

This is a self-archived version of an original article. This version may differ from the original in pagination and typographic details.

Author(s): Quarshie, Benjamin; Santoso, Halim Budi; Rachmat Chrismanto, Antonius; Ngubeni, Paulina; Ukpabi, Dandison

Title: I Know What You Think About Your Last Vacation : A Topic Modelling Approach for Destination Online Reviews

Year: 2024

Version: Published version

Copyright: © The Author(s) 2024

Rights: CC BY 4.0






Rights url: <https://creativecommons.org/licenses/by/4.0/>

Please cite the original version:

Quarshie, B., Santoso, H. B., Rachmat Chrismanto, A., Ngubeni, P., & Ukpabi, D. (2024). I Know What You Think About Your Last Vacation : A Topic Modelling Approach for Destination Online Reviews. In K. Berezina, L. Nixon, & A. Tuomi (Eds.), *Information and Communication Technologies in Tourism 2024 : ENTER 2024 International eTourism Conference, Izmir, Türkiye, January 17–19* (pp. 385-397). Springer Nature. Springer Proceedings in Business and Economics. https://doi.org/10.1007/978-3-031-58839-6_40



I Know What You Think About Your Last Vacation: A Topic Modelling Approach for Destination Online Reviews

Benjamin Quarshie¹ (✉) , Halim Budi Santoso² ,
Antonius Rachmat Chrismanto³ , Paulina Ngubeni⁴ , and Dandison Ukpabi⁵ 

¹ Mampong Technical College of Education, Mampong District, Ghana
bquarshie@mtce.edu.gh

² Information System Department, Universitas Kristen Duta Wacana, Yogyakarta, Indonesia
hbudi@staff.ukdw.ac.id

³ Informatics Department, Universitas Kristen Duta Wacana, Yogyakarta, Indonesia
anton@staff.ukdw.ac.id

⁴ Department of Tourism Management, Tshwane University of Technology,
Pretoria, South Africa
ngubenipm@tut.ac.za

⁵ School of Business, University of Jyväskylä, Jyväskylä, Finland
dandison.c.ukpabi@jyu.fi

Abstract. Online reviews (ORs) have garnered interdisciplinary attention, notably in hospitality and tourism. Despite their significance, concerns about OR credibility persist. Destination Management Organizations increasingly recognize ORs as valuable sources of firsthand, authentic feedback from consumers. However, there remains a dearth of cross-continental investigations into ORs, particularly concerning themes discussed by local and international travelers across various destinations. To address this gap, we employ Latent Dirichlet Analysis—a probabilistic technique to extract topics from a given corpus—to examine 10350 TripAdvisor reviews from 12 destinations in Ghana and Indonesia. Our analysis reveals shared concerns among domestic and international travelers regarding activities, destination attractions, local staff attitudes, and positive visitor experiences. This study advances insights, highlights limitations, and lays the groundwork for future research.

Keywords: Destination · Latent Dirichlet Analysis · Online Review · Topic Modelling

1 Introduction

The Online Review (OR) phenomenon has globally surged in the realm of consumer services due to technological advancements. This impact aligns with research by [1], indicating OR's influence on supply chains and consumer behaviors. ORs encompass consumer opinions about products or services, often on third-party websites. Despite

their prevalence, OR credibility is intensely debated, as explored by [2]. Recent research applies ORs across diverse commerce domains, particularly in hospitality and tourism, where tourists' sentiments [3, 4] influence potential travelers. Instagram, X (Twitter), YouTube, TikTok, and TripAdvisor serve as platforms for sharing destination-related ORs, and transcending boundaries. These shared experiences play a pivotal role in travelers' decision-making [5]. These narratives are essential resources that shape the preferences of potential travelers by providing firsthand insights from previous explorers. Understanding tourists' sentiments and impressions across destinations is crucial for robust quality assurance in Destination Management Organizations (DMOs), as demonstrated in previous studies [1, 2, 4]. The impact of these ORs on brand images remains significant, even considering social media's rapid information spread [6]. DMOs monitor tourist ORs due to their influence on rankings and traveler choices. Recent research shows consumers prioritize aesthetic attributes and accommodation quality for perceived value [7]. Our study examines tourist sentiments in selected destinations in Indonesia and Ghana, focusing on emotional responses, activities, and sociocultural interactions.

Existing research ORs in tourism have gaps in comprehensively analyzing experiential narratives, especially among domestic and international travelers in specific cross-continental destinations. This study employs topic modeling [8] to address: *What are the primary travel concerns for domestic and international travelers in ORs?* Analyzing TripAdvisor ORs via text-mining, we focus on cross-continental destinations, extracting topics to reveal traveler experiences and emotions using Latent Dirichlet Analysis (LDA), with six destinations from Indonesia and Ghana. Findings, discussions, contributions, limitations, and future research directions follow.

