

Social Media Analytics and Tourism Destination Marketing: The Case of TIMIMOUN Destination

GRAA Amel ¹, BECHELAGHEM Khadidja², FRIOUI Samira ³

¹ Djillali Liabes University (Algeria),

amel.graa@univ-sba.dz

² Djillali Liabes University (Algeria),

ben.khad@yahoo.fr

³ Djillali Liabes University (Algeria),

samira.frioui@univ-sba.dz

Received: 23/10/2023

Accepted: 15/02/2024

Published:01/04/2024

Abstract:

Social media analytics plays a crucial role in tourism destination marketing. With the growing influence of social media platforms, tourists are increasingly using these platforms to research, discover, and share their travel experiences. Accordingly, this research work uses analytical techniques such as sentiment analysis and topic modelling to extract topics of interest from tourists' conversational data on different social media from June 07, 2022 to June 07, 2023. Using *Mentionlytics* to track online conversation about TIMIMOUN as a travel destination, the results reveal that the overall sentiment towards the TIMIMOUN destination in this period was overwhelmingly positive and the most online conversation took place on YouTube.

Keywords: Social Media Analytics; Tourism Destination; TIMIMOUN; Mentionlytics.

JEL Classification Codes : M31, L81, L83

Corresponding author: GRAA Amel, *e-mail:* amel.graa@univ-sba.dz .

1. INTRODUCTION

Examining big data practices within the knowledge management sphere is crucial, particularly in areas such as health, education, industry, and commercial and marketing trends. This is because big data represents a large and relevant source of information that caters to current and future cognitive demands, including prediction (Alashi & Badi , 2021).

Analyzing big data from social networks is an essential tool for modern businesses. The amount of information floating through social networks increases every day, and represents a rich source of data, if it is properly processed (Žunić, Djedović, & Đonko, 2016).

Social media analytics refers to the practice of collecting and analyzing data from social media platforms to gain insights and make informed decisions. It involves monitoring and measuring various social media metrics such as engagement, reach, impressions, mentions, and sentiments among others. Social media has become a powerful tool for tourism promotion, allowing destinations, businesses, and travelers to connect and share experiences. Tourism boards and destination marketing organizations can use social media platforms to showcase attractions, natural beauty, culture, and to experience their location offers (Drago & Antun , 2010).

To understand this, a main question is asked: *What role does social data analytics play in promoting and marketing the tourist destination?* To grasp the contours of this phenomenon, other questions are interesting: (1) What are some popular social media analytics tools? (2) How can social media analytics help businesses improve their marketing strategies?

Therefore, this study seeks to evaluate an analytics method based on textual content of tourists' online reviews and conversations about TIMIMOUN town as a tourism destination. The research work includes emerging computational methods to provide useful information for tourism destination management strategic planning and operational decision support tool. In order to come up with more insights, this study uses *Mentionlytics* with some computational techniques such as text processing, and sentiment analysis to understand the travelers and tourists and the way they behave after their experience in TIMIMOUN destination.

2. Review of Literature

2.1 Social media analytics:

Nowadays, social media is considered as a powerful tool for all types of companies due to its ability to draw consumers and inspire them to take action. (Radi & Shokouhyar, 2021). Through technology and internet-based tools, social networking gave rise to the term "Social Media" as an entire field. Social media is a potent tool for many types of businesses nowadays because of its capacity to draw customers and motivate them to act. The process of social media analytics typically involves the following steps (Stieglitz, Mirbabaie, Ross, & Neuberger, 2018):

- **Data collection:** Social media analytics tools gather data from various social media platforms such as Facebook, Twitter, Instagram, LinkedIn, YouTube, etc. This data includes user interactions, posts, comments, shares, likes, and other relevant information.
- **Data cleaning and preprocessing:** The collected data may contain noise, irrelevant information, or duplicate entries. Data cleaning and preprocessing techniques are applied to ensure that data is accurate and ready for analysis.
- **Data analysis:** Various analytical techniques are applied for data collection to uncover patterns, trends, and insights. These may involve statistical analysis, sentiment analysis, network analysis, text mining, and machine learning algorithms.
- **Performance evaluation and optimization:** The insights derived from social media analytics are used to evaluate the effectiveness of social media campaigns and strategies. Based on the findings, adjustments and optimizations can be made to improve future social media efforts.

