Sentiment Analysis of Brand Personality Positioning Through Text Mining

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ABSTRACT
This article uses text mining and a Chinese word segmentation program developed by the Chinese Knowledge and Information Processing Group in Taiwan’s Academia Sinica to analyze Facebook posts from 14 e-commerce companies. In addition, a list of keywords representing brand personalities is analyzed to reveal key factors affecting which social media posts attract consumers’ attention. This research uses statistical analysis with a nonmanual questionnaire that is efficient and based on computer science to provide a reference for businesses operating Facebook fan pages and internet marketing.

KEYWORDS
Brand Personality Positioning, Sentiment Analysis, Social Media Marketing, Text Mining

INTRODUCTION
As internet and social media develops, the usage of smart mobile devices increases, the users of internet increases while the user's age bracket decreases. The popularity of Social Networking Site and Instant Messaging lead many business companies to interact and promote its products to consumers via Facebook, Twitter and other social networking sites, sometimes on instant messaging apps such as Line, QQ and WeChat. In the “2013 Taiwan’s Internet User Shopping Behavior Analysis” by Market Intelligence & Consulting Institute (MIC) points out that in the category “Which way to buy needed products,” “Browse social network sites” takes up 30.1%, which is the second highest in all option. The fan pages in social networking sites always takes up 18.1%. From this statistic analysis, it’s clear that the information in social networking sites cannot just only raise Taiwan’s internet user’s shopping desire, it is also a main source when it comes to comparing products.

According to “Facebook Taiwan Consumer Online Behavior Questionnaire,” a research that Facebook commissioned Kantar TNS to conduct points out the fact that Facebook is the most used social network site by Taiwanese people. Consumers, especially students and young professionals spends more time on Facebook than any other websites, TV and printed media. Facebook has a huge influence on Taiwanese consumer, 50% of Facebook Taiwan consumer searched, bought or

DOI: 10.4018/JITR.2019070106

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sold products on Facebook, 22% of Taiwanese that used Facebook will buy the product after getting recommendations from friends. The sales conversion rate is double the 12% of self-search. From this report, it’s not hard to realize that Facebook is not just a simple social networking site, but a battleground of business marketing. How to promote and popularize product and corporate identity through Facebook become a something that all business corporate must think about.

This research hopes to use text mining as the main technique, with the data from “Taiwan’s Top 10 Online Shopping Sites With The Most Product” provided by EZprice in July 2014, the Facebook fan pages of 10 shopping sites “PChome Online Shopping,” “Momo Shop,” “Yahoo Shopping Center,” “UDN Buy,” “Go Happy Shopping Site,” “PayEasy Women Shop,” “ETMall,” “U-Mall,” “7net Online Shopping,” “ASAP Flash Online Shopping” as the research objective, using fan page posts from the day the fan page was created until 2016 as the field of research. Through the list of vocabularies that represent brand personality positioning organized from papers and documents, also by calculating the brand personality positioning emotion score, the result can be used in corporate’s Facebook fan pages as reference when it comes to marketing and brand market position.

**LITERATURE REVIEW**

**Brand Personality Positioning**

Aaker (1997) believes that “Brand Personality Positioning” is the related attribute when business corporates are building product images and consumer’s impression, so it is important to understand how consumer feels toward the brand personality positioning. He divides brand personality positioning into five core dimensions: Sincerity, Excitement, Competence, Sophistication, and Ruggedness. These five core dimensions then includes 15 facets and 42 traits. Table 1 shows the brand personality positioning scale.

Building brand personality positioning can bring both the consumer and business itself uniqueness, which brings a lot of benefits, this has led to many scholars to start researching and study brand personality positioning. For businesses, Traci and Lukas (2005) proved with evidence that the hardest part of building a successful brand personality positioning is the diversification. A unique and powerful brand personality positioning can bring the brand a special and outstanding brand positioning. Plummer (2000) believes that Brand Personality Profiles and Brand Personality Statement can represent Brand

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Classification</th>
<th>Traits</th>
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<tbody>
<tr>
<td>Excitement</td>
<td>1. Daring, 2. Spirited, 3. Imaginative, 4. Up-to-Date</td>
<td>Daring, Trendy, Exciting, Spirited, Cool, Young, Imaginative, Unique, Up-to date, independent, Contemporary</td>
</tr>
<tr>
<td>Sophistication</td>
<td>1. Upper Class, 2. Charming</td>
<td>Upper Class, Glamorous, Good Looking, Charming, Feminine, Smooth</td>
</tr>
<tr>
<td>Ruggedness</td>
<td>1. Outdoorsy, 2. Tough</td>
<td>Outdoorsy, Masculine, Western, Tough, Rugged</td>
</tr>
</tbody>
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On the Use of Intelligent Systems for the Modelling of Financial Literacy Parameters
www.igi-global.com/article/use-intelligent-systems-modelling-financial/37407?camid=4v1a