2 Literature Review

The tourism industry, mainly service-oriented, relies on intangible experiences, and customer loyalty is crucial, influenced by quality and satisfaction [9:46]. Customer satisfaction in tourism significantly influences retention and word-of-mouth marketing [10]. To nurture loyalty, DMOs should focus on infrastructure, safety, service quality, and marketing to create a positive destination image [10]. The rise of online social media platforms has transformed tourism marketing, enabling consumers to review and assess services, affecting their purchasing decisions [12, 13]. Information technology advancements have revolutionized communication and destinations, fostering transformation [12]. Post-consumption customers increasingly provide feedback, with ORs becoming a prominent form of digitized word-of-mouth, shifting from traditional oral exchanges to platforms like TripAdvisor [16]. Recognizing the importance, marketers leverage ORs for their trustworthiness [15]. Similarly, [14] emphasizes the rise of electronic word of mouth (eWOM), propelled by electronic media. ORs are powerful marketing tools, impacting the trustworthiness of offerings [16]. To wit, [16] defines OR marketing as unpaid promotion based on customer feedback. Digitization has shifted customer reviews from personal conversations to online platforms like TripAdvisor, sharing experiences with a digital community. ORs potentially furnish consumers with credible and persuasive commercial information [14]. As this study delineates, Exploring ORs becomes imperative to impact the total growth of tourism destinations, especially in Africa and Asia.

2.1 Online Reviews and Customer Perceptions

The fourth industrial revolution (4IR) has significantly transformed the operations and marketing strategies of tourism and hospitality businesses. As the eWOM, commonly known as ORs, increases due to 4IR, web-based technologies have enabled extensive OR communication, directly impacting consumer purchase intentions and brand perceptions [17]. ORs are accessible globally regardless of location and play a pivotal role in e-commerce, influencing online and offline purchase decisions [18]. Some consumers find ORs more credible than conventional marketing campaigns, considering them unbiased and devoid of monetary influence [19]. However, this credibility is contested among researchers [2]. Sentiment analysis explores customer sentiments in Online Reviews (ORs) by identifying expressions as positive or negative opinions about the subject. It involves assessing sentiment expressions, their polarity, intensity, and their relation to the subject [20]. Sentiment analysis uses text mining and natural language processing to identify and extract subjective information from the text [21]. Mining consumer's emotions from online reviews is significant due to its ability to attract potential consumers by influencing their decisions, additionally, it enables organizations to get product feedback [22]. Yu et al. [23] argue that mining the online reviews on travel websites can help potential visitors better understand tourist attractions, choose their favorite scenic spots and avoid or reduce trouble throughout the planning of the tour or visit. Through ORs, consumers evaluate service risks and quality potential, while service providers gain insights to tailor their services to customer needs and expectations [18]. Consumers have the potential to make personal choices based on the perceptions gathered from the various OR platforms. ORs are vital in marketing tourism and hospitality, mitigate perceived risks and influence purchases, with platforms like TripAdvisor when engaged further through sentiment analysis [1]. Reviews assess risks, especially in foreign purchases. Positive reviews reduce perceived risks and enhance confidence [24]. Online platforms redefine consumer decision-making, transforming tourism communication [12, 13], allowing consumers to review, compare, and evaluate services, gauging value. Despite substantial research on online reviews, there is a noticeable dearth of studies pertaining to online reviews in Ghana and Indonesia, despite the vibrant tourism industries in these nations.

In this current study, we adopted Latent analysis as it aimed to identify underlying themes, attitudes, or patterns in text-based customer reviews posted on TripAdvisor [25]. This was necessary as this approach would assist in extracting important insights from customer reviews. [26] postulates that a tourist attraction with a high occurrence of reviews has a stronger perceived popularity and importance among tourists. For Ghanaian and Indonesian destinations, the situation differs as they do not yield a high volume of reviews. Popularity should not be solely gauged by review quantity; the relatively lower number still reflects their appeal. Therefore, our focus shifts to analyzing reviewer sentiment using LDA, as outlined in the methodology section.

3 Research Methodology

3.1 Data Collection

This research employs TripAdvisor online reviews for twelve destinations in Ghana and Indonesia, sourced using the third-party API platform APIFY (www.apify.com). Selection includes six destinations per country, encompassing cultural heritage, national parks, and natural attractions (beaches, volcanoes). Indonesian sites are drawn from the New Bali Projects list by the Ministry of Tourism, while well-known Ghana destinations are chosen. The ORs were downloaded via the API platform, with review counts detailed in Table 1. The research methodology, depicted in Fig. 1, employs LDA to extract topics from destination reviews.

