



Tourist and Followers Perception toward Karnataka Tourism: Sentimental Analysis Using Social Media Analytics

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Abstract

The Research paper tries to examine the Tourist and Followers Perception toward Karnataka Tourism: Sentimental Analysis Using Social Media Analytics of Facebook, Twitter, and Instagram. Here mixed-method approach for carrying out the research was used. The data has been analyzed through sentimental analysis based on the user-generated contents which are available on the Social Medias. The research is exploratory in nature and uses an inductive approach to understand the sentiment of social media users towards tourism destinations. The results based on all the analyses carried out we can say that Tourists/followers on Facebook pages, twitter are generally showing very much positive attitude towards Karnataka Tourism, which implies that the tourists are happy about tourism destinations, activities, and infrastructure of Karnataka tourism. Based on the Instagram analysis we can say that compared to July in August, there is a greater positive sentiment in the Instagram Posts.

Keywords: Karnataka Tourism, Social Media, Sentimental Analysis, Tourism Destination, Twitter, Instagram, Facebook, Virtual

1. Introduction

In tourism, the social media or Web 2.0 has played a significant role as both tourism and social media both are information-driven entities. In tourism the word of mouth (WOM) played a vital part. In the era of social media, word of mouth which was physical, has changed into Electronic Word of Mouth (EWOM) or User Generated Content (UGC). Social Networking sites have revolutionized the traditional ways of acquiring, interacting, and engaging consumers and their behaviors (Cvijikj & Michahelles, 2014). Social Media platform such as Facebook, Twitter and Instagram changing the way individuals make their decisions regarding tourism planning and allied activities. Sentiment analysis is an emerging technique and the social media content can help to understand user behaviour and make available valuable information for associated data analysis (Mandhyani, Khatri, Ludhrani, Nagdev, & Sahu, 2017). So, in this context, the present study tries to examine Social Media posts towards Karnataka Tourism. The findings of the study will help the tourism authorities to take appropriate steps to the development of tourism in the Karnataka state in India.

2. Literature Review

2.1. Social Media and Tourism

(Constantinides & Fountain, 2008) defines Social Media or web 2.0 as “a collection of open-source, interactive and user-controlled online applications expanding the experiences, knowledge and market power of the users as participants in business and social processes.”

Tourism-related services are experiential, their purchase is considered complex and involves high risk. So, they involve extensive information search (Sirakaya & Woodside, 2005). “Social media and different

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Web 2.0 applications provide tourism companies, unique opportunities to easily, cheaply and quickly reach scores of people, understand a market's reaction to their offerings and use this information in their business development" (Ráthonyi, 2013). Social media can also offer different echoes of the tourism from other data sources, including official tourism reports and online review platforms (e.g., TripAdvisor); moreover, social media data can offer real-time insights of tourists' visiting patterns during participation in big events (Dhiratara, Yang, Bozzon, & Houben, 2016). Two kinds of social media which make people share, WOM peer network (i.e., Facebook, Instagram, LinkedIn, Twitter etc.) and anonymous travel review websites (i.e., Yelp, TripAdvisor, etc.) are existed (Tiwari & Richards, 2013).

Buying process of a consumer for tourism and hospitality services are deeply influenced by social media communications and information obtained from these platforms due to its high level of reliability (Icoz, Kutuk, & Icoz, 2018). The consumer's perceived quality of experience usually affected by social media pages and comments etc. available within a social media. Consequently, giving consideration to more social media will lead to more customer engagement (Buluk, 2015). Frequency of using social media and engaging in tourism activities has a positive effect on adoption intention (Cao, Yu, & Tian Tian, 2017).

Various studies show that there is a gap in studying social media and tourism using sentimental analysis, as there are very few studies in the context of Karnataka Tourism.

3. Research Methodology

3.1 Method

The paper uses a mixed-method approach for carrying out the research and the data has been analyzed through sentimental analysis based on the user-generated contents which are available on the Social Medias.

Samples were collected from Facebook Pages and Twitter hashtags related to Karnataka Tourism, for Facebook from 1-7-2018 to 7-02-2019; for twitter from 01-01-2019 to 07-02-2019 and Instagram hashtags related to Karnataka Tourism from 04-07-2019 to 03-09-2019. The data for Facebook pages were collected from the official fan page of Karnataka Tourism, and for twitter, the hashtag Karnataka Tourism and Instagram, #karnatakaturism was used.

For the study, sentimental analysis tools such as IntenCheck (for Facebook Pages and Twitter hashtag) and Brand24 (Instagram) have been used for analysis.

3.2 Data Analysis & Results

Facebook: Sentimental Analysis of Facebook

Karnataka Tourism

Document size (characters) : 43,794
Number of words in the document: 4,077

Attitude Group

Category	Value	Words	Highlighted words
POSITIVE VERY HIGH	100	1500	above, abundance, accessible, admiring, adventure, affordable, amazed, amazing, ardent, astonish...
NEGATIVE VERY LOW	0	24	black, close, complex, deep, down, emotional, endless, evil, hole, lies, maddening, mysterious,...
STRONG VERY LOW	0	89	abundance, action, amaze, ardent, army, attraction, big, build, capital, champion, combine, cre...
WEAK VERY LOW	0	11	alone, gentle, light, nothing, old, quaint, service, sloth, spend, tiny, unfinished
ACTIVE VERY LOW	0	68	accommodate, action, activities, adventure, aim, alive, arrival, attempt, begin, beginning, bet...
PASSIVE VERY LOW	0	45	been, being, calm, cherish, choice, dream, emotional, enjoy, expect, experience, gentle, glance...

