

The East Nusa Tenggara Resort Online Reviews Content Analysis. TripAdvisor Dataset for the Period 2019.

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Abstract

Despite the fact that TripAdvisor online reviews are an unstructured data source that might help with decision-making in travel and hospitality, there is a dearth of studies evaluating the data. This study examined the internet reviews data from a hotel in East Nusa Tenggara, Indonesia, during the year 2019 to see what insights might be found within the dataset. The approach begins with a content analysis of word frequency and phrase frequency, followed by an exploratory factor analysis to reveal the Aaker brand personality from the online review dataset. The research findings show that the hotel has five brand personality dimensions, namely sincerity, sophistication, excitement, ruggedness, and competence. The sincerity dimension is the dominant dimension, it is relevant with the word and phrase content analysis exposed. The most commonly used terms and phrases are about the performance of the employees. More research in the tourist and hospitality industries is required to enhance the process of utilizing the unstructured TripAdvisor online reviews dataset.

Keywords: TripAdvisor, Online Reviews, Content Analysis, Big Data, East Nusa Tenggara

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I. Introduction

Technology enables any business to create its own brand marketing communication channels via websites, social media, and the delivery of remarks that anyone may write and read online. The term produced content refers to the many remarks, images, and sounds that are supplied in the internet ecosystem. For example, remarks, images, and audio submitted by internet users are examples of user-generated content, whereas content supplied by a company is referred to as firm / brand-generated content [1].

The remarks studied in this study were those of TripAdvisor users. Voluntary users provide feedback on their resort experiences. Thus, user-generated material differs from surveying impressions using scripted questions. [2].

Reviews on TripAdvisor are unstructured data [3]. Reviews can only discuss the resort's characteristics or amenities that the user wishes to express, but the survey's questions are all the same. It tells the difference between organized and unstructured data[4][2].

What is presented within TripAdvisor for unstructured data is also based on user preferences. As a result, there are user preference weights in every review, and it is these preferences that are used. They are critical for marketers and researchers to comprehend [5].

Among the numerous offers of rivals, each entity must develop excellence and construct a relevant brand to what the target is about. As a result, knowing what customers are delivering and developing brands that are responsive to consumer requirements are critical to winning the present competition [2].

II. Review Literature

The research focuses on the use of unstructured datasets and exploratory factor analysis of brand personality.

2.1 Unstructured data

Unstructured data is data with little organization that can be analyzed as a unit. Data units with specified data points comprise structured data [6][3]. The survey questionnaire is an example of structured data derived from a structured query. TripAdvisor online reviews are an example of an unstructured dataset with a wide range of data points.

2.2 Brand Personality

The brand personality consists of sincerity, sophistication, excitement, competence, and ruggedness. [7][8]. Sincerity is a metric that demonstrates how well services are delivered to customers. The level of excitement is related to the novelty of the event. The sophistication component is related to the resort's exceptional experience. The competence dimension is concerned with the delivery of services. The dimension of ruggedness is related to the natural experience.

III. Research Method

This is a qualitative study that makes use of non-structural data gathered from TripAdvisor (Table 1). The first step is to tabulate each word frequency from the dataset. The other method is to keep track of how frequently the term is used [9][10][11][12]. The final step is to classify the words in the dataset according to the brand personality component of SSERC (Sincerity, Sophistication, Excitement, Ruggedness, Competence) [13][8]. The findings of this SSRRC will indicate the brand's personality based on the perceptions stated in the TripAdvisor online reviews dataset [8].

Table 1. Research Method

Research Methodology	Exploratory study
Type of sampling	Nonstatistical sampling
Sample	2019 dataset
Data collection methods	Extraction from user-generated content
Information sources	TripAdvisor online platform
Key contributors	East Nusa Tenggara Hotel online reviews
Data analysis methods	Word frequency content analysis Phrase frequency content analysis Brand Personality exploratory factor analysis with Brand Personality Dictionary [14]
Study period	2019
Source	Based on [14][15]

IV. Results

4.1 Word frequency content analysis

The initial stage of analysis is frequency tabulation. Overall, the hotel review dataset contains numerous words with favorable emotion, as well as many reviews about the performance of the hotel's personnel. A good performance, providing satisfaction and impressing hotel guests (Table 2).

