verdun battlefield: a TripAdvisor case study. *Current Issues in Tourism*, 24(6), 824–841. https://doi.or g/10.1080/13683500.2020.1751593
- Borrego, Á., & Comalat Navarra, M(2020). What users say about public libraries: an analysis of Google Maps reviews. Online Information Review, 45(1), 84–98. https://doi.org/10.1108/OIR-09-2019-0291
- Bui, V., Alaei, A. R., Vu, H. Q., Li, G., & Law, R.(2022). Revisiting Tourism Destination Image: A Holistic Measurement Framework Using Big Data. *Journal of Travel Research*, 61(6), 1287–1307. https://doi. org/10.1177/00472875211024749
- Catahan, N., & Woodruffe-Burton, H.(2019). The view, brew and loo: perceptions of botanic gardens? Journal of Place Management and Development, 12(1), 20–38. https://doi.org/10.1108/JPMD-12-2017-0127
- Celata, F., Capineri, C., & Romano, A.(2020). A room with a (re)view. Short-term rentals, digital reputation and the uneven spatiality of platform-mediated tourism. *Geoforum*, *112*, 129–138. https://doi.org/10.1016/j. geoforum.2020.04.007
- Cerdeira, J. H. da L., & Fernandes, A.(2020). Estudo da imagem da região turística de Lisboa.*RISTI* - *Revista Ibérica de Sistemas e Tecnologias de Informação, 2020*(40),89–111. https://doi.org/10.17013/ risti.40.89-111
- Cherapanukorn, V., & Sugunnasil, P.(2022). Tourist Attraction Satisfaction Factors from Online Reviews. A Case Study of Tourist Attractions in Thailand. *Journal of Environmental Management and Tourism*, 13(2), 379–390.https://doi.org/10.14505/JEMT.V13.2(58).08
- Chiu, W., & Cho, H.(2021). Mapping aboriginal tourism experiences in Taiwan: A case of the Formosan Aboriginal Culture Village. Journal of Vacation Marketing, 27(1), 17–31. https://doi.org/10.1177/1356766720950345
- Chiu, W., & Leng, H. K.(2017). Let's go cycling: an analysis of tourists' experience on online user-generated content. *International Journal of Tourism Cities*, 3(1), 30–42. https://doi.org/10.1108/IJTC-10-2016-0045
- Clarke, H., & Hassanien, A.(2020). An evaluation of Toronto's destination image through tourist generated content on Twitter. *International Journal of Customer Relationship Marketing and Management*, 11(2), 1–16.https://doi.org/10.4018/IJCRMM.2020040101
- Corpas, N., & Castillo, A.(2019). Tourism 3.0 and archaeology: approaching tourists' generated-content of World Heritage sites. PASOS. Revista de Turismo y Patrimonio Cultural, 17, 39–52. https://doi. org/10.25145/j.pasos.2019.17.003
- Cosentino, G., & Alikasifoglu, B.(2019). Políticas de la posverdad en el Próximo Oriente: los estudios de caso de Siria y Turquía. *Artnodes*, 2019(24), 91–100. https://doi.org/10.7238/a.v0i24.3284
- Crouch, G. I., & Ritchie, J. R. B.(1999). Tourism, Competitiveness, and Societal Prosperity. Journal of Business Research, 44(3), 137–152. https://doi.org/10.1016/S0148-2963(97)00196-3

- Cuomo, M. T., Tortora, D., Foroudi, P., Giordano, A., Festa, G., & Metallo, G.(2021). Digital transformation and tourist experience co-design: Big social data for planning cultural tourism. *Technological Forecasting* and Social Change, 162. https://doi.org/10.1016/j.techfore.2020.120345
- Dong, X., & Lian, Y.(2021). A review of social media-based public opinion analyses: Challenges and recommendations. *Technology in Society*, 67. https://doi.org/10.1016/j.techsoc.2021.101724
- Egresi, I.(2017). Tourists' satisfaction with shopping experience based on reviews on TripAdvisor. *Tourism*, 65(3), 330–345. https://hrcak.srce.hr/186957
- Egresi, I., & Prakash, T. G. S. L.(2019). What makes wildlife tourists happy and what disappoints them? Learning from reviews posted on tripadvisor. *Geojournal of Tourism and Geosites*, 24(1), 102–117. https://doi.org/10.30892/gtg.24109-346
- Enrique Navarro Jurado.(2016). Técnicas e instrumentos de planificación territorial de áreas turísticas. In M. R. Simancas Cruz (Ed.), *La planificación y gestión territorial del turismo* (pp. 133–174). Editorial Síntesis Madrid. https://biblioteca.uazuay.edu.ec/buscar/item/85257
- Farhadloo, M., Patterson, R. A., & Rolland, E.(2016). Modeling customer satisfaction from unstructured data using a Bayesian approach. Decision Support Systems, 90, 1–11. https://doi.org/10.1016/j.dss.2016.06.010
- Fayzullaev, K., Cassel, S. H., & Brandt, D.(2021). Destination image in Uzbekistan heritage of the Silk Road and nature experience as the core of an evolving Post Soviet identity. *The Service Industries Journal*, 41(7–8), 446–461.https://doi.org/10.1080/02642069.2018.1519551
- Feng, J., Li, Y., & Wu, P.(2017). Conflicting Images of the Great Wall in Cultural Heritage Tourism. Critical Arts, 31(6), 109–127.https://doi.org/10.1080/02560046.2017.1405455
- Fisher, D. M., Wood, S. A., Roh, Y. H., & Kim, C. K.(2019). The geographic spread and preferences of tourists revealed by user-generated information on jeju island, south korea.*Land*, 8(5), 73.https://doi.org/10.3390/LAND8050073
