

Are Social Media Useful for Managing Reputation Online?: Comparing User Interactions Online with Reputation Indicators

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Abstract. Reputation is a growing concern to all organizations, regardless of their size or industry. Recently, social networking sites (SNS) such as Facebook have become effective and efficient channels for an organization to build relationships with various publics, which is fundamental for reputation management. Applying the dialogic communication theory and the halo effect, the present study seeks to explore whether there is a significant relationship between a company's reputation and the level of interaction on the respective company's Facebook page (measured by the number of page 'likes', number of wall comments and commented comments by both the companies and users). This study used a social network analysis tool called NodeXL to gather data on Facebook. Results from the present study provide practical implications regarding online reputation management for organizations.

Keywords: Reputation management · Social networking sites (SNS) · Facebook · Halo effect · Dialogic communication

1 Introduction

Reputation is a growing concern to all organizations, regardless of their size or industry, possibly due to its direct, positive relationship with revenue [1]. Doorley and Garcia [2] defined an organization's reputation as "the sum of how its stakeholders view it" [2, p. 381] and one that can and should be managed by organizations [2]. Moreover, it is the sum of images, composed of several elements: performance, behavior, communication and authenticity factor [2]; the present study examined the communication aspect, more specifically online communication.

Publics perceive a company's reputation based on the information provided by the company itself, media or from other sources [3]. And today, social media function as channels that allow organizations to communicate with different publics in novel ways that were impossible in the past [2]. Thus, social networking sites (SNS), such as Facebook, can be used as effective and efficient channels for an organization to build relationships with various publics, which is greatly important for reputation management. In fact, it is one of the most common ways that organizations reach their target audiences today. In 2014, of the Fortune 500 companies, 413 companies had Twitter accounts and

401 companies had Facebook pages, which equal 83 % and 80 %, respectively [4]. Compared to the previous year findings, this was a 6 % and 10 % increase, respectively [4]. In addition, according to Facebook, 30 million small businesses had active Facebook pages in 2014 [5].

Therefore, the present study thoroughly examined the relationship between a company's reputation and the respective company's presence on social media, specifically Facebook.

2 Literature Review

2.1 Dialogic Communication

A dialogue is defined as “a product of an on going communication and relationships” [6, p. 24]. Subsequently, dialogic communication is a “negotiated exchange” of information [7, p. 325]. In addition, Kent and Taylor [7] argued that through the web, public relationships can be built and altered.

Applying the dialogic communication theory, Kim, Kim and Nam [8] conducted a study on how organizations used the four different social networking sites (SNSs) – Facebook, Twitter, YouTube and LinkedIn – for communicating online with their publics. The organizations were analyzed based on the industry type [8]. By examining various Facebook features, including, but not limited to, the number of page ‘likes’ (number of fans), the number of wall comments per posting by companies, the number of wall comments per posting made by fans, as well as the number of responses from both parties, researchers were able to measure the level of interaction between the organization and the public [8]. One of the key findings from the study is that Twitter and Facebook were the most widely used social networking sites, of which Facebook was the most used platform for dialogic interaction between the organization and the public [8].

2.2 Reputation Management and Social Media

There has been a plethora of studies on reputation management and social media, of which the majority focuses on online reputation management – how organizations and individuals should manage their reputation in an online environment (i.e. search engines, blogs, Facebook, Twitter, etc.). The emphasis is placed more on the privacy and how others search one's name, whether it be an individual or organization. On the other hand, Barnes, Cass, Getgood, Gillin and Goosieaux [9] studied how customer care on social media influences the brand reputation; however, the study did not analyze the different features of Facebook, such as the ‘like’ button and the number of comments on wall posts, to explain the connection with the organization's reputation.

In another study, Schultz, Utz, and Göritz [10] examined whether crisis communication strategies, both message and medium (traditional and social media), influenced the receiver's perception of organizational reputation, secondary crisis communication and secondary crisis reactions. Twitter and blog were used for online media [10]. One of the main findings of the study is that the medium was more important than the message itself [10]. For example, Twitter led to “the most positive effect on secondary crisis

communication and reactions” [10, p. 26]. The results highlight the significance of social media effect on crisis communication, as well as on the perception of organizational reputation.