Based on a review of 40 social media analytics "success stories" from IBM, SAS, and SAP, (Kurniawati, Shanks, & Bekmamedova, 2013) list the following advantages: better marketing strategies, better customer engagement, better customer service, better reputation management and brand awareness, product innovation, business process improvement, and spotting new business opportunities. In general, the benefits of social media analytics include: understanding audience behavior, tracking

campaign performance, identifying trends and opportunities, Enhancing customer service, Crisis management.

Web crawling, computational linguistics, machine learning, and statistical techniques are just a few examples of the interdisciplinary methods and information systems tools used in SMA to "collect, monitor, analyze, summarize, and visualize SM data, usually driven by specific requirements from a target application (Mirzaalian & Halpenny, 2021)."

Social media analytics refers to the collection, analysis and interpretation of data generated by social media platforms. Social media offer a wide range of data, including mentions, interactions, shares, comments, likes, followers, hashtags and more. Social media analytics helps to measure and evaluate the impact of social media activities, understand user engagement and make informed decisions to improve social media strategy (Zeng, Chen, Lusch, & Li, 2010).

There are several popular social media analytics tools available in the market, including: Hootsuite, Buffer, Sprout, Mentionlytics, HubSpot, Google Analytics, TweetDeck, Keyhole and BuzzSumo. These are just a few examples of popular social media analytics tools. The right tool for a particular business or organization would depend on their specific needs and goals. It is important to evaluate and compare different tools to determine which one would best fit their requirements (Nanda & Kumar, 2021).

2.2 Social media analytics and Destination marketing:

Social media analytics plays a crucial role in tourism destination marketing. With the growing influence of social media platforms, tourists are increasingly using these platforms to discover, research, and share their travel experiences (Mirzaalian & Halpenny, 2021). Consequently, tourism destinations and marketers have recognized the significance of social media analytics in understanding consumer behaviour, shaping marketing strategies, and measuring the effectiveness of their campaigns (Lin, Liang, Xue, Pan , & Schroeder, 2021). Here are some key ways social media analytics can be utilized in tourism destination marketing (Kumpu, Pesonen, & Heinonen, 2021):

Social Media Analytics and Tourism Destination Marketing
The Case of TIMIMOUN Destination

- Audience insights: Social media analytics provides valuable data about the demographics, interests, and preferences of the target audience. This information helps marketers to better understand their potential visitors and accordingly, tailor their marketing messages. By analyzing social media followers, engagement metrics, and user-generated content, destinations can gain insights into the characteristics and preferences of their target market.
- Trend identification: Social media platforms are dynamic spaces where trends emerge and evolve rapidly. Tourism destinations can leverage social media analytics to identify emerging travel trends, popular destinations, and new activities or experiences that are gaining traction among travellers. This knowledge can be used to align marketing strategies and offerings with the current market demands, ensuring destinations stay relevant and competitive.
- Influencer marketing: Influencers on social media have a significant impact on their followers' travel decisions. Social media analytics helps identify relevant influencers who align with a destination's brand values and target audience. By analyzing engagement rates, reach, and audience demographics of influencers, destinations can select the right influencers to partner with for content creation, promotion, and endorsement, thereby expanding their reach and visibility.
- Content strategy: Social media analytics provides insights into the performance of different types of content, such as photos, videos, or blog posts. By analyzing engagement metrics, reach, and sentiment analysis, destinations can identify the content that resonates most with their audience. This information helps in crafting an effective content strategy that maximizes user engagement and encourages social sharing, ultimately driving awareness and interest in the destination.
- Crisis management: Social media analytics enables destinations to monitor and respond to online conversations in real-time. By tracking mentions, comments, and sentiment analysis, destinations can quickly detect and address potential crises or negative publicity. This proactive approach allows destinations to effectively manage their reputation

and mitigate the impact of negative sentiment on social media platforms.