- Fisher, D. M., Wood, S. A., White, E. M., Blahna, D. J., Lange, S., Weinberg, A., Tomco, M., & Lia, E.(2018). Recreational use in dispersed public lands measured using social media data and on-site counts. *Journal of Environmental Management*, 222, 465–474.https://doi.org/10.1016/j.jenvman.2018.05.045
- Fronzetti Colladon, A., Guardabascio, B., & Innarella, R.(2019). Using social network and semantic analysis to analyze online travel forums and forecast tourism demand. *Decision Support Systems*, 123. https://doi.org/10.1016/j.dss.2019.113075
- Garay Tamajón, L. A., & Morales Pérez, S.(2022). Narrativas de seducción: Airbnb y la construcción de las imágenes de los destinos turísticos. *Cuadernos de Turismo*, 49(49), 29–50. https://doi.org/10.6018/turismo.521781
- Ghosh, S. S., & Chatterjee, S. K.(2022). A knowledge organization framework for influencing tourism-centered place-making. Journal of Documentation, 78(2), 157–176. https://doi.org/10.1108/JD-12-2020-0220
- Guo, H., Liu, Z., & Jiao, Z.(2022). Research on Satisfaction Evaluation Based on Tourist Big Data.KSII Transactions on Internet and Information Systems, 16(1), 231–244.https://doi.org/10.3837/tiis.2022.01.013
- Guo, Y., Sun, S., Schuckert, M., & Law, R.(2016). Online Feedback and Attraction Management: An Exploration of the Critical Factors in Effective Operations. Asia Pacific Journal of Tourism Research, 21(8), 883–904.https://doi.org/10.1080/10941665.2015.1080740
- Gursoy, D., Akova, O., & Atsız, O.(2022). Understanding the heritage experience: a content analysis of online reviews of World Heritage Sites in Istanbul. Journal of Tourism and Cultural Change, 20(3), 311–334.https://doi.org/10.1080/14766825.2021.1937193
- Hänska-Ahy, M. T., & Shapour, R.(2013). Who's reporting the protests? *Journalism Studies*, 14(1), 29–45. https://doi.org/10.1080/1461670X.2012.657908
- Hartmann, M. C., Koblet, O., Baer, M. F., & Purves, R. S.(2022). Automated motif identification: Analysing Flickr images to identify popular viewpoints in Europe's protected areas. *Journal of Outdoor Recreation and Tourism*, 37. https://doi.org/10.1016/j.jort.2021.100479
- Heikinheimo, V., Minin, E. Di, Tenkanen, H., Hausmann, A., Erkkonen, J., & Toivonen, T.(2017). User-Generated Geographic Information for Visitor Monitoring in a National Park: A Comparison of Social Media Data and Visitor Survey. ISPRS International Journal of Geo-Information, 6(3), 85.https://doi.org/10.3390/ijgi6030085
- Hernández, J. M., Kirilenko, A. P., & Stepchenkova, S.(2018). Network approach to tourist segmentation via user generated content. Annals of Tourism Research, 73, 35–47. https://doi.org/10.1016/j.annals.2018.09.002
- Hlengwa, D. C.(2021). Placemaking and visitors' reviews of the Golden Mile of Durban. Acta Commercii, 21(1). https://doi.org/10.4102/ac.v21i1.921
- Hu, M., Li, H., Song, H., Li, X., & Law, R.(2022). Tourism demand forecasting using tourist-generated online review data. *Tourism Management*, 90. https://doi.org/10.1016/j.tourman.2022.104490

- Hu, T., Marchiori, E., Kalbaska, N., & Cantoni, L.(2014). Online representation of Switzerland as a tourism destination: An exploratory research on a Chinese microblogging platform. Studies in Communication Sciences, 14(2), 136–143. https://doi.org/10.1016/j.scoms.2014.12.001
- Huai, S., & Van de Voorde, T.(2022). Which environmental features contribute to positive and negative perceptions of urban parks? A cross-cultural comparison using online reviews and Natural Language Processing methods. Landscape and Urban Planning, 218. https://doi.org/10.1016/j.landurbplan.2021.104307
- Huang, W., Zhu, S., & Yao, X.(2021). Destination Image Recognition And Emotion Analysis: Evidence From User-Generated Content Of Online Travel Communities. *The Computer Journal*, 64(3), 296–304. https://doi.org/10.1093/comjnl/bxaa064
- Huang, Y., Li, Z., & Huang, Y.(2022). User Perception of Public Parks: A Pilot Study Integrating Spatial Social Media Data with Park Management in the City of Chicago. *Land*, *11*(2). https://doi.org/10.3390/land11020211
- Iglesias-Sánchez, P. P., Correia, M. B., Jambrino-Maldonado, C., & de las Heras-Pedrosa, C.(2020). Instagram as a Co-Creation Space for Tourist Destination Image-Building: Algarve and Costa del Sol Case Studies. Sustainability, 12(7). https://doi.org/10.3390/su12072793
- Iordanova, E., & Stainton, H.(2019). Cognition, emotion and trust: A comparative analysis of Cambodia's perceived and projected online image. *Tourist Studies*, 19(4), 496–519. https://doi.org/10.1177/1468797619837970
- Ivars-Baidal, J. A., Celdrán-Bernabeu, M. A., Mazón, J.-N., & Perles-Ivars, Á. F.(2019). Smart destinations and the evolution of ICTs: a new scenario for destination management? *Current Issues in Tourism*, 22(13), 1581–1600.https://doi.org/10.1080/13683500.2017.1388771
- Jang, H., & Park, M.(2020). Social media, media and urban transformation in the context of overtourism. International Journal of Tourism Cities, 6(1), 233–260.https://doi.org/10.1108/IJTC-08-2019-0145