Table 1. Lists of Destinations and Number of Reviews

Country	Tourism Object	Total Review	Excluded Review	Final Review	
				Domestic traveler	International traveler
Ghana	Cape Coast Castle	701	238	45	418
	Kakum	716	211	53	452
	Kintampo Falls	36	13	3	20
	Mole	716	220	50	446
	Nzulezu	716	229	56	431
	Tafi Atome	716	225	49	442
Indonesia	Borobudur Temple	7593	3100	1364	3129
	Bromo Tengger	2565	1030	602	933
	Lake Toba	853	195	324	334
	Tanjung Lesung	119	32	82	5
	Thousand Islands	921	228	508	185
	Wakatobi	519	100	12	407

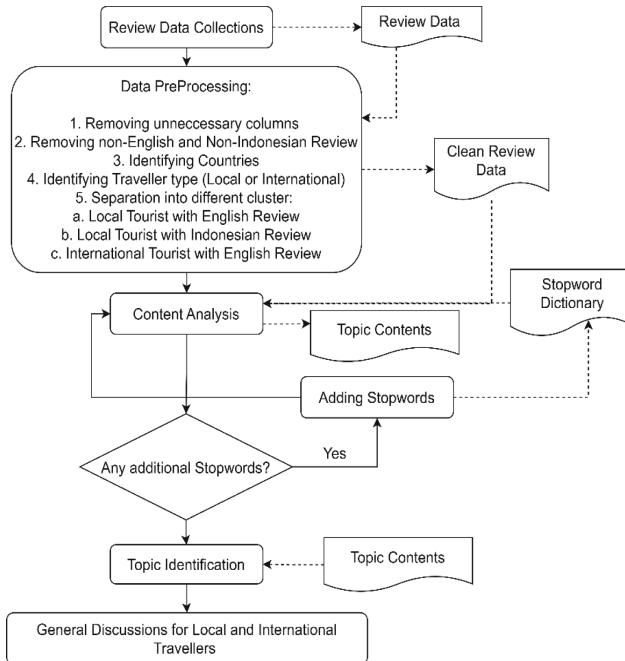


Fig. 1. Research Methodology

3.2 Data Preprocessing

From the acquired reviews, we extracted additional details like review title, publication date, username, location (city and country), language, helpful votes, user's review count, attraction review count, and attached images. Six columns (review ID, title, comments, city, country, and username) were retained after removing unnecessary columns. Non-English and non-Indonesian reviews were excluded, and a "Traveler Type" column was added, classifying reviewers as "Domestic" or "International" based on their origin. Review counts for each destination categorized by traveler type are provided in Table 1.

3.3 Data Analysis

Our analysis commenced by categorizing reviews based on language and traveler type, leading to distinct clusters. Given that two authors are Indonesians we conveniently formed three clusters for Indonesian destinations: domestic travelers with Indonesian reviews, domestic travelers with English reviews, and international travelers with English reviews. Ghana destinations yielded two clusters: domestic travelers with English reviews and international travelers with English reviews. We segmented words, removed punctuation and stopword, and aligned reviews with the required formats by applying a standard stopword dictionary. Topic modeling using LDA followed, with an initial five topics [25]. LDA is employed for information retrieval and analyzing document corpus content like patents or news. Python tool pyLDAvis aided topic extraction from online

reviews. We tried a different number of topics for each analysis and then compared them. We agreed to use five topics as the initial number of topics to have a diverse number of topics that we could identify. We refined keyword clusters through iterative processes, enhancing topic justification. Figure 1 visually illustrates our research methodology, offering an overview of our study's approach.

4 Findings

This section elucidates the LDA corpus topic modeling technique [8, 21]. Employing LDA to discern topics from ORs is apt, as it reveals diverse attributes within reviews. The number of topics needs manual definition [22]; we set it to five topics and identify underlying themes through discussions among research team members. Actual review content aids context identification alongside keywords. In some cases, overlapping topics render certain themes indiscernible, resulting in fewer topics than anticipated, especially fewer than five for each destination by tourist type. Due to limitations in the number of reviews, there are two reviews that only have a single topic: First, Wakatobi (Indonesian Tourist, Indonesian Language) only has a topic. In addition, one destination in Ghana (Kintampo Falls, Domestic Travelers) only has three reviews, which can only be categorized into a single topic. Once topics are identified, we delve into each cluster's broader context (Fig. 2), aiding the grouping of similar topics for enhanced explanations. Understanding the higher context aids in delivering comprehensive insights.