- **Performance measurement:** Social media analytics provides quantifiable metrics to measure the success and impact of marketing campaigns. Key performance indicators (KPIs) such as reach, engagement, conversions, and sentiment analysis can be tracked to evaluate the effectiveness of different marketing initiatives. By analyzing these metrics, destinations can optimize their marketing strategies, allocate resources more efficiently, and demonstrate the return on investment (ROI) of their social media efforts.

In summary, social media analytics is an invaluable tool for tourism destination marketers. It enables them to gain insights into their target audience, identify trends, collaborate with influencers, optimize content strategies, manage crises, and measure campaign performance. By leveraging the power of social media analytics, destinations can enhance their marketing efforts, attract more visitors, and create memorable travel experiences.

3. Methodology

We have chosen TIMIMOUN as example of a tourism destination in Algeria. In Adrar Province (south-central Algeria), TIMIMOUN is a town and the administrative center of TIMIMOUN District. It has 52,876 residents according to the United nation statistics of the year 2022. The structures of TIMIMOUN are well-known for their ochre-red hue (n.d., 2023).

TIMIMOUN is located in the Gourara area of northern Adrar Province at a height of around 288 meters (945 feet). The town population is surrounded by an oasis that is situated in the southeast side of the town. Further to the northwest, there is a sebkha (salt lake), while Tademat plateau is located in the southeast (Otmane & Kouzmine, 2011).

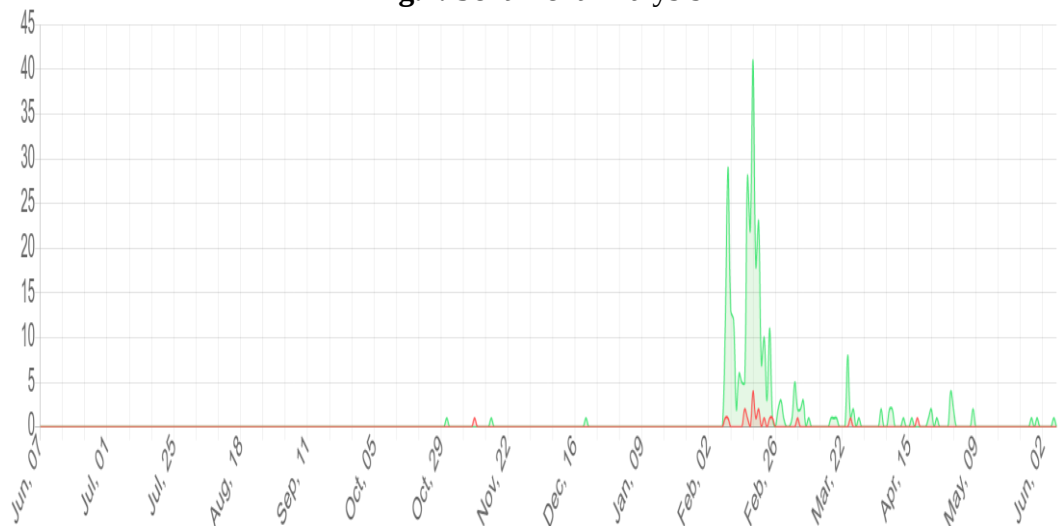
Efforts are being made in TIMIMOUN town to materialize a number of projects designed to boost the capacity of tourist facilities in the Oasis-rouge, TIMIMOUN, to the satisfaction of tourists converging on the region. These efforts to promote TIMIMOUN as a destination have been bolstered by the registration, up to the end of September, of 35 public and private

Results demonstrate some of the metrics used to measure Timimoun as tourism destination.

For such a large destination, online conversation across social media, blogs, forums, press and various other platforms starts to increase on February 02, 2023 and reaches a peak on February 20, 2023. After that, the volumes of online conversation begin to go down slightly. This rise can be justified by tourists return from their trip after visiting the destination.

As mentioned at the top of this graph, the total mentions is about 864. We examined also the social reach metrics which depends on how many followers a profile has and how many posts it posts. The Social Reach metric is available for Twitter (2.7 M), YouTube (51.3 K), and Reddit (27.1 M). The Social Engagement is also observed. It refers to the actual total number of likes, shares, comments, videos, pins from every supported source. For “Timimoun” mention, there were 85.2 K likes, 3.5 K shares, 2.8 K comments, and 111 K videos.