- Jiang, Q., Chan, C.-S., Eichelberger, S., Ma, H., & Pikkemaat, B.(2021). Sentiment analysis of online destination image of Hong Kong held by mainland Chinese tourists. *Current Issues in Tourism*, 24(17), 2501–2522.https://doi.org/10.1080/13683500.2021.1874312
- Kádár, B., & Gede, M.(2021). Tourism flows in large-scale destination systems. *Annals of Tourism Research*, 87. https://doi.org/10.1016/j.annals.2020.103113
- Kim, C. S., Bai, B. H., Kim, P. B., & Chon, K.(2018). Review of reviews: A systematic analysis of review papers in the hospitality and tourism literature. *International Journal of Hospitality Management*, 70, 49–58. https://doi.org/10.1016/j.ijhm.2017.10.023
- Kim, H., Joun, H. J., Choe, Y., & Schroeder, A.(2019). How Can a Destination Better Manage Its Offering to Visitors? Observing Visitor Experiences via Online Reviews. Sustainability, 11(17). https://doi. org/10.3390/su11174660
- Kim, K., Park, O., Barr, J., & Yun, H.(2019). Tourists' shifting perceptions of UNESCO heritage sites: lessons from Jeju Island-South Korea. *Tourism Review*, 74(1), 20–29. https://doi.org/10.1108/TR-09-2017-0140
- Kim, W., Kim, S.-B., & Park, E.(2021). Mapping Tourists' Destination (Dis)Satisfaction Attributes with User-Generated Content. Sustainability, 13(22). https://doi.org/10.3390/su132212650
- Kirilenko, A. P., Stepchenkova, S. O., & Dai, X.(2021). Automated topic modeling of tourist reviews: Does the Anna Karenina principle apply? *Tourism Management*, 83. https://doi.org/10.1016/j.tourman.2020.104241
- Kirilenko, A. P., Stepchenkova, S. O., & Hernandez, J. M.(2019). Comparative clustering of destination attractions for different origin markets with network and spatial analyses of online reviews. *Tourism Management*, 72, 400–410.https://doi.org/10.1016/j.tourman.2019.01.001
- Kirova, V.(2021). Value co-creation and value co-destruction through interactive technology in tourism: the case of 'La Cité du Vin'wine museum, Bordeaux, France. *Current Issues in Tourism*, 24(5), 637–650. https://doi.org/10.1080/13683500.2020.1732883
- Kleshcheva, A.(2021). Perception of Dark Tourism: Automated Text Analysis of Users Comments a Case Study of the Chernobyl Exclusion Zone. Zeitschrift Für Tourismuswissenschaft, 13(2), 191–208. https:// doi.org/10.1515/tw-2021-0014
- Kolar, T.(2017). Conceptualising tourist experiences with new attractions: the case of escape rooms. International Journal of Contemporary Hospitality Management, 29(5), 1322–1339.https://doi.org/10.1108/ IJCHM-12-2015-0687
- Koufodontis, N. I., & Gaki, E.(2022). UNESCO urban world heritage sites: Tourists' awareness in the era of social media. *Cities*, 127.https://doi.org/10.1016/j.cities.2022.103744
- Kydros, D., & Vrana, V.(2021). A Twitter network analysis of European museums. Museum Management and Curatorship, 36(6), 569–589. https://doi.org/10.1080/09647775.2021.1894475

- La, L., Xu, F., Ren, Q., Zhen, F., & Lobsang, T.(2022). Understanding Consumers' Sentiment Expressions in Online Reviews: A Hybrid Approach. Journal of International Consumer Marketing, 34(4), 465–479. https://doi.org/10.1080/08961530.2021.1982807
- Lau, C. K. H., Huang, J., Feng, S. Y. P., & Qiu, H.(2022). Profiling trusted information sources for Chinese tourists traveling to Pacific SIDS. Journal of Global Scholars of Marketing Science, 32(1), 77–96. https:// doi.org/10.1080/21639159.2020.1808834
- Le, T. H., Arcodia, C., Novais, M. A., & Kralj, A.(2019). What we know and do not know about authenticity in dining experiences: A systematic literature review. *Tourism Management*, 74, 258–275. https://doi.org/10.1016/j.tourman.2019.02.012
- Leask, A.(2016). Visitor attraction management: A critical review of research 2009–2014. *Tourism Management*, 57, 334–361. https://doi.org/10.1016/j.tourman.2016.06.015
- Lee, J., Benjamin, S., & Childs, M.(2022). Unpacking the Emotions behind TripAdvisor Travel Reviews: The Case Study of Gatlinburg, Tennessee. *International Journal of Hospitality & Tourism Administration*, 23(2), 347–364. https://doi.org/10.1080/15256480.2020.1746219
- Lei, W. S. (Clara), Chen, Z., Zhou, X., & King, B.(2022). Organic destination imagery and social media: Mapping tourism dynamics across China's Greater Bay Area cities. *Journal of China Tourism Research*, 1–24.https://doi.org/10.1080/19388160.2022.2047857
- Li, H., Hu, M., & Li, G.(2020). Forecasting tourism demand with multisource big data. *Annals of Tourism Research*, 83. https://doi.org/10.1016/j.annals.2020.102912
- Li, H., Zhang, L., & Hsu, C. H. C.(2023). Research on user-generated photos in tourism and hospitality: A systematic review and way forward. *Tourism Management*, 96, 104714. https://doi.org/10.1016/j. tourman.2022.104714
- Li, J., Xu, L., Tang, L., Wang, S., & Li, L.(2018). Big data in tourism research: A literature review. *Tourism Management*, 68, 301–323.https://doi.org/10.1016/j.tourman.2018.03.009
- Li, N., Tung, V., & Law, R.(2017). A fuzzy comprehensive evaluation algorithm for analyzing electronic word-of-mouth. Asia Pacific Journal of Tourism Research, 22(6), 592–603. https://doi.org/10.1080/109 41665.2017.1308395