Table 2. Word Frequency

No	Words	Words Frequency	No	Words	Words Frequency
1	HOTEL	94	11	TOWN	39
2	STAFF	76	12	FOOD	38
3	BEACH	75	13	RESTAURANT	38
4	ROOM	69	14	ROOMS	34
5	NICE	56	15	AMP	32
6	GOOD	54	16		32
7	CLEAN	45	17		32
8	POOL	45	18	STAY	31
9	FRIENDLY	43	19	BAJO	30
10	STAYED	39	20	KOMODO	30

Further elaboration relates to the results from tabulating the frequency of words in the 2019 dataset show that the frequency of words occupying the Top-of-Mind position of the hotel for the observation period of January to December 2019 is "staff" with a frequency of 76. It shows that the service of the hotel impresses visitors.

Two other words that also have frequencies above 50 are "nice" with a frequency of 56 and "good" with a frequency of 54. Both words have a positive sentiment, so it can be estimated that the reviews submitted using these two words are part of the customer satisfaction review.

4.2 Phrase frequency content analysis

The phrase finder frequency is used to start the next analytical step. A phrase made up of two words that have the same meaning.

The findings show that the hotel is located in Labuan Bajo, famous for its tourist destinations, namely Komodo National Park, which must be visited. In addition, the hotel has shuttle service facilities that become the dominant attribute, so many of the visitors provide a positive response (Table 3).

Table 3. Phrase Frequency

No	Phrase	Phrase Frequency
1		32
2	LABUAN BAJO	23
3	FREE SHUTTLE	14
4	PRIVATE BEACH	9
5	FRIENDLY AND HELPFUL	8
6	SHUTTLE SERVICE	8
7	FRIENDLY STAFF	7
8		7
9	FRONT DESK	6
10	KOMODO NATIONAL PARK	6
11	ROOM WAS CLEAN	6
12	SWIMMING POOL	6

Phrases are two words that have a unified meaning. In the dataset, several phrases such as phrase with a frequency 14 show the service from the hotel for a "free shuttle" shuttle to a particular location or the phrase "shuttle service" with a frequency of 8, which still refers to the shuttle service. In addition, there is the phrase "friendly and helpful" with a frequency of 8, and the phrase "friendly staff" with a frequency of 7, which is a review of the performance of the hotel staff.

Another phrase related to staff performance is "room was clean", which amounts to 6 frequencies. It also shows that cleanroom conditions are a highlight for TripAdvisor reviews. Another phrase is "Komodo National Park", a favorite destination in Labuan Bajo, with a number of frequencies is 6. In addition, there is the phrase "swimming pool", with a frequency of 6, and the phrase "private beach", with a frequency of 9, which displays the facilities reviewed at the hotel.

The frequency of this phrase is still few, it is because the number of reviews analyzed is limited compare with other existing tourism destination. The hotel is located in Labuan Bajo, with a small number of datasets.

4.3 Brand Personality exploratory factor analysis

To begin the following analytical phase, the phrase finder frequency is employed. A phrase composed of two words with the same meaning. The third analysis process is tabulating the frequency for 5 brand personality dimensions, which are the sincerity, sophistication, excitement, ruggedness, and competence. The summary show that there were five dimensions of brand personality in this analysis case, namely sincerity, sophistication, excitement, ruggedness, competence. Sincerity dominates the majority dimension. The hotel obtained a dominant sincerity dimension in the 2019 dataset.