Table 1: Table showing details of sentimental analysis of Karnataka Tourism Facebook page

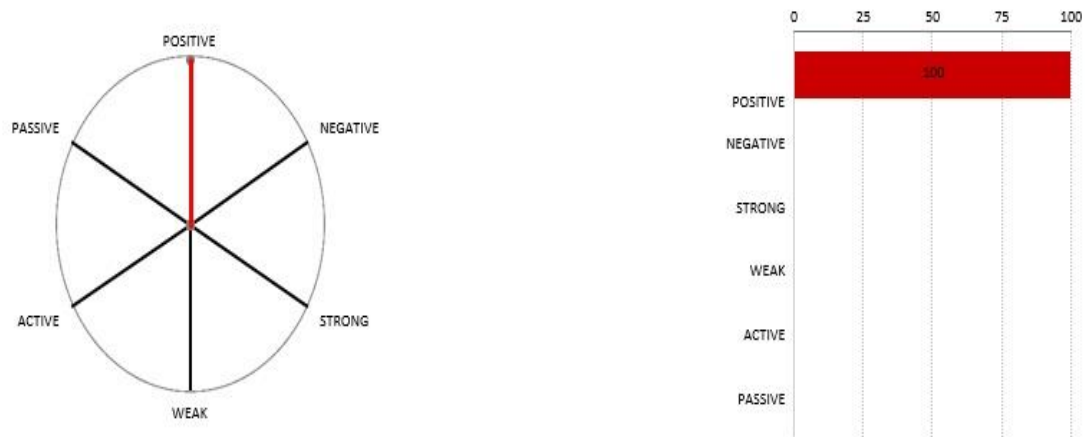


Figure 1: Figure showing sentimental analysis of Karnataka Tourism Facebook page

Interpretation:

The above analysis from the Karnataka Tourism fan page shows that there are very high positive words being discussed which implies that the tourists are happy about tourism destinations, activities and infrastructure of Karnataka tourism.

Twitter: Sentimental Analysis of Tweets

Karnataka Tourism

Document size (characters) : 18,095
 Number of words in the document : 1,422

Attitude Group

Category	Value	Words	Highlighted words
POSITIVE VERY HIGH	100	42	accurate, adventure, amazing, amazingly, awesome, beautiful, beauty, calm, celebration, charmin...
NEGATIVE VERY LOW	0	3	black, cross, fear
STRONG VERY LOW	0	20	association, cause, drive, exclusive, experience, fort, government, growth, guarantee, head, he...
WEAK VERY LOW	0	2	light, mind
ACTIVE VERY LOW	0	31	activities, activity, adventure, association, care, cause, celebration, clean, connection, cros...
PASSIVE VERY LOW	0	16	calm, experience, fear, home, long, mind, observe, offer, place, project, quiet, reflection, se...

Table 2: Table showing details of sentimental analysis of Karnataka Tourism Twitter Hashtag



Figure 2: Figure showing sentimental analysis of Karnataka Tourism Twitter Hashtag

Interpretation:

The above analysis about tweets on Karnataka Tourism shows that there are very high positive words being discussed, which implies that the tourists are happy about tourism destinations, activities and infrastructure of Karnataka tourism.

Instagram: Instagram Sentimental Analysis

	July (04-07-2019 to 02-08-2-19)	Percentage	August (03-08-2019 to 03-09-2019)	Percentage
Positive	786	18.23	3837	61.93
Negative	18	0.42	46	0.74
Neutral	3508	81.35	2313	37.33
Total	4312	100	6196	100

Table 3: Table showing details of sentimental analysis of Karnataka Tourism Instagram post

The analysis of sentiments shows that in July, the percentage of Positive posts were 18.23% Negative posts were 0.42% and Neutral Posts were 81.35%. In August the percentage of Positive posts were 61.93% Negative posts were 0.74% and Neutral Posts were 37.33%. So, compared to July in August positive posts have increased to a greater extent for Karnataka Tourism.

4. Conclusion

The attitude of the individuals was positive, strong, active, and passive in most cases whereas there are few cases where attitude is negative, weak which presents a serious scenario for those cases. So those need to be addressed by the respective authorities.

Karnataka Tourism fan page shows that there are very high positive words being discussed, which implies that the tourists are happy about tourism destinations, activities and infrastructure of Karnataka tourism. Tweets on Karnataka Tourism shows that there are very high positive words being discussed which implies that the tourists are happy about tourism destinations, activities and infrastructure of Karnataka tourism. Based on the Instagram analysis we can say that compared to July in August, there is a greater positive sentiment in the Instagram Posts. There are several words repeat over a while in the posts to make the discussion lively in Instagram. Karnataka Tourism should maintain the same level of the image with tourists and also need to keep them happy for a longer period.

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