- Li, X., Geng, S., & Liu, S.(2022). Social Network Analysis on Tourists' Perceived Image of Tropical Forest Park: Implications for Niche Tourism. SAGE Open, 12(1).https://doi.org/10.1177/21582440211067243
- Liu, M. T., Liu, Y., Mo, Z., & Ng, K. L.(2020). Using text mining to track changes in travel destination image: the case of Macau. Asia Pacific Journal of Marketing and Logistics, 33(2), 371–393. https://doi. org/10.1108/APJML-08-2019-0477
- Liu, P., Xiao, X., Zhang, J., Wu, R., & Zhang, H.(2018). Spatial Configuration and Online Attention: A Space Syntax Perspective. *Sustainability*, 10(1), 221. https://doi.org/10.3390/su10010221
- Liu, Tao, Zhang, Y., Zhang, H., & Yang, X.(2021). A Methodological Workflow for Deriving the Association of Tourist Destinations Based on Online Travel Reviews: A Case Study of Yunnan Province, China. *Sustainability*, *13*(9).https://doi.org/10.3390/su13094720
- Liu, Tianjian, Liu, S., & Rahman, I.(2022). International anime tourists' experiences: a netnography of popular Japanese anime tourism destinations. *Asia Pacific Journal of Tourism Research*, 27(2), 135–156. https://doi.org/10.1080/10941665.2021.1998163
- Longjit, C., & Pearce, D. G.(2013). Managing a mature coastal destination: Pattaya, Thailand. Journal of Destination Marketing & Management, 2(3), 165–175. https://doi.org/10.1016/j.jdmm.2013.05.002
- Lozano-Monterrubio, N., & Huertas, A.(2020). The image of Barcelona in Online Travel Reviews during 2017 Catalan independence process. *Communication & Society*, 33(3), 33–49. https://doi.org/10.15581/003.33.3.33-49
- Lu, W., & Stepchenkova, S.(2015). User-Generated Content as a Research Mode in Tourism and Hospitality Applications: Topics, Methods, and Software. *Journal of Hospitality Marketing & Management*, 24(2), 119–154.
- Luo, J. M., Vu, H. Q., Li, G., & Law, R.(2020). Topic modelling for theme park online reviews: analysis of Disneyland. *Journal of Travel & Tourism Marketing*, 37(2), 272–285.https://doi.org/10.1080/10548 408.2020.1740138
- Luo, Y., Tong, T., Zhang, X., Yang, Z., & Li, L.(2021). Exploring destination image through online reviews: an augmented mining model using latent Dirichlet allocation combined with probabilistic hesitant fuzzy algorithm.*Kybernetes*.https://doi.org/10.1108/K-07-2021-0584
- Lyu, J., Khan, A., Bibi, S., Chan, J. H., & Qi, X.(2022). Big data in action: An overview of big data studies in tourism and hospitality literature. *Journal of Hospitality and Tourism Management*, *51*, 346–360. https://doi.org/10.1016/j.jhtm.2022.03.014

- Ma, K., & Jiang, B.(2020). Voice of urban park visitors: exploring destination attributes influencing behavioural intentions through online review mining. *Complex & Intelligent Systems*, 1–13.https:// doi.org/10.1007/s40747-020-00223-7
- Mandi, A., & Kennell, J.(2021). Smart governance for heritage tourism destinations: Contextual factors and destination management organization perspectives. *Tourism Management Perspectives*, 39.https:// doi.org/10.1016/j.tmp.2021.100862
- Mariani, M., Baggio, R., Fuchs, M., & Höepken, W.(2018). Business intelligence and big data in hospitality and tourism: a systematic literature review. *International Journal of Contemporary Hospitality Management*, 30(12), 3514–3554. https://doi.org/10.1108/IJCHM-07-2017-0461
- Marine-Roig, E., & Anton Clavé, S.(2015). Tourism analytics with massive user-generated content: A case study of Barcelona. Journal of Destination Marketing & Management, 4(3), 162–172. https:// doi.org/10.1016/j.jdmm.2015.06.004
- Marine-Roig, E., & Anton Clavé, S.(2016). Perceived image specialisation in multiscalar tourism destinations. Journal of Destination Marketing & Management, 5(3), 202–213. https://doi.org/10.1016/j. jdmm.2015.12.007
- Marine-Roig, E., & Ferrer-Rosell, B.(2018). Measuring the gap between projected and perceived destination images of Catalonia using compositional analysis. *Tourism Management*, 68, 236–249.https://doi. org/10.1016/j.tourman.2018.03.020
- Martí, P., García-Mayor, C., & Serrano-Estrada, L.(2021). Taking the urban tourist activity pulse through digital footprints. *Current Issues in Tourism*, 24(2), 157–176. https://doi.org/10.1080/13683500.2019.1 706458
- Martin-Fuentes, E., Nieto Ferrando, J., Marine-Roig, E., & Ferrer-Rosell, B.(2020). From Blockbuster to Neighbourhood Buster: The Effect of Films on Barcelona. Sustainability, 12(6), 2290. https://doi. org/10.3390/su12062290
- McCreary, A., Seekamp, E., Davenport, M., & Smith, J. W.(2020). Exploring qualitative applications of social media data for place-based assessments in destination planning. *Current Issues in Tourism*, 23(1), 82–98.https://doi.org/10.1080/13683500.2019.1571023
- Meng, L., Liu, Y., Wang, Y., & Li, X.(2021). A big-data approach for investigating destination image gap in Sanya City: When will the online and the offline goes parted? *RegionalSustainability*, 2(1), 98–108. https://doi.org/10.1016/j.regsus.2021.02.001