4.1 Topic Modelling for Ghanaian Tourist Destination

Domestic Travelers

- *Positive Visitor Experience:* Ghanaian tourists expressed positive sentiments using terms like thrilling, attractive, amazing, fun, good, beautiful, and great during their visits. They also emphasized the sites' significance, considering them worthwhile and intriguing. Cape Coast Castle was particularly valued for its educational aspects, while other destinations were seen as sources of enjoyment and excitement.
- *Negative Visitor Experience:* Domestic visitors conveyed negative emotions, particularly related to Cape Coast Castle. Terms like dehumanizing, awkward, sobering, and horrific were used in reference to its slave history, reflecting their sentiment. Additionally, fear was expressed, particularly regarding the canopy walk at Kakum. Concerns about the littered state of Kintampo Falls were also raised.
- *Destination Attraction:* Ghanaian tourists exhibited contentment with their visited destinations, particularly highlighting the allure of natural landscapes and wildlife. These aspects were frequently described as amazing and integral to their great adventure. Historic education at Cape Coast Castle resonated positively. Floral and arboreal elements, wildlife encounters, and canoe cruises were also captivating features.
- *Activities:* Activities encompassed heritage education and dungeon exploration at Cape Coast, safari drives at Mole, hikes at Atome and Kakum, and canopy walks at Kakum. Canoe cruises (Nzulenzu), picnics, swimming at Kintampo Falls, and interactions with monkeys at Atome formed memorable experiences for many.