Fig.2. Sentiment Analysis

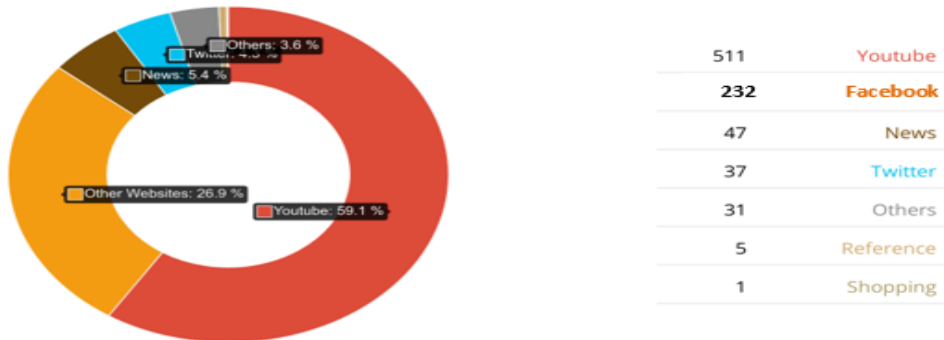


Source: Mentionlytics output

The Sentiment Analysis algorithm is based on Artificial Intelligence deep learning algorithms that will categorize the mentions to positive, negative, and neutral. It works in any language so that means that we can add keywords in every language and get the sentiment of it! Sentiment analysis, also known as opinion mining, is a natural language processing

there are a 41 total mention, 4.8 M social reach and 12 M social engagement (Appendix .1). Additionally, for the word “Ksar”, there are a 30 total mention, 961 social reach and 92K social engagement (Appendix .2).

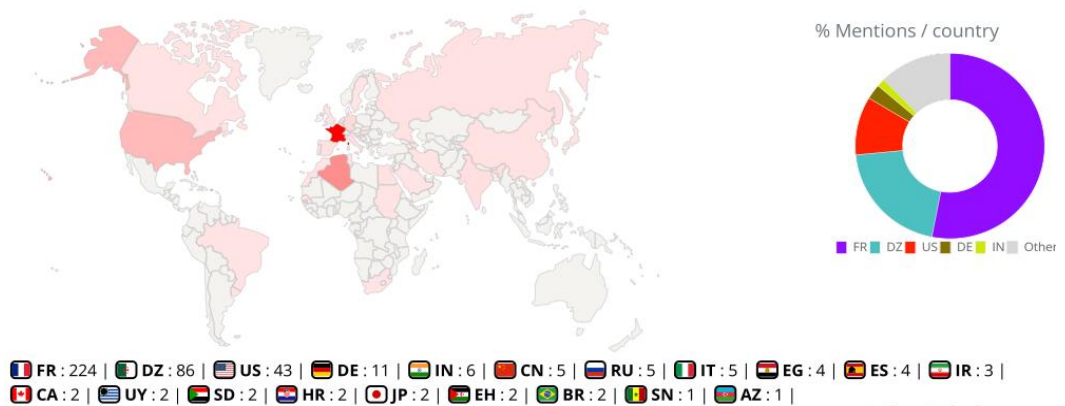
Fig.4. A graph depicting the spread of conversation across platforms and press sources.



Source: Mentionlytics output

Mentionlytics’s data illustrated that 59.1% of online conversation took place on YouTube whereas 26.9% happened on Facebook, with various other platforms taking up small percentages as well. As for Twitter, it was noticed that 4.6% of online conversation came from this platform.

Fig.5. Countries with most mentions.



Source: Mentionlytics output

For mentions where country is available (as set by the profile that performed the post). Fig. 3 shows the areas with more intense color have more mentions. *Mentionlytics*’s data noticed that most comments come from France with 224 mentions follow by Algerian users with 86 comments.

Fig.6. Examples of video description.