- Miah, S. J., Vu, H. Q., Gammack, J., & McGrath, M.(2017). A Big Data Analytics Method for Tourist Behaviour Analysis. Information & Management, 54(6), 771–785. https://doi.org/10.1016/j.im.2016.11.011
- Mirzaalian, F., & Halpenny, E.(2019). Social media analytics in hospitality and tourism: A systematic literature review and future trends. Journal of Hospitality and Tourism Technology, 10(4), 764–790. https://doi.org/10.1108/JHTT-08-2018-0078
- Mirzaalian, F., & Halpenny, E.(2021). Exploring destination loyalty: Application of social media analytics in a nature-based tourism setting. *Journal of Destination Marketing and Management*, 20.https://doi. org/10.1016/j.jdmm.2021.100598
- Munawir, Koerniawan, M. D., & Dewancker, B. J.(2019). Visitor Perceptions and Effectiveness of Place Branding Strategies in Thematic Parks in Bandung City Using Text Mining Based on Google Maps User Reviews. Sustainability, 11(7), 2123. https://doi.org/10.3390/su11072123
- Naab, T. K., & Sehl, A.(2017). Studies of user-generated content: A systematic review. *Journalism*, 18(10), 1256–1273. https://doi.org/10.1177/1464884916673557
- Nilashi, M., Fallahpour, A., Wong, K. Y., & Ghabban, F.(2022). Customer satisfaction analysis and preference prediction in historic sites through electronic word of mouth. *Neural Computing and Applications*, 34(16), 13867–13881.https://doi.org/10.1007/s00521-022-07186-5
- Nowacki, M.(2019). Unique elements of Polish city brands in online reviews. *Turyzm / Tourism*, 29(1), 63–70. https://doi.org/10.2478/tour-2019-0007
- Nowacki, M., & Kowalczyk-Anioł, J.(2022). Experiencing islands: is sustainability reported in tourists' online reviews? Journal of Ecotourism, 1–21. https://doi.org/10.1080/14724049.2022.2041648
- Osmond, A. M., & Chen, T. (2016). Tourists' Experiences of Recreation Spaces in Australia's Wet Tropics. *Tourism Review International*, 20(2), 122–141.https://doi.org/10.3727/154427216X14724915340080
- Oteros-Rozas, E., Martín-López, B., Fagerholm, N., Bieling, C., & Plieninger, T.(2018). Using social media photos to explore the relation between cultural ecosystem services and landscape features across five European sites. *Ecological Indicators*, 94, 74–86. https://doi.org/10.1016/j.ecolind.2017.02.009
- Ouzzani, M., Hammady, H., Fedorowicz, Z., & Elmagarmid, A.(2016). Rayyan—a web and mobile app for systematic reviews. *Systematic Reviews*, 5(1), 210.https://doi.org/10.1186/s13643-016-0384-4

- Page, M. J., McKenzie, J. E., Bossuyt, P. M., Boutron, I., Hoffmann, T. C., Mulrow, C. D., Shamseer, L., Tetzlaff, J. M., Akl, E. A., Brennan, S. E., Chou, R., Glanville, J., Grimshaw, J. M., Hróbjartsson, A., Lalu, M. M., Li, T., Loder, E. W., Mayo-Wilson, E., McDonald, S., ... Moher, D.(2021). The PRISMA 2020 statement: An updated guideline for reporting systematic reviews. *International Journal of Surgery*, 88, 105906.https://doi.org/10.1016/j.ijsu.2021.105906
- Pahlevan Sharif, S., Mura, P., & Wijesinghe, S. N. R.(2019). Systematic Reviews in Asia: Introducing the "PRISMA" Protocol to Tourism and Hospitality Scholars, 13–33.https://doi.org/10.1007/978-981-13--2463-5_2
- Pantano, E., Priporas, C.-V., & Stylos, N.(2017). 'You will like it?' using open data to predict tourists' response to a tourist attraction. *Tourism Management*, 60, 430–438.https://doi.org/10.1016/j.tourman.2016.12.020
- Paraskevaidis, P., & Weidenfeld, A.(2019). Sign consumption and sign promotion in visitor attractions. International Journal of Contemporary Hospitality Management, 31(4), 1937–1955.https://doi.org/10.1108/ IJCHM-07-2018-0543
- Pasquinelli, C., Trunfio, M., Bellini, N., & Rossi, S.(2022). Reimagining urban destinations: Adaptive and transformative city brand attributes and values in the pandemic crisis.*Cities*, 124. https://doi.org/10.1016/j.cities.2022.103621
- Paül i Agustí, D.(2018). Characterizing the location of tourist images in cities. Differences in user-generated images (Instagram), official tourist brochures and travel guides. *Annals of Tourism Research*, 73, 103–115.https://doi.org/10.1016/j.annals.2018.09.001
- Paül i Agustí, D.(2019a). La escasa representación turística de los ámbitos no urbanos. Una comparación de fuentes impresas e imágenes de Instagram. PASOS. Revista de Turismo y Patrimonio Cultural, 17, 65–80.https://doi.org/10.25145/j.pasos.2019.17.005
- Paül i Agustí, D.(2019b). La localización espacial de los atractivos turísticos de un área metropolitana: diferencias entre material turístico institucional, guías turísticas y contenidos generados por los usuarios. *Documents d'Anàlisi Geogràfica*, 65(2), 293.https://doi.org/10.5565/rev/dag.528
- Paül i Agustí, D.(2021). Mapping gender in tourist behaviour based on instagram. Journal of Outdoor Recreation and Tourism, 35.https://doi.org/10.1016/j.jort.2021.100381
- Pearce, D. G.(2016). Modelos de gestión de destinos: Síntesis y evaluación. Estudios y Perspectivas En Turismo, 25(1).