Table 4. Brand Personality Dimension Frequency

No	Dimension	Dimension Frequency
1	SINCERITY	172
2	SOPHISTICATION	57
3	EXCITEMENT	26
4	COMPETENCE	16
5	RUGGEDNESS	14

The many characters of this brand may be identified by studying the online reviews on TripAdvisor. The procedure of employing Provalis software may be accomplished by classifying the phrases that fit into each component of brand personality. The procedure of mapping the prominent dimensions of the hotel may be carried out with the help of Software Provalis' computational capabilities. (Table 4).

Sincerity

An example of this dimension is the case of (2) (TripAdvisor, Dec 2019), who conveyed that the staff were light-handed, "helpful", and always smiling "smiling". In addition, there is also the case (3) (TripAdvisor,

Dec 2019), who conveyed that his staff was friendly, with the keyword "friendly" and also light-handed helping visitors.

Furthermore, another review submitted by the case (3) (TripAdvisor, Dec 2019) is that the hotel provides a thick mattress and also clean, with the keyword "good". It is an excellent example of management in managing staff. Next up is a review of the case (4) (TripAdvisor, Dec 2019) that the restaurant serves excellent food "good".

Another example is the case of (TripAdvisor, Nov 2019), who said they were lucky "lucky" because the food provided was also accompanied by live music using traditional instruments. This sensation gives a positive sentiment for visitors when staying at the hotel.

In addition, there is also a review of the case (9) (TripAdvisor, Sep 2019) that conveys that the shuttle service (free shuttle) makes a trip to the city practical, with the keyword "practical".

Another example is the case of (10) (TripAdvisor, Aug 2019), who said that the hotel is the best hotel he visited so far. The bathroom was large with warm "warm" water, so she recommended this place to others.

Furthermore, the case of (16) (TripAdvisor, Jul 2019) conveys that the experience of staying at the hotel is pleasant, with the keyword "pleasant". He also said he would be happy to return to this place on his next visit.

Another example is the case of (23) (TripAdvisor, May 2019), who conveyed that the food provided is delicious with a large portion, with the keyword "generous". A review of the case (17) (TripAdvisor, Jul 2019) told me that the staff at this place are friendly, always smiling, "smiling", and always willing to help.

Furthermore, in the case of (28) (TripAdvisor, Jan 2019), (TripAdvisor, Jan 2019), and (TripAdvisor, Sep 2019) also delivered reviews using the word "friendly" or friendly to service provided by the staff of the hotel to in-house visitors.

Another example is the case of (TripAdvisor Jul 2019), who told me that some of the staff at the hotel were the friendliest he had ever met. They were always smiling broadly and sincerely "genuine", making visitors comfortable and relaxing.

Table 5. Sincerity Dimension Keyword in Context

Case number	Pre-Keyword Context	Keyword	Post-Keyword Context
2	Everything about this resort was fantastic. The room is clean and big and the bed is huge! I mean huge, in our room anyway. The first night my wife and I communicated by text because it's so big, the second morning after trekking over clean bedding and many minutes of searching I found her tucked away on the other side safe and comfortable. The restaurant is by the beach and has fantastic service and great food and priced right The beach is quiet and calm and the water is shallow for a for a long ways out, but the water is turned up and not clear. The staff is very	helpful	and always smiling and greeting you. If I ever come back, I will book here in an instant!

Sophistication

An example of this dimension is the case of (1) (TripAdvisor, Jan 2019), when she found a small but "charming" hotel with a green field. In addition, also conveyed by the case (13) (TripAdvisor, Jul 2019) that staff provide "excellent" service and also attract attention.

Another view-related review was delivered by (16) (TripAdvisor, Jul 2019), who said that the view from the pool and the view along the sea towards the island across the ocean was a "beautiful" view.

Another was conveyed by the case of (19) (TripAdvisor, Jun 2019), who delivered a review when his room was upgraded to an excellent villa suite and impressed him, with the keyword "stunning".

Another thing was conveyed by the case (13) (TripAdvisor, Jul 2019) who conveyed that the hotel has excellent staff and interesting "engaging" with very spacious rooms and a garden full of birds, so it is perfect.

