

# Content Analysis of TripAdvisor Reviews on Restaurants: A Case Study of Macau

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## Abstract

This study explored a consumer rating and review website that reflects the dining experience in restaurants in Macau. English language online consumer reviews from TripAdvisor were selected and analysed by content analysis and taxonomy. Simple frequency counts on the number of positive, negative and neutral comments were performed. Empirical results showed that the overall customer satisfaction on the dining experience in Macau was positive. Interestingly, the expensive restaurants in Macau indicated a higher percentage of negative comments than the less expensive restaurants did. The content analysis revealed untapped stories and generally provided insights to service industry practitioners.

**Keywords:** restaurant; dining; TripAdvisor; Macau

## 1 Introduction

Tourism is an information-intensive industry (Doolin, Burgess, & Cooper, 2002). In the context of tourism and hospitality, the use of travel blogs, consumer rating and review sites have gained much attention from researchers in identifying the effects of this trend on the tourism business environment (Leung, Law, van Hoof, & Buhalis, 2013). The emergence of Web 2.0 that started the prevalence of user-generated content (UGC) has significantly changed the travel behaviours of people. Many individuals nowadays share their travel or dining experiences in rich and diversified contents (e.g., texts, photos and videos) on social media sites. As a consequence, an increasing number of people rely heavily on UGC for their travel plans (Ayeh, Au, & Law, 2013), which establishes a powerful and ever-growing customer knowledge base being shared among Internet users worldwide.

The objectives of this study are twofold. First, the study intends to provide an environmental scanning of electronic word-of-mouth (eWOM) for restaurants in Macau as a comprehensive 'health check', thereby providing a summary of the qualities that the restaurants possess and lack. Second, the findings will determine whether expensive restaurants generally perform a better job towards achieving customer satisfaction than inexpensive restaurants do.

## 2 Literature Review

Customers often look for information and advice from their interpersonal relationships and word-of-mouth (WOM) channels because one cannot easily evaluate

tourism-related products and services without engaging in first-hand experience (Litvin, Goldsmith, & Pan, 2008). The powers of social media and eWOM are tremendous (Stringam & Gerdes, 2010; Racherla, Connolly, & Christodoulidou, 2013). To maintain competitiveness in the market, firms in the tourism and hospitality industry should not disregard the influence of the 'WOM generating machine'. Big data can be characterised by one more V, in addition to the 3 Vs depicted by McAfee and Brynjolfsson (2012): volume, velocity, variety and veracity (Au, 2014). Veracity means a high degree of trustworthiness. Given that business firms have no control over UGC, not only should service providers monitor online discussions regarding an individual firm and its competitors, but must also promptly respond to customer complaints and/or address service failures for future encounters (He, Zha, & Li, 2013). For example, Casa Flamenco, an Australian restaurant, was forced to close in 2008 because of the inappropriate email response of the management to a criticism of a customer (Pantelidis, 2010). Therefore, hospitality service providers, including restaurateurs, should be aware of and understand the effects of eWOM.

The concept of servicescape can be applied to any hospitality firm, such as a hotel, casino, restaurant, retail shop and spa parlour, where customers spend their time and money for hedonic reasons. In this study, servicescape is viewed from a restaurant setting, representing physical or built environment (Bitner, 1992). Besides the spatial layout and the fixtures and fittings, other dimensions, such as interior decoration, temperature, light, air quality, noise, music, crowdedness and cleanliness, are used to assess the overall consumer experience in a servicescape (Bitner, 1992; Su, 2011). In TripAdvisor, the four existing dimensions used to rate restaurants are food, service, value and atmosphere.

Previous studies that examined eWOM of Macau as a tourist destination are scarce, particularly those relayed by English-language media (Choi, Lehto, & Morrison, 2007). Law and Cheung (2010) extracted the perceptions of users from their blogs about Hong Kong as a perceived travel destination. Previous studies that examined the consumer reviews of TripAdvisor on destinations and hotels were mostly from the academia (e.g., García-Barriocanal, Sicilia, & Korfiatis, 2010; Lee, Law, & Murphy, 2011). Neutral comments (e.g., neutral adjectives) were highly observed, but were not classified or reported in previous studies. Therefore, this study attempts to extract neutral comments, in addition to positive and negative ones, to identify trends and patterns in reviews.