- Peng, Y., Yin, P., & Matzler, K.(2022). Analysis of Destination Images in the Emerging Ski Market: The Case Study in the Host City of the 2022 Beijing Winter Olympic Games. *Sustainability*, 14(1), 555. https://doi.org/10.3390/su14010555
- Perea-Medina, M. J., Navarro-Jurado, E., & Luque-Gil, A. M.(2018). Inteligencia territorial: Conceptualización y avance en el estado de la cuestión. Vínculos posibles con los destinos turísticos. Cuadernos de Turismo, 41, 535–554.https://doi.org/10.6018/turismo.41.327141
- Pereira, T., Lima, F. B. C., & Leoti, A.(2022). Gestão e planejamento turístico de um patrimônio mundial da UNESCO: um estudo sobre as Ruínas da Missão Jesuítica de São Miguel das Missões, Brasil.PASOS. Revista de Turismo y Patrimonio Cultural, 20(2), 285–298.https://doi.org/10.25145/j.pasos.2022.20.021
- Phucharoen, C., Jarumaneerat, T., & Sangkaew, N.(2022). Comparing shopping experiences in department stores and street markets: a big data analysis of TripAdvisor reviews. *International Journal of Culture, Tourism, and Hospitality Research*, 16(1), 259–275. https://doi.org/10.1108/IJCTHR-10-2020-0228
- Pickering, C., Walden-Schreiner, C., Barros, A., & Rossi, S. D.(2020). Using social media images and text to examine how tourists view and value the highest mountain in Australia. *Journal of Outdoor Recreation and Tourism*, 29.https://doi.org/10.1016/j.jort.2019.100252
- Plank, A.(2016). The hidden risk in user-generated content: An investigation of ski tourers' revealed risk-taking behavior on an online outdoor sports platform.]*Tourism Management*, 55, 289–296.https://doi.org/10.1016/j.tourman.2016.02.013
- Prakash, S. L., Perera, P., Newsome, D., Kusuminda, T., & Walker, O.(2019). Reasons for visitor dissatisfaction with wildlife tourism experiences at highly visited national parks in Sri Lanka. Journal of Outdoor Recreation and Tourism, 25, 102–112. https://doi.org/10.1016/j.jort.2018.07.004
- Qi, S., Wong, C. U. I., Chen, N., Rong, J., & Du, J.(2018). Profiling Macau cultural tourists by using user-generated content from online social media. *Information Technology & Tourism*, 20(1–4), 217–236. https://doi.org/10.1007/s40558-018-0120-0
- Qiu, Q., & Zhang, M.(2021). Using Content Analysis to Probe the Cognitive Image of Intangible Cultural Heritage Tourism: An Exploration of Chinese Social Media.ISPRS International Journal of Geo-Information, 10(4).https://doi.org/10.3390/ijgi10040240

- Ranfagni, S., Milanesi, M., & Guercini, S.(2022). An online research approach for a dual perspective analysis of brand associations in art museums. *International Review on Public and Nonprofit Marketing*, 1–19. https://doi.org/10.1007/s12208-022-00332-8
- Ren, G., & Hong, T.(2017). Investigating Online Destination Images Using a Topic-Based Sentiment Analysis Approach. *Sustainability*, 9(10). https://doi.org/10.3390/su9101765
- Ronck, C. L., & Price, W. R.(2019). Revealing "Salt City's" Geological and Mining Heritage at Strataca. Great Plains Research, 29(2), 137–151.https://doi.org/10.1353/gpr.2019.0018
- Sangkaew, N., & Zhu, H.(2022). Understanding Tourists' Experiences at Local Markets in Phuket: An Analysis of TripAdvisor Reviews. *Journal of Quality Assurance in Hospitality & Tourism*, 23(1), 89–114. https://doi.org/10.1080/1528008X.2020.1848747
- Schuckert, M., Liu, X., & Law, R.(2015). Hospitality and Tourism Online Reviews: Recent Trends and Future Directions. Journal of Travel & Tourism Marketing, 32(5), 608–621. https://doi.org/10.1080/10 548408.2014.933154
- Seyyedamiri, N., Pour, A. H., Zaeri, E., & Nazarian, A.(2022). Understanding destination brand love using machine learning and content analysis method. *Current Issues in Tourism*, 25(9), 1451–1466.https:// doi.org/10.1080/13683500.2021.1924634
- Shang, Z., Luo, J. M., & Kong, A.(2022). Topic Modelling for Ski Resorts: An Analysis of Experience Attributes and Seasonality. Sustainability, 14(6).https://doi.org/10.3390/su14063533
- Shao, J., Ying, Q., Shu, S., Morrison, A. M., & Booth, E.(2019). Museum Tourism 2.0: Experiences and Satisfaction with Shopping at the National Gallery in London. *Sustainability*, *11*(24), 7108. https://doi.org/10.3390/su11247108
- Shin, S.-H., Yang, S.-B., Nam, K., & Koo, C.(2017). Conceptual foundations of a landmark personality scale based on a destination personality scale: Text mining of online reviews. *Information Systems Frontiers*, 19(4), 743–752. https://doi.org/10.1007/s10796-016-9725-z
- Sidor, C., Kršák, B., Šebešová, A., & Kola, J.(2020). Examples of secondary online data for raising awareness about geo and mining heritage. Acta Montanistica Slovaca, 25. https://doi.org/10.46544/AMS.v25i1.11
- Simeon, M. I., Buonincontri, P., Cinquegrani, F., & Martone, A.(2017). Exploring tourists' cultural experiences in Naples through online reviews. *Journal of Hospitality and Tourism Technology*, 8(2), 220–238.https://doi.org/10.1108/JHTT-10-2016-0067
- Skinner, H., Williams Burnett, N., & Fallon, J.(2022). Exploring reality television and social media as mediating factors between destination identity and destination image. *International Journal of Tourism Research*, 24(2), 270–281.https://doi.org/10.1002/jtr.2499