Another review was submitted on the case of (22) (TripAdvisor, May 2019), which story that the hotel has more expensive hotel facilities, with the keyword "expensive" and cheap hotel costs.

Furthermore, another thing was conveyed by the case of (28) (TripAdvisor, Jan 2019), (32) (TripAdvisor, Jun 2019), and (40) (TripAdvisor Jul 2019). They are delivered a review using the word "beautiful" or beautiful for the atmosphere of the hotel environment and the beach at the hotel, which has a calm atmosphere and beautiful scenery.

Another example is the case of (71) (TripAdvisor, Jun 2019), who told me that she has a spacious bedroom with a large bed and elegant mosquito nets, with the keyword "elegant". The bathroom is also significant.

Excitement

An example of this dimension is conveyed by the case of (6) (TripAdvisor, Nov 2019), who stated that when they eat, accompanied by live music that uses new hits "new" and also old nostalgic songs. This novelty is what makes it fun and also memorable for visitors.

In addition, there is also a review of the case (11) (TripAdvisor, Aug 2019) that conveyed when they had breakfast obtained a fresh omelet "fresh" at the station. On the other hand, they also conveyed that the food is ordinary, but overall, it satisfies them. Another example of case (17) (TripAdvisor, Jul 2019) is the review of the Atlantis club, which is a comfortable "cool" place to sit by the pool.

In addition, some reviews are beyond expectations from visitors, such as the case (48) (TripAdvisor, Feb 2019) that when the restaurant is busy. There is also a performance of live music. He also sees and hears some tables and chairs move "moving" and plates that make a sound because it clashes with other plates. These voices did not meet his expectations.

Furthermore, in the case of (55) (TripAdvisor, Nov 2019), the story that the hotel is a very peaceful and clean, and colorful place. The pool area is very "cool" with a beautiful garden and large and clean rooms.

Another example was presented by the case of (66) (TripAdvisor, Jul 2019), who said that this place has a good location with clean, comfortable, beautiful conditions with a fabulous beach and swimming pool "awesome".

Furthermore, in the case of (62) (TripAdvisor, Aug 2019) and (65) (TripAdvisor, Jul 2019) also delivered reviews using the word "fresh" or fresh for the quality of the ingredients used for breakfast.

Ruggedness

An example of this dimension was conveyed by the case (34) (TripAdvisor, Dec 2019), which states that they are doing a "safari boat" that exceeds its expectations. In addition, there is also a case (47) (TripAdvisor, Feb 2019) that conveys they are enjoy sunset "sunset" on the beach as a whole according to the price paid.

Next, in the case of (54) (TripAdvisor, Dec 2019), (60) (TripAdvisor, Oct 2019), and (TripAdvisor, Jun 2019). They are also delivered reviews using the word "sunset" or sunset that can be enjoyed while at the hotel.

Competence

An example of this dimension can be seen from the case of (21) (TripAdvisor, May 2019), who said that the receptionist is friendly and also the communication skills are fluent "fluent" in English. It is an excellent appreciation for hotels in the new tourist area.

(TripAdvisor, Nov 2019) stated that restaurants that provide exceptional food "excellent" at prices are also appropriate. Another example is the case of (1) (TripAdvisor, Jan 2019), who told me that he found a charming little "charming" hotel located on green land, right next to the beach.

Furthermore, in the case of (19) (TripAdvisor, Jun 2019), who told me that the villa suite room is truly amazing "stunning" with a very comfortable bed. Other reviews, such as the case of (40) (TripAdvisor, Jul 2019) that convey that the garden at the hotel is beautiful, with the keyword "pretty".

V. Conclusion

Because the data processing is restricted, these findings consist of a tiny number of frequencies. However, we can observe that the approach employed is frequency tabulation for terms, tabulation, and classification. These five-dimensional keywords may also be used to a small dataset. The meaning acquired is also crucial to the research findings.

The results show that the two dimensions, sincerity and sophistication, still occupy the top position for analysis of various reviews on the hotel. From this result, sincerity has a much larger dimension in frequency than the other four dimensions. Sincerity with the number of frequencies 172 and sophistication 57, then we can see that the main thing delivered data review is the sincerity of staff in providing services to consumer.