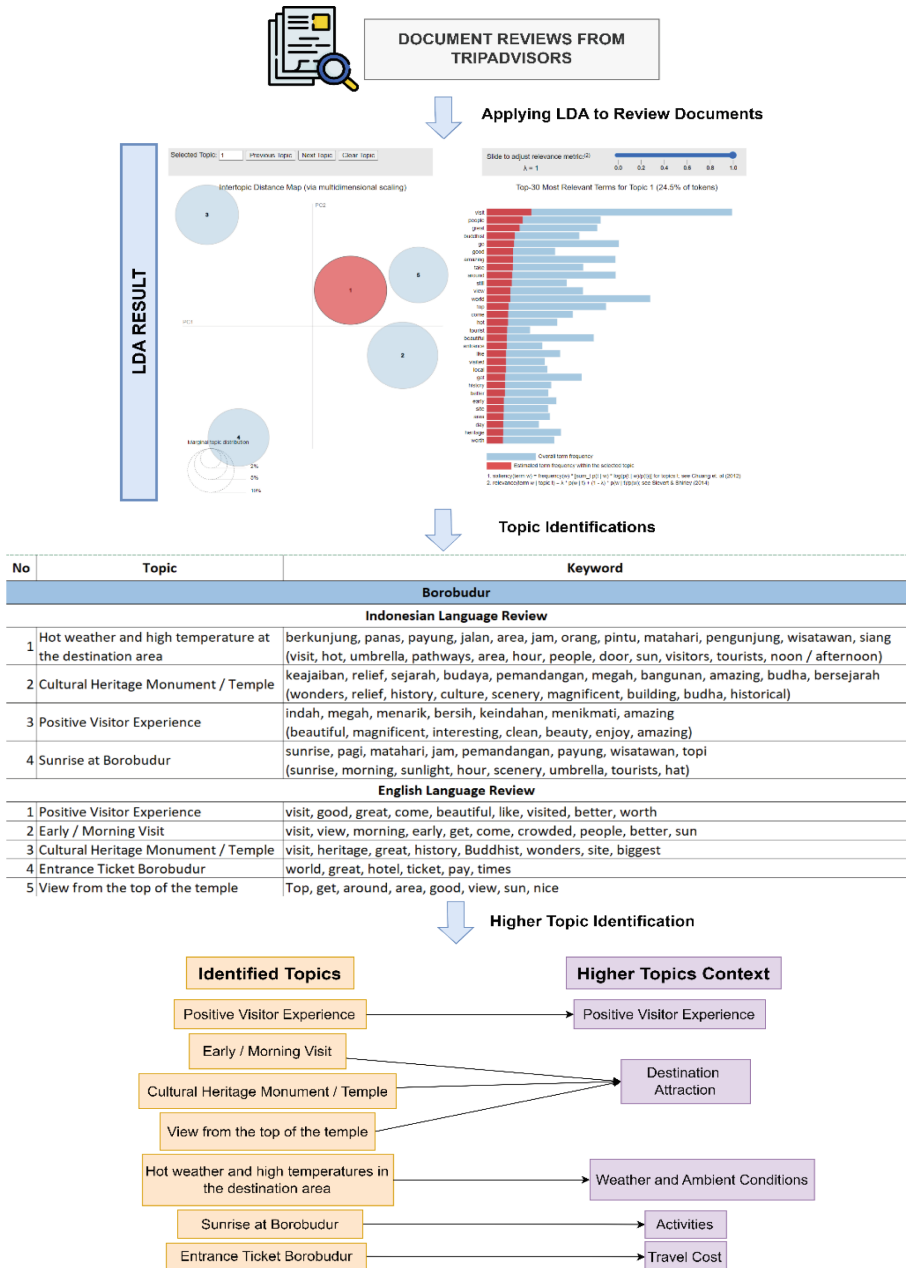


Fig. 2. Methodology on LDA, Topic, and Higher Context Identification

- *The Attitude of Staff and Local Guides:* Ghanaian visitors praised the knowledge of Cape Coast Castle’s tour guide while expressing dissatisfaction with the Kakum guide for not accompanying them on the shaky canopy walk.

- *Accessibility/Affordability*: While most destinations were described as easily accessible with the appropriate fees, Ghanaian visitors perceived Mole Park as expensive. Cape Coast Castle was deemed inexpensive, and the encounter with friendly monkeys at Atome was considered attainable with just a banana.

International Travelers

- *Activities*: Predominant activities encompassed heritage education and immersive dungeon exploration at Cape Coast Castle, hiking ventures at Atome and Kakum, game drives and safaris at Mole, engaging canopy walks at Kakum, and leisurely canoe cruises at Nzulenzu. Notably, Kintampo Falls entailed significant picnic and swimming endeavors. Also, highlights included close monkey encounters at Atome and unique lodging experiences at Kakum, such as sleeping near the monkey sanctuary or in tree houses. ORs indicate highly positive experiences for international travelers at these destinations.
- *Destination Attraction*: Certain international visitors were captivated by the vistas of Cape Coast Castle, often describing it as a “must-see” and a significant historical site for learning. The castle’s focus on heritage and education garnered attention. Rain-forest views at Kakum, waterfalls at Kintampo, and the unique Lake at Nzulenzu also drew admiration. Notably, discussions among international visitors about Ghanaian destinations frequently revolved around wildlife encounters. Monkeys (Atome), elephants, warthogs, crocodiles, and leopards (Mole) were encountered and described as thrilling, epic, amazing, and great.
- *The Attitude of Local Guides*: International visitors also expressed satisfaction with the quality of service. Travelers greatly appreciated the knowledgeable and experienced tour guides at Cape Coast Castle, while some raised concerns about guides leaving the group during the tour at Kakum.

4.2 Topic Modelling for Indonesian Tourist Destination

Domestic Travelers

- *Positive visitor experience*: Indonesian tourists frequently post about their positive experiences during their visits, and from the topic identification, this study cannot find any negative reviews or negative experiences of the visitors. The most frequent words that appear to express their positive visitor experiences are beautiful, amazing, good, nice, great, and enjoy.
- *Activities*: Indonesian travelers extensively describe their engaged activities during their journeys. Each destination provides unique experiences tied to their geographical advantages and natural surroundings. Frequently highlighted activities in ORs include watching sunrise from elevated points (Borobudur and Bromo), visiting cultural heritage temples (Borobudur), early morning jeep trips (Bromo), group excursions (Tanjung Lesung), swimming (Tanjung Lesung and Thousand Islands), snorkeling (Thousand Islands and Wakatobi), guided diving (Wakatobi), savoring local cuisine (Lake Toba), island-hopping by boat (Thousand Islands), and horseback riding (Bromo).

Furthermore, interactions with local inhabitants are cherished, particularly in Lake Toba, where discussions center around Batak culture and cultural immersion.

- *Weather and ambient conditions:* Indonesian travelers are concerned about the weather near their destination, such as hot temperatures and bringing an umbrella during a visit to Borobudur at noon, cold breeze while visiting Bromo in the early morning, and enjoying Lake Toba at night.
- *Destination attraction:* Indonesian tourists frequently mention nearby attractions that enhance their visits, such as the local Buddha temple at Borobudur, the Savana, caldera, mountain, and crater at Bromo, the Sea view at Tanjung Lesung, visiting various islands at Thousand Islands, Samosir and Parapat at Lake Toba, and luxurious villas and resorts at Wakatobi. Many reviews are positive and praise the attractions, but discussions also raise environmental concerns, particularly regarding issues like trash, especially in natural attractions like Tanjung Lesung.
- *Travel accompaniment:* Travel accompaniment is necessary, especially when the local people have collectivist cultures, such as Indonesia and other Asian countries. Indonesian tourists mention their companions when visiting destinations, such as traveling with friends at Tanjung Lesung, with working colleagues on weekends at Thousand Islands, and with family at Tanjung Lesung or Wakatobi.
- *Travel cost:* Traveling cost is the next topic domestic travelers least confer. They discuss the unaffordable luxurious Wakatobi vacation, which most Indonesians may not afford. Another review can be found on how they explain some accommodation prices at Tanjung Lesung and entrance tickets at Borobudur.
- *The attitude of staff and local guides:* Lastly, Indonesian travelers rarely mention the staff or local guides' attitudes. Only one topic was found, specifically about the positive attitude (friendly and kind) of resort staff at Wakatobi.