- Skotis, A., & Livas, C.(2022). A data-driven analysis of experience in urban historic districts. Annals of Tourism Research Empirical Insights, 3(2), 100052.https://doi.org/10.1016/j.annale.2022.100052
- Song, X., Mo, Z., Liu, M. T., Niu, B., & Huang, L.(2021). Cooperator or supporter: how can cross-boundary Macau–Zhuhai metropolis promote regional tourism together? Asia Pacific Journal of Marketing and Logistics, ahead-of-p.https://doi.org/10.1108/APJML-02-2021-0137
- Spyrou, E., Korakakis, M., Charalampidis, V., Psallas, A., & Mylonas, P.(2017). A geo-clustering approach for the detection of areas-of-interest and their underlying semantics. *Algorithms*, 10(1), 35.https://doi.org/10.3390/a10010035
- Stellacci, S., & Moro, S.(2022). Travellers' perspectives on historic squares and railway stations in Italian heritage cities revealed through sentiment analysis. *Journal of Urban Design*, 1–25. https://doi.org/10.1080/13574809.2022.2097903
- Su, M. M., Wall, G., Wu, B., Xu, H., Fu, X., & Deng, Y.(2021). Tourism place making through the bioluminescent "Blue Tears" of Pingtan Islands, China. *Marine Policy*, 133, 104744.https://doi.org/10.1016/j. marpol.2021.104744
- Sued, G.(2018). Ciudades visibles: estética y temática de las representaciones urbanas en Instagram. DeSignis, 28, 155–166.https://doi.org/10.35659/designis.i28p155-166
- Sun, Y., Shao, Y., & Chan, E. H. W.(2020). Co-visitation network in tourism-driven peri-urban area based on social media analytics: A case study in Shenzhen, China.Landscape and Urban Planning, 204. https://doi.org/10.1016/j.landurbplan.2020.103934
- Taecharungroj, V.(2019). User-generated place brand identity: harnessing the power of content on social media platforms. *Journal of Place Management and Development*, 12(1), 39–70. https://doi.org/10.1108/JPMD-11-2017-0117
- Taecharungroj, V., & Mathayomchan, B.(2019). Analysing TripAdvisor reviews of tourist attractions in Phuket, Thailand. *Tourism Management*, 75, 550–568. https://doi.org/10.1016/j.tourman.2019.06.020

- Taecharungroj, V., Warnaby, G., & Parker, C.(2021). Responding to the voice of the markets: an analysis of Tripadvisor reviews of UK retail markets. *Journal of Place Management and Development*, 14(2), 180–200.https://doi.org/10.1108/JPMD-02-2020-0016
- Tang, S., Duan, Z., Chen, W., & Qiao, H.(2022). Research on post occupancy evaluation of Oze National Park in Japan based on online reviews. *Journal of Asian Architecture and Building Engineering*, 1–18. https://doi.org/10.1080/13467581.2022.2047981
- Teles da Mota, V., & Pickering, C.(2021a). Assessing the popularity of urban beaches using metadata from social media images as a rapid tool for coastal management. *Ocean & Coastal Management*, 203. ttps://doi.org/10.1016/j.ocecoaman.2021.105519
- Teles da Mota, V., & Pickering, C.(2021b). Geography of Discourse about a European Natural Park: Insights from a Multilingual Analysis of Tweets. *Society & Natural Resources*, *34*(11), 1492–1509. https://doi.or g/10.1080/08941920.2021.1971809
- Teles da Mota, V., Pickering, C., & Chauvenet, A.(2022). Popularity of Australian beaches: Insights from social media images for coastal management. Ocean & Coastal Management, 217.https://doi.org/10.1016/j.ocecoaman.2021.106018
- Tokarchuk, O., Barr, J. C., & Cozzio, C.(2022). How much is too much? Estimating tourism carrying capacity in urban context using sentiment analysis. *Tourism Management*, 91. https://doi.org/10.1016/j. tourman.2022.104522
- Toral, S. L., Martínez-Torres, M. R., & Gonzalez-Rodriguez, M. R.(2018). Identification of the Unique Attributes of Tourist Destinations from Online Reviews. *Journal of Travel Research*, 57(7), 908–919. https://doi.org/10.1177/0047287517724918
- Tseng, C., Wu, B., Morrison, A. M., Zhang, J., & Chen, Y.(2015). Travel blogs on China as a destination image formation agent: A qualitative analysis using Leximancer. *Tourism Management*, 46, 347–358. https://doi.org/10.1016/j.tourman.2014.07.012
- Uchinaka, S., Yoganathan, V., & Osburg, V. S.(2019). Classifying residents' roles as online place-ambassadors. *Tourism Management*, 71, 137–150.https://doi.org/10.1016/j.tourman.2018.10.008
- Ukpabi, D. C., & Karjaluoto, H.(2018). What drives travelers' adoption of user-generated content? A literature review. *Tourism Management Perspectives*, 28, 251–273. https://doi.org/10.1016/j.tmp.2018.03.006
- UNWTO.(2019).International Tourism Highlights, 2019 Edition. In UNWTO World Tourism Organisation. World Tourism Organization (UNWTO).https://doi.org/10.18111/9789284421152
- Vada, S., Prentice, C., Scott, N., & Hsiao, A.(2020). Positive psychology and tourist well-being: A systematic literature review. *Tourism Management Perspectives*, 33, 100631.https://doi.org/10.1016/j.tmp.2019.100631
- Väisänen, T., Heikinheimo, V., Hiippala, T., & Toivonen, T.(2021). Exploring human-nature interactions in national parks with social media photographs and computer vision. *Conservation Biology*, 35(2), 424–436.https://doi.org/10.1111/cobi.13704
- Van der Zee, E., & Bertocchi, D.(2018). Finding patterns in urban tourist behaviour: a social network analysis approach based on TripAdvisor reviews. *Information Technology & Tourism*, 20(1–4), 153–180. https://doi.org/10.1007/s40558-018-0128-5
