Social Media Analytics for Chinese Professional Baseball League Fans: The Effect of Media Characteristics on Fan Engagement

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Introduction and Literature Review

Social media use is a global phenomenon, with 2.46 billion users worldwide in 2017 (The Statistic Portal, 2017). Social media provide sports fans with first-hand news and opportunities to contribute their own content (Butler, 2013), which can be divided into diverse features. We identify media characteristics as vividness and interactivity based upon the online advertising theoretical perspective which posits these characteristics as the main antecedents of consumer engagement (Ashley & Tuten, 2015). Vividness is the use of different ways to stimulate the senses, can be distinguished by the richness of sensory stimuli (Coyle & Thorson, 2001), and can lead to more positive attitudes toward the brand post (de Vries et al., 2012). From low to high levels, it includes text, pictures, Graphics Interchange Format (GIF), and video. Interactivity is defined as "the degree to which two or more communication parties can act on each other, on the communication medium, and on the messages and the degree to which such influences are synchronized" (Liu & Shrum 2002, p. 54). From low to high levels, it includes statements, links to a new page, and encouraging fans to take actions (de Vries et al., 2012). We use quantity and ratio to measure fans' engagement. Many scholars have studied engagement issues in social media use (Cvijikj & Michahelles, 2013), confirming that different message characteristics can influence the effectiveness of brand posts. This paper will examine (a) how different media characteristics affect fans' engagement on Facebook, and (b) what content fans engage with on Facebook in professional sport contexts.

Method

The participants are fans of two Taiwanese professional baseball teams. The data were retrieved from March 6, 2017. R studio was utilized to collect data from the Lamigo Monkeys and Fubon Guardians Facebook pages to ensure that all coders were analyzing the same dataset. Three types of fan engagement behaviors were measured: numbers of likes, comments, and shares (de Vries et al., 2012). The like, comment, and share rates can be calculated by the number of engagement behaviors divided by the number of fans (Cvijikj & Michahelles, 2013). Vividness from low to high includes photos and videos (de Vries et al., 2012). Interactivity from low to high includes statements and links (de Vries et al., 2012). Release time and group name are two control variables. Multiple regression was used to examine the effect between media characteristics and fan engagement. Content analysis was employed as the methodological approach. The Kappa statistics analysis method was adopted to evaluate the inter-coder consistency. Disagreements were resolved through consensus. If the Kappa coefficient is larger than 0.8, the two systems are highly consistent (Watson & Petrie, 2010). Online information is constantly updated and removed. Thus, we targeted posts published between January 1 and December 31, 2017.

Results

A total of 924 posts were collected from 9,448 members of the Lamigo Monkeys' group and 3,879 posts from 17,469 members of the Fubon Guardians' group. The largest number of posts was published in March in both groups when the World Baseball Classic was held. The

two groups had a lower utilization of Facebook during December to February. Lamigo Monkeys' fans utilized photos the most in their posts (42.80%), followed by links (28.93%), while Fubon Guardians' fans posted links the most (54.79%) then photos (21.61%). Status and videos were used the least by both groups. Post characteristics and content were analyzed over the time periods selected based on the professional league's schedule: Pre-Games (i.e., January & February), Games (i.e., March to October) and Post Games (i.e., November & December). Links are the predominate communication type used in the Pre-Games and Post Games periods for both fan groups, whereas Lamigo Monkeys' fans utilized photos and Fubon Guardians' fans utilized links the most during Games. The findings further indicated that the post content was related to competition (i.e., World Baseball Classic, Taiwan Series, Asia Professional Baseball Championship) during the Games periods. During the Pre-Games and Post Games periods, the most frequently discussed issue was star players. (*Further results are unavailable at the time of abstract submission. We guarantee that the results will be presented at the conference.*)

Contributions

This study provides comprehensive understanding of the message characteristics of different behaviors using different measures. Initial results reveal differences between types of fan engagement and index employed (quantity vs. rate). This research offers insights into the types of content that sport brands might employ to achieve greater engagement levels and adherence. From a theoretical standpoint, this study extends previous advertising theoretical perspectives from convenience stores' branding models by using content analysis to better understand the topics and themes of vividness and interactivity within each time period of professional team sport contexts. Our research provides valuable and directly applicable implications for professional sport teams' social media marketing activities.

References

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