International Travelers

- *Attraction:* International travelers visit Indonesia to see and experience tropical nature and learn from historical sites like Borobudur. Indeed, they enjoyed different attractions, such as small islands at thousand islands, sand and mountains at Bromo, and the natural lake at Toba.
- *Positive Visitor Experience:* International visitors also write their positive visitor experience while enjoying Indonesian tourist destinations, such as the beautiful temple and historical significance at Borobudur, the Trip at Bromo, the beautiful scenery at Thousand Islands and Lake Toba, and the excellent resort at Wakatobi.
- *Activities:* Domestic travelers emphasize activities more than international travelers. Topics related to activities include admiration for Borobudur's ancient artwork, guided tours and horseback riding at Bromo, boat experiences and local cuisine at Thousand Islands, and relaxation at Lake Toba. Domestic travelers focus on swimming, diving and snorkeling activities and interactions with locals, while international travelers prioritize art appreciation and destination relaxation
- *Negative Visitor Experience:* International travelers also shared their negative experiences and dissatisfaction with certain destinations. A specific topic surfaced concerning international travelers' dissatisfaction with their visits to Tanjung Lesung.

Intriguingly, these travelers not only voice their negative experiences but also propose potential solutions to improve services.

- *The attitude of staff and local guides:* Similar to domestic travelers, international visitors are also concerned about the attitude of staff and local guides. We discovered one topic related to the attitude of staff at Wakatobi Resort, but we did not find one about Wakatobi diving guides.
- *The quality of services:* International travelers are also concerned about the quality of the service offered. We examined one topic discussion about the quality of the services of Wakatobi Resorts.

5 Discussion

Our findings reveal similarities in ORs from domestic travelers in Indonesia and Ghana. Four specific topics were highlighted, either in Ghanaian or Indonesian contexts. These topics predominantly encompass positive visitor experiences, destination attractions, activities, and the demeanor of staff and local guides (refer to Fig. 3). [27] notes that consumers find extreme ratings (positive or negative) more useful and enjoyable than moderate ones, significantly influencing their decision-making process. Domestic travelers’ emphasis on positive visitor experiences contributes to a positive destination image for both domestic and international travelers. The role of staff and tour guides notably impacts these experiences, with positive attitudes enhancing visitor satisfaction [10, 16]. Therefore, domestic travelers emphasize staff and tour guide attitudes in their reviews. Positive reviews on reputable platforms can attract more travelers due to perceived reliability and reduced risk [1]. Local travelers also discuss potential activities and attractions, promoting the destination and forming a positive image. Activities and attractions contribute to conative experiences, pivotal for holistic customer satisfaction [10, 16]. Conversely, three topics are more prominent among international travelers, influencing their online reviews (Fig. 3). Unique destination attractions like the ancient artworks at Borobudur in Indonesia and the wild experiences with monkeys in Ghana, draw international tourists. Well-trained frontline staff and guides are vital for enhancing destination impressions and impacting tourist satisfaction [10, 16]. Hence, international travelers prioritize this aspect and share reviews regarding local staff or guides’ attitudes.

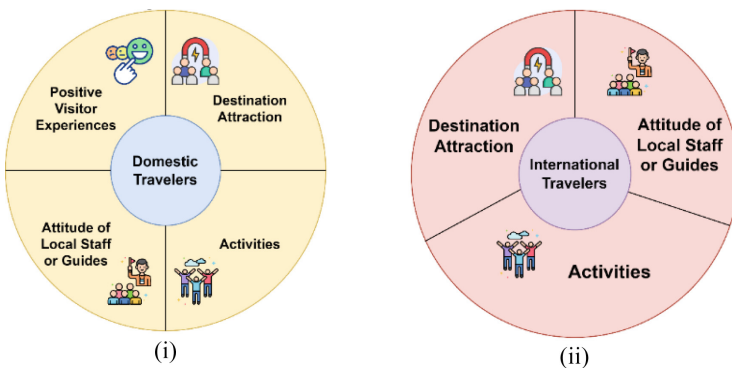


Fig. 3. Top of Minds of (i) Domestic and (ii) International Travelers Online Reviews