- Viñán-Ludeña, M. S., & de Campos, L. M.(2022). Analyzing tourist data on Twitter: a case study in the province of Granada at Spain. Journal of Hospitality and Tourism Insights, 5(2), 435–464. https://doi. org/10.1108/JHTI-11-2020-0209
- Vu, H. Q., Luo, J. M., Ye, B. H., Li, G., & Law, R.(2018). Evaluating museum visitor experiences based on user-generated travel photos. *Journal of Travel & Tourism Marketing*, 35(4), 493–506. https://doi.org/ 10.1080/10548408.2017.1363684
- Wang, L., Wang, G., Hou, X., Chen, Z., & Lu, K.(2022). Attractiveness index of national marine parks: A study on national marine parks in coastal areas of East China Sea.*Open Geosciences*, *14*(1), 393–403. https://doi.org/10.1515/geo-2022-0364
- Wang, R., Hao, J.-X., Law, R., & Wang, J.(2019). Examining destination images from travel blogs: a big data analytical approach using latent Dirichlet allocation. Asia Pacific Journal of Tourism Research, 24(11), 1092–1107.https://doi.org/10.1080/10941665.2019.1665558
- Wang, S., Yu, Y., Chen, J., & Liu, J.(2022). Impact of climate change on cherry blossom viewing tourism: analysis and simulation based on Weibo proxy data. *Current Issues in Tourism*, 1–17.https://doi.org/1 0.1080/13683500.2022.2049711
- Wartmann, F.M., Baer, M. F., Hegetschweiler, K. T., Fischer, C., Hunziker, M., & Purves, R. S.(2021). Assessing the potential of social media for estimating recreational use of urban and peri-urban forests. Urban Forestry & Urban Greening, 64.https://doi.org/10.1016/j.ufug.2021.127261

- Wartmann, Flurina M., & Mackaness, W. A.(2020). Describing and mapping where people experience tranquillity. An exploration based on interviews and Flickr photographs. Landscape Research, 45(5), 662–681.https://doi.org/10.1080/01426397.2020.1749250
- Wilk, V., Sadeque, S., & Soutar, G. N.(2021). Exploring online destination brand advocacy. *Tourism Recreation Research*, 1–19. https://doi.org/10.1080/02508281.2021.1992952
- Wise, N., Polidoro, M., Hall, G., & Uvinha, R. R.(2019). User-generated insight of Rio's Rocinha favela tour: Authentic attraction or vulnerable living environment? *Local Economy: The Journal of the Local Economy Policy Unit*, 34(7), 680–698.https://doi.org/10.1177/0269094219889881
- Woyo, E., & Amadhila, E.(2018). Desert tourists experiences in Namibia: A Netnographic Approach. African Journal of Hospitality, Tourism and Leisure, 7(3), 1–13.
- Xu, J., Yang, Y., & Jin, C.(2022). Tracking discrepancies between expected and actual flows of tourists in an urban destination: An application of user-generated data. *Journal of Hospitality and Tourism Management*, 52, 29–38. https://doi.org/10.1016/j.jhtm.2022.05.012
- Yang, E. C. L., Khoo-Lattimore, C., & Arcodia, C.(2017). A systematic literature review of risk and gender research in tourism. *Tourism Management*, 58, 89–100. https://doi.org/10.1016/j.tourman.2016.10.011
- Yang, Y., Duan, Y., Wang, X., Huang, Z., Xie, N., & Shen, H. T.(2019). Hierarchical Multi-Clue Modelling for POI Popularity Prediction with Heterogeneous Tourist Information. *IEEE Transactions on Knowledge* and Data Engineering, 31(4), 757–768. https://doi.org/10.1109/TKDE.2018.2842190
- Yang, Y., Ruan, Q., Huang, S., Lan, T., & Wang, Y.(2021). Impact of the COVID-19 outbreak on tourists' real-time on-site emotional experience in reopened tourism destinations. *Journal of Hospitality and Tourism Management*, 48, 390–394. https://doi.org/10.1016/j.jhtm.2021.07.014
- Yu, Q., Pickering, S., Geng, R., & Yen, D. A.(2021). Thanks for the memories: Exploring city tourism experiences via social media reviews. *Tourism Management Perspectives*, 40, 100851.https://doi. org/10.1016/j.tmp.2021.100851
- Zanibellato, F., Rosin, U., & Casarin, F.(2018). How the attributes of a museum experience influence electronic word-of-mouth valence: An analysis of online museum reviews. *International Journal of Arts Management*, 21(1), 76–90.
- Zeng, B.(2017). Cultural Centre, Destination Cultural Offer and Visitor Satisfaction. *Sustainability*, 9(11). https://doi.org/10.3390/su9111984
- Zhang, K., Chen, D., & Li, C.(2020). How are Tourists Different? Reading Geo-tagged Photos through a Deep Learning Model. Journal of Quality Assurance in Hospitality & Tourism, 21(2), 234–243. https:// doi.org/10.1080/1528008X.2019.1653243
- Zhang, T., Li, B., & Hua, N.(2022). Chinese cultural theme parks: text mining and sentiment analysis. Journal of Tourism and Cultural Change, 20(1–2), 37–57.https://doi.org/10.1080/14766825.2021.1876077
- Zhang, T., Li, B., Milman, A., & Hua, N.(2022). Assessing technology adoption practices in Chinese theme parks: text mining and sentiment analysis. *Journal of Hospitality and Tourism Technology*, 13(1), 195–213.https://doi.org/10.1108/JHTT-05-2020-0126
- Zhuravskaya, E., Petrova, M., & Enikolopov, R.(2020). Political Effects of the Internet and Social Media. Annual Review of Economics, 12(1), 415–438.https://doi.org/10.1146/annurev-economics-081919-050239

Recibido:	01/03/2024
Reenviado:	10/03/2024
Aceptado:	01/04/2024
Sometido a evaluación	por pares anónimos