### **3 Methodology**

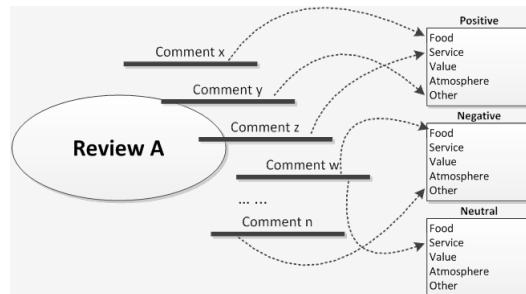
This study uses secondary data and follows a content analysis approach. Consumer reviews, both texts and photos, from TripAdvisor.com on restaurants in Macau are carefully examined. Given the big data and the four V characteristics to determine in the reviews, a cut-off date is set in obtaining a snapshot of the consumers' recommendations, as required by this empirical study. On 1 March 2014, a small sample was chosen: all TripAdvisor reviews on the restaurants in Macau were retrieved and grouped according to four price categories: (a) '\$'-priced: fast food or self-service, (b) '\$\$'-priced: casual or sit-down service, (c) '\$\$\$'-priced: formal dining and (d) '\$\$\$\$'-priced: most expensive or service for special occasions. All TripAdvisor reviews without price category were discarded. Several languages were

used in the reviews, such as English, Chinese, Japanese, Portuguese and Russian. Non-English reviews were excluded because the authors felt more comfortable in reading and writing English language reviews so as to avoid possible misinterpretation of the non-English ones.

**Table 1.** General guidelines for assigning a comment to a category for assessment

Attribute	Sub-attributes	Rationale
Food	Meals, snacks, wines, desserts, variety of choices, portion size, safety, temperature, smell	No comprehensive items can be adopted to suit all comments
Service	Attitude, efficiency, helpfulness, host-guest interaction	(King, 1995)
Value	Prices on food and wine, comparative prices, discounts and compliments	(Haemoon, 2000)
Atmosphere	Ambiance, interior decoration, view, lights, music, TV, spatial layout, surrounding environment, special events, performers	(Bitner, 1992; Su, 2011)
Other	Unclassified, miscellaneous	(Law & Cheung, 2010)

This study adopts the definition of a *review* as an unstructured, but complete text distributed into a series of complete sentences called *comments* by individual online reviewers. A full stop is ‘a point that marks the end of a sentence...’ (‘Full stop’, 2007). Therefore, individual comments are evident regardless of the lengths of the paragraphs. Each comment can be categorised as positive, negative and/or neutral. Each comment can be assigned to one or more categories with a specific attribute. Neutral adjectives or descriptions are often associated with the fact that consumers may not have a strong feeling towards a particular item being evaluated (Law & Cheung, 2010). Therefore, this study applies the definition of ‘neutrality’ from Law and Cheung (2010). A ‘+1’ is numerically assigned to a specific attribute (see Table 1) of a category (i.e. positive, negative, or neutral) whenever the textual meaning of a sentence fits the category and the attribute, as illustrated in Figure 1.



**Fig. 1.** Taxonomy of consumer comments

## 4 Findings and Discussions

614 online reviews from 22 restaurants were analysed following the taxonomic review process in Figure 1 and the guidelines in Table 1. Both frequency counts and percentages are shown for clarity. The collected data represented the recent and relevant consumer recommendations for restaurants in Macau. The shortened version of the summary is listed in Table 2.

**Table 2.** Shortened version of summary of simple frequency counts

Categories	Positive Comments		Negative Comments		Neutral Comments	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
\$	208	82%	31	12%	16	6%
\$\$	652	75%	58%	7%	161	18%
\$\$\$	390	82%	35	7%	51	11%
\$\$\$\$	580	69%	119	14%	141	17%

## 5 Conclusion

This empirical study found that expensive restaurants in Macau did not yield high customer satisfaction. Small cafés in Macau, however, were evaluated remarkably on customer satisfaction and retained more customers. Product quality, uniqueness and the knowledgeable, passionate and amicable qualities of the restaurateur are keys to success in the competitive market. Moreover, with a few restaurant owners in Macau publicly acknowledging and responding to TripAdvisor reviews, whether positive or negative reviews, this observation verifies that many restaurateurs in Macau are not fully aware of eWOM effects.

Despite the high living costs in Macau, good restaurants with good value for money can still be found there, which is great news for value-savvy customers. High-end restaurants do not readily yield high customer satisfaction because well-travelled customers are already exposed to diverse food qualities and prices offered from other places in the world, which become their bases for comparison.

The review process is manual and mechanical. Future studies may explore the use of a computer program to parse massive online consumer reviews in an efficient manner. This automatic text parsing capability can convert a small-scale research project to a full-scale one. Human counting errors may have occurred during the review process. Moreover, the interpretations of some sentences may have been highly subjective, resulting in the difficulty in distinguishing between positive and neutral or between negative and neutral. In addition, non-English reviews were excluded. TripAdvisor reviews in Asian languages, such as Chinese, Korean and Japanese, can potentially provide more useful insights to the overall analysis.

In the future, online English comments on Chinese cuisine restaurants in Macau can be included for a more comprehensive study. For further studies related to social

media and Macau, two related areas can be explored, namely, (a) the perceived destination image of Macau as revealed by TripAdvisor and (b) content analysis on user-generated photographs and videos of Macau.

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