According to the ENGAGEMENTdb report [11], “the most valuable brands in the world are experiencing a direct correlation between top financial performance and deep social media engagement” [11, p. 1]. This finding implies that social media engagement can lead to improved reputation or vice versa, which is in line with Schultz et al.’s [10] research findings. Therefore, the following hypotheses have been formulated:

Hypothesis 1: A company’s reputation is positively correlated with the frequency of dialogic communication.

Hypothesis 1a: A company’s reputation is positively correlated with the number of wall comments by both companies and users.

Hypothesis 1b: A company’s reputation is positively correlated with the number of commented comments (responses) by both companies and users. Hypothesis 1c: A company’s reputation is positively correlated with the online interaction index.

2.3 Facebook ‘Like’ Button

On Facebook, there are various features used for engagement and interaction, one of which is the ‘like’ button; it has been utilized in copious studies for gauging various attributes. Researchers have scrutinized the motivation and implications of Facebook users’ ‘liking’ a page.

Bushelow [12] explored Facebook fan pages and studied whether there is a causal relationship between the act of ‘liking’ a Facebook page and the users’ brand loyalty and purchase intentions. The study’s results showed that the ‘likes’ and activities on the Facebook page were not robust signs of the users’ brand loyalty or purchase intentions [12].

In another study, Wallace, Buil and de Chernatony [13] examined whether social media has an effect on the interaction between the organization and consumers, as well as the relationship between Facebook features, such as the ‘like’ button, and consumers’ brand advocacy. The researchers argued that “consumers who ‘Like’ brands on Facebook do so partly to express themselves” [13, p. 133]. In some sense, the ‘liked’ brand “becomes part of the consumers’ online identity, as it is visible on their profile page” [13, p. 130]. One of the key findings of the study is that consumers with strong social ties tend to ‘like’ self-expressive brands [13].

Despite countless studies regarding the Facebook ‘like’ button, the direct association between Facebook page ‘likes’ and an organization’s reputation has not been explored thoroughly. Furthermore, reputation is fairly difficult to quantify. As of February 2015, there are only a few rankings dealing with organizations, such as Reputation Institute’s *Global RepTrak* and Fortune Magazine’s *World’s Most Admired Companies* list. Therefore, the following hypothesis was derived.

Hypothesis 2: A company's reputation is positively correlated with the number of Facebook page 'likes'.

2.4 Halo Effect

Another important aspect to consider when analyzing various Facebook features, such as the 'like' button and comments, is whether the public's preconception of an organization has a significant influence. This can be explained by the psychological phenomenon called the halo effect, which was first coined by Thorndike [14]. It is defined as "a problem that arises in data collection when there is carry-over from one judgment to another" [14, p. 25]. In other words, people make biased judgments about a subject based on their attitudes towards a few specific attributes [14]. This phenomenon can also come into effect in image building and reputation. As Reynolds [15] states, brand images are made by consumers. Thus, consumers can reach to a certain conclusion about a product or brand image from a limited amount of information that they are familiar with [15]. According to Reynolds [15], "an image produced by halo looks like a real image and may function like one" [15, p. 72].

2.5 Halo Effect and Reputation

The halo effect has been studied in a wide range of fields, even in an online setting. Several studies have examined the halo effect of customer satisfaction in e-commerce [16], as well as its presence relating to the level of attractiveness on online dating websites [17].

There has also been previous research on the relationship between reputation and the halo effect. Coombs and Holladay [18] conducted a study on the halo effect and its influence on the organization's reputation during crisis situations. According to the results, the halo effect of prior reputation protects organizations in the face of crisis [18]. However, the study did not cover the online environment.

As it can be implied from the aforementioned studies, there has been sufficient research on the relationship between reputation and social networking sites, as well as that of halo effect and reputation, yet there has not been a particular study on all three elements – the influence of the halo effect on organizational reputation on social media such as Facebook. Thus, the following research question has been derived:

Research Question 1: Is the halo effect of organizational reputation present on Facebook?

In an attempt to fill some of the aforementioned research gaps regarding the direct association between reputation and social networking sites, the purpose of the present study is to examine whether there is a significant relationship between an organization's reputation and the level of presence and interaction on the respective organization's Facebook page (measured by the number of page 'likes', number of company's wall comments, the number of users' wall comments, as well as the number of responses (commented comments) from both parties), based on the dialogic communication theory and the halo effect.