Other dimensions are excitement, ruggedness, and competence. After the process for analysis of the first stage, it tabulates the frequency of the word, then tabulates the frequency of the phrase, and finally is the categorization that corresponds to the keyword personality of the brand.

However, the process of working with the dataset necessitates a quantitative approach in order to provide a weight to the dataset's main dimensions and groupings. Using a quantitative method, we can identify the aspects that currently have benefits and those that need to be maintained or enhanced. The following procedure of this study must also be examined on an annual basis to reflect the hotel's success.

In the phrase frequency tabulation in the dataset, some phrases display services from the hotel, such as shuttle service that consumers can use because it is a facility that the hotel provided. Another phrase is still related to the staff service at the hotel, where consumers review staff performance.

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An acknowledgement section may be presented after the conclusion, if desired.

References

- [1]. Hu, Y., et al., *Generating Business Intelligence Through Social Media Analytics: Measuring Brand Personality with Consumer-, Employee-, and Firm-Generated Content*. Journal of Management Information Systems, 2019. **36**(3): p. 893-930.
- [2]. Kietzmann, J. and L.F. Pitt, *Computerized content analysis of online data – opportunities for marketing scholars and practitioners*. European journal of marketing, 2020. **54**(3): p. 473-477.
- [3]. Balducci, B. and D. Marinova, *Unstructured data in marketing*. Journal of the Academy of Marketing Science, 2018. **46**(4): p. 557-590.
- [4]. Bruce, K.L., *Assessing Brand-Consumer Personality Congruence on Twitter: A Computational Textual Analysis Approach*. 2020, The University of Alabama.
- [5]. Seok, H., Y. Joo, and Y. Nam, *An Analysis of the Sustainable Tourism Value of Graffiti Tours through Social Media: Focusing on TripAdvisor Reviews of Graffiti Tours in Bogota, Colombia*. Sustainability, 2020. **12**(11): p. 4426.
- [6]. Blazquez, D. and J. Domenech, *Big Data sources and methods for social and economic analyses*. Technological forecasting & social change, 2018. **130**: p. 99-113.
- [7]. Neto, A.P., et al., *Discovering the sustainable hotel brand personality on TripAdvisor*. Journal of Hospitality and Tourism Technology, 2020.
- [8]. Provalis Research, P.R., *Brand personality dictionary*. 2019.
- [9]. Sechelski, A.N. and A.J. Onwuegbuzie, *A Call for Enhancing Saturation at the Qualitative Data Analysis Stage via the Use of Multiple Qualitative Data Analysis Approaches*. The Qualitative Report, 2019. **24**(4).
- [10]. Nugroho, A. and J. Sihite. *Market Driven Strategy & Employability Skills. An Exploratory Study @JOBSDBINDONESIA*. in *International conference on Management in Emerging Market*. 2017.
- [11]. Nugroho, A., *ASEAN tourism marketing communication attribute: An exploratory research at Goaseantv*. 2017.
- [12]. Nugroho, A. and J. Sihite, *Tweeting and retweeting tourism and airline service attributes*, in *Balancing Development and Sustainability in Tourism Destinations*. 2017, Springer. p. 341-351.
- [13]. Aaker, J.L., *Dimensions of brand personality*. Journal of marketing research, 1997. **34**(3): p. 347-356.
- [14]. Opoku, R., R. Abratt, and L. Pitt, *Communicating brand personality: Are the websites doing the talking for the top South African Business Schools?* Journal of Brand Management, 2006. **14**(1/2): p. 20-39.
- [15]. Fuentes-Medina, M.L., E. Hernández-Estárico, and S. Morini-Marrero, *Study of the critical success factors of emblematic hotels through the analysis of content of online opinions: The case of the Spanish Tourist Paradors*. European journal of management and business economics, 2018. **27**(1): p. 42-65.

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