6 Conclusions

This study investigates customer destination perceptions from ORs across 12 destinations in Ghana and Indonesia. Empirical results validate the significance of ORs in reflecting customer sentiments about the explored destinations. Both domestic and international travelers prominently discuss destination activities and experiences. Wang et al. [28] found that respondents valued the credibility and informativeness of travel post reviews, as well as their style and length, which enhanced trust in tourism offerings and influenced their decision-making. We herein posit that the experiences shared by TripAdvisor reviewers on the Ghanaian and Indonesian destinations could potentially increase attractions of tourists. Noteworthy is the recurring theme of excellent customer service in ORs, underscoring the influence of front-line staff in shaping lasting impressions across markets. The study also encompasses a review of existing research, underscoring the potent impact of positive ORs on customer perceptions of brands, albeit with potentially contrasting effects of negative ORs. The research underlines the pivotal role of ORs for tourism and hospitality businesses. Recognizing and comprehending ORs' role in assessing customer satisfaction is vital for sustaining and perpetuating the success of destinations.

6.1 Theoretical and Practical Contributions

Our study explores TripAdvisor ORs through the LDA topic modeling approach, hence contributing to existing literature on ORs. Our study is unique in the sense that we explored domestic and international travelers' thoughts from two developing countries in two continents. Our methodological approach has great potentials of guiding other scholars and researchers in similar future inquiries. Again, our study analyzes ORs to uncover experiential activities and sentiments of domestic and international travelers, potentially impacting DMOs' service quality and marketing strategies highlighted in the selected destinations.

6.2 Limitations and Future Research Agenda

We acknowledge three study limitations. Firstly, we focused on 12 popular destinations in Ghana and Indonesia due to their high comment volumes. Therefore, caution is required when generalizing findings beyond these destinations to the wider tourism industry in both countries. Second, our data collection centered exclusively on TripAdvisor, an interactive but not real-time platform [5]. Platforms like X (Twitter) and Facebook offer real-time dynamics that could yield distinct results, warranting future exploration of potential divergences. Lastly, Our study solely uses customer ORs, but future research could explore individual review histories in specific countries, establishing reviewer recognition programs on OR platforms to enhance OR credibility.

References

1. Schuckert, M., Liu, X., Law, R.: Hospitality and tourism online reviews: recent trends and future directions. *J. Travel Tour. Mark.* **32**(5), 608–621 (2015). <https://doi.org/10.1080/10548408.2014.933154>