Source: Mentionlytics output

The high level of Interest from social media demonstrates the popularity of the destination. Fig.4 illustrates some examples of video description of TIMIMOUN in Youtube. Don Explorer entitled his video “La plus belle ville du Sahara enAlgerie”. This later is shared by 24.6 K and liked by 18.7 K users. Another video posted by Abdou Rider show the Ksar draa TIMIMOUN is was shared by 4545 and liked by 683 users. *Mentionlytics’s* data demonstrated also the negative and positive mentions from YouTube (Appendix 3.). Analyzing these mentions can be a valuable exercise for content creators, businesses, and individuals looking to gauge public sentiment, understand audience feedback

5. CONCLUSION

Overall, social media analytics provides valuable insights and helps organizations make data-driven decisions to improve their social media presence, engage with their audience effectively, and achieve their marketing objectives.

Tourism companies can employ social media data to confirm fundamental elements of the visitor experience and to display a perceptual map of the touristic areas inside their destination. For Timimoun destination we can recommend Ksardraa as the most mentioned area by the visitors. Besides, online conversations analysis of Timimoun visitors reveal key dimensions of destination towards Timimoun.

There are various managerial implications of this study. We can confirm that social media analytics provides valuable insights into the behaviour, preferences, and demographics of destination visitors. This

information can be used to tailor content, campaigns, and strategies to better resonate with the target audience. Moreover, by analysing social media metrics, we can assess the success of marketing campaigns, and identify areas for improvement. Finally, and by monitoring social media conversations and sentiment, we can proactively address customer concerns, respond to feedback, and provide better customer service, all of which help in building brand loyalty and improving customer satisfaction.

Ultimately, it is recommended from Algeria tourism operators to use social media analytics because it provides useful information and helps make data-driven decisions to enhance their social media presence, interact with their audience in a successful way, and consequently achieve their marketing goals.

6. Bibliography List

- Alashi , S., & Badi , D. (2021). Analyzing Big Data from social networks as an enabling factor for sustainable knowledge management of marketing trends. *Journal of Information Studies & Technology*.
- Drago , R., & Antun , B. (2010). Social Media In Destination Marketing Organisations (DMOs). At: . *Conference: Tourism & Hospitality Industry , New Trends in Tourism and Hospitality Management*. Opatija, Croatia.
- Kumpu, J., Pesonen, J., & Heinonen, J. (2021). Measuring the Value of Social Media Marketing from a Destination Marketing Organization Perspective. In W. Wörndl, C. Koo, & J. Stienmetz, *Information and Communication Technologies in Tourism*. Springer.
- Kurniawati, K., Shanks, G., & Bekmamedova, N. (2013). The Business Impact of Social Media Analytics. *Proceedings of the 21th European Conference on Information System*, (pp. 48-61). Utrecht, The Netherlands.
- Lin, M., Liang, Y., Xue, J., Pan , B., & Schroeder, A. (2021). Destination image through social media analytics and survey method. *International Journal of Contemporary Hospitality Management*, 2219-2238.
- Mirzaalian, F., & Halpenny, E. (2021). Exploring destination loyalty: Application of social media analytics in a nature-based tourism setting. *Journal of destination marketing & management* 20.
- n.d. (2023, June 06). *Timimoun, Algérie — statistics*. Retrieved from zhujiworld: <https://fr.zhujiworld.com/dz/1377525-timimoun/>
- Nanda, P., & Kumar, V. (2021). Social media analytics: tools, techniques and present day practices. *International Journal of Services Operations and Informatics (IJSOI)*.
- Otmame, T., & Kouzmine, Y. (2011). Timimoun, évolution et enjeux actuels d'une oasis saharienne algérienne. . *Insaniyat* 51-52, 165-183.

service, A. p. (2023, October 06). *Timimoun : de nouvelles installations touristiques pour renforcer les capacités d'accueil*. Retrieved from aps: <https://www.aps.dz/regions/160888-timimoun-de-nouvelles-installations-touristiques-pour-renforcer-les-capacites-d-accueil>

Wankhade, M., Sekhara Rao, A., & Kulkarni, C. (2022). A survey on sentiment analysis methods, applications, and challenges. *Artificial Intelligence Review*.

Zunić, E., Djedović, A., & Đonko, D. (2016). Application of Big Data and text mining methods and technologies in modern business analyzing social networks data about traffic tracking. *XI International Symposium on Telecommunications*. Sarajevo, Bosnia and Herzegovina: IEEE.

Appendix.1. Statistics about word “timimoun”.