2. Pooja, K., Upadhyaya, P.: What makes an online review credible? A systematic review of the literature and future research directions. *Manage. Rev. Q.* (2022). <https://doi.org/10.1007/s11301-022-00312-6>
3. Xiang, Z., Du, Q., Ma, Y., Fan, W.: A comparative analysis of major online review platforms: implications for social media analytics in hospitality and tourism. *Tour. Manage.* **58**, 51–65 (2017). <https://doi.org/10.1016/j.tourman.2016.10.001>
4. Qin, Y., Wang, X., Zhang, X.: Ranking tourist attractions through online reviews: a novel method with intuitionistic and hesitant fuzzy information based on sentiment analysis. *Int. J. Fuzzy Syst.* **24**(2), 755–777 (2021). <https://doi.org/10.1007/s40815-021-01131-9>
5. Nasution, R.A., Windasari, N.A., Mayangsari, L., Arnita, D.: Travellers' online sharing across different platforms: what and why? *J. Hosp. Tour. Technol.* **14**(2), 295–308 (2023). <https://doi.org/10.1108/jhtt-02-2021-0040>
6. Guo, X., Pesonen, J.: The role of online travel reviews in evolving tourists' perceived destination image. *Scand. J. Hosp. Tour.* **22**(4–5), 372–392 (2022). <https://doi.org/10.1080/15022250.2022.2112414>
7. Zhuo, X., Wang, W.: Value for money? Exploring the consumer experience on shared accommodation platforms: evidence from online reviews in China. *J. Hosp. Tour. Technol.* **13**(3), 542–558 (2022). <https://doi.org/10.1108/jhtt-03-2021-0087>
8. Asmussen, C.B., Møller, C.: Smart literature review: a practical topic modelling approach to exploratory literature review. *J. Big Data*, **6**(1) (2019) <https://doi.org/10.1186/s40537-019-0255-7>
9. Corte, V., Sciarelli, M., Cascella, C., Gaudio, G.: Customer satisfaction in tourist destination: the case of tourism offer in the city of naples. *J. Invest. Manage.* **4**(1), 39–50 (2015)
10. Surahman, I.G.N., Yasa, P.N.S., Wahyuni, N.M.: The effect of service quality on customer loyalty mediated by customer satisfaction in tourism villages in Badung Regency. *Jurnal Ekonomi dan Bisnis Jagaditha* **7**(1), 46–52 (2020)
11. Adinegara, G.N.J., Suprapti, N.W.S., Yasa, N.N.K., Sukaatmadja, I.P.G.: Factors that influences tourist's satisfaction and its consequences. *Eur. J. Bus. Manage.* **8**(9), 39–50 (2017)
12. Sotiriadis, M.D., van Zyl, C.: Electronic word-of-mouth and online reviews in tourism services: the use of Twitter by tourists. *Electron. Commer. Res.* **13**(1), 103–124 (2013). <https://doi.org/10.1007/s10660-013-9108-1>
13. Popa, R.A., Săplăcana, Z., Dabija, D.C., Alt, M.A.: The impact of social media influencers on travel decisions: the role of trust in consumer decision journey. *Curr. Issue Tour.* **25**(5), 823–843 (2022). <https://doi.org/10.1080/13683500.2021.1895729>
14. López, M., Sicilia, M.: EWOM as source of influence: the impact of participation in eWOM and perceived source trustworthiness on decision making. *J. Interact. Advert.* **14**(2), 86–97 (2014). <https://doi.org/10.1080/15252019.2014.944288>
15. Nuseir, M.T.: The impact of electronic word of mouth (eWOM) on the online purchase intention of consumers in the Islamic countries – a case of (UAE). *J. Islamic Market.* **10**(3), 759–767 (2019). <https://doi.org/10.1108/JIMA-03-2018-0059>
16. Naylor, G.S.: Complaining, complementing, and word-of-mouth in the digital age: typology and terms. *J. Cons. Satisfaction, Dissatisfaction Complain. Behav.* **29**, 131–142 (2016)
17. Cheung, C.M.K., Lee, M.K.O., Rabjohn, N.: The impact of electronic word-of-mouth: the adoption of online opinions in online customer communities. *Internet Res.* **18**(3), 229–247 (2008). <https://doi.org/10.1108/10662240810883290>
18. Wan, Y., Ma, B., Pan, Y.: Opinion evolution of online consumer reviews in the e-commerce environment. *Electron. Commer. Res.* **18**, 291–311 (2018). <https://doi.org/10.1007/s10660-017-9258-7>
19. Kurdia, B., Alshurideh, M., Akour, I., Tariq, E., AlHamad, A., Alzoubi, H.: The effect of social media influencers' characteristics on consumer intention and attitude toward Keto products purchase intention. *Int. J Data Netw. Sci.* **6**(4), 1135–1146 (2022)

20. Nasukawa, T., Yi, J.: Sentiment analysis: capturing favorability using natural language processing. In: Proceedings of the Second International Conference on Knowledge Capture (pp. 70–77). ACM (2003)
21. Wankhade, M., Rao, A.C.S., Kulkarni, C.: A survey on sentiment analysis methods, applications, and challenges. *Artif. Intell. Rev.* **55**, 5731–5780 (2022). <https://doi.org/10.1007/s10462-022-10144-1>
22. Xia, H., Yang, Y., Pan, X., Zhang, Z., An, W.: Sentiment analysis for online reviews using conditional random fields and support vector machines. *Electron. Commer. Res.* **20**(2), 343–360 (2020)
23. Yu, C., Zhu, X., Feng, B., Cai, L., An, L.: Sentiment analysis of Japanese tourism online reviews. *J. Data Inf. Sci.* **4**(1), 89–113 (2019). <https://doi.org/10.2478/jdis-2019-0005>
24. Stein, N., Spinler, S., Vanthournout, H., Blass, V.: Consumer perception of online attributes in circular economy activities. *Sustainability* **12**(5), 1–16 (2020)
25. Govindarajan, U.H., Trappey, C.V.: Intelligent collaborative patent mining using excessive topic generation. *Adv. Eng. Inform.* **42**, 100955 (2019). <https://doi.org/10.1016/j.aei.2019.100955>
26. Yang, Y.: Understanding tourist attraction cooperation: An application of network analysis to the case of Shanghai, China. *J. Destination Market. Manage.* (2017). <https://doi.org/10.1016/j.jdmm.2017.08.003>
27. Park, S., Nicolau, J.L.: Asymmetric effects of online consumer reviews. *Ann. Tour. Res.* **50**, 67–83 (2015)
28. Wang, Z., Huang, W.-J., Liu-Lastres, B.: Impact of user-generated travel posts on travel decisions: a comparative study on Weibo and Xiaohongshu. *Ann. Tour. Res. Empirical Insights* **3**, 100064 (2022)

Open Access This chapter is licensed under the terms of the Creative Commons Attribution 4.0 International License (<http://creativecommons.org/licenses/by/4.0/>), which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