3 Method

The sample of the present study was collected from the 2014 rankings of Fortune Magazine's "World's Most Admired Companies" [19] and Reputation Institute's "Global RepTrak" [20]. Of the companies that were co-listed, their rankings were averaged to obtain the top 10 companies with best reputations. The sample of the study consists of the following companies in the respective ranking order: Google (#1), Apple (#2), Walt Disney (#2), BMW (#3), Amazon.com (#4), Samsung Electronics (#5), Nike (#6), Microsoft (#7), Johnson & Johnson (#8) and Nestle (#9).

The Facebook pages of the abovementioned ten companies were scrutinized. As outlined in Kim et al.'s [8] study, the number of page 'likes' (number of fans), the number of company's wall comments, the number of users' wall comments, the number of company's commented comments (responses) and the number of users' commented comments (responses) were measured to determine the level of interactivity.

Each organization's official Facebook page that has interaction with users was visited to record the number of page 'likes' on February 1, 2015. In order to collect data on other elements, social network analysis software NodeXL was used. The time period of the analysis was set to March 1 to March 31 of 2014, since "World's Most Admired Companies" list was released in February, and the Global RepTrak ranking in April. The number of wall comments and commented comments by both companies and users were recorded by sorting through 'commented post' and 'commented comment' relationships on NodeXL. Applying the equation employed by Kim et al. [8], the interaction index (the level of company's direct involvement in communication) was calculated by dividing the number of company's commented comments by the number of user's wall comments.

4 Results

Google. Google had a total of 19,357,176 Facebook page 'likes', 0 company's wall comments, 1,127 user's wall comments, 0 company's commented comments and 0 user's commented comments. Google's interaction index equaled 0.

Apple. Apple had a total of 605,623 Facebook page 'likes', 0 company's wall comments, 744 user's wall comments, 0 company's commented comments and 14 user's commented comments. Apple's interaction index equaled 0.

Walt Disney. Walt Disney had a total of 50,320,343 Facebook page 'likes', 0 company's wall comments, 2,624 user's wall comments, 0 company's commented comments and 0 user's commented comments. Walt Disney's interaction index equaled 0.

BMW. BMW had a total of 19,590,942 Facebook page 'likes', 6 company's wall comments, 1,144 user's wall comments, 0 company's commented comments and 268 user's commented comments. BMW's interaction index equaled 0.

Amazon.com. Amazon.com had a total of 26,186,147 Facebook page ‘likes’, 26 company’s wall comments, 4,482 user’s wall comments, 25 company’s commented comments and 359 user’s commented comments. Amazon.com’s interaction index equaled 0.006.

Samsung Electronics. Samsung Electronics had a total of 789,383 Facebook page ‘likes’, 2 company’s wall comments, 1,585 user’s wall comments, 7 company’s commented comments and 9 user’s commented comments. Samsung Electronics’ interaction index equaled 0.004.

Nike. Nike had a total of 22,834,501 Facebook page ‘likes’, 0 company’s wall comments, 124 user’s wall comments, 0 company’s commented comments and 0 user’s commented comments. Nike’s interaction index equaled 0.

Microsoft. Microsoft had a total of 6,335,813 Facebook page ‘likes’, 59 company’s wall comments, 1,398 user’s wall comments, 64 company’s commented comments and 290 user’s commented comments. Microsoft’s interaction index equaled 0.046.

Johnson & Johnson. Johnson & Johnson had a total of 663,232 Facebook page ‘likes’, 2 company’s wall comments, 202 user’s wall comments, 2 company’s commented comments and 2 user’s commented comments. Johnson & Johnson’s interaction index equaled 0.010.

Nestle. Nestle had a total of 7,406,235 Facebook page ‘likes’, 1 company’s wall comment, 38 user’s wall comments, 1 company’s commented comment and 3 user’s commented comments. Nestle’s interaction index equaled 0.026.

Table 1. Summary of Facebook Data. Key: CWC: company’s wall comments; UWC: user’s wall comments; CCC: company’s commented comments; UCC: user’s commented comments; CCC/UWC: company and user interaction index;

Ranking	Company	CWC	UWC	CCC	UCC	CCC/UWC
1	Google	0	1127	0	0	0.000
2	Apple	0	744	0	14	0.000
2	Walt Disney	0	2624	0	0	0.000
3	BMW	6	1144	0	268	0.000
4	Amazon.com	26	4482	25	359	0.006
5	Samsung Electronics	2	1585	7	9	0.004
6	Nike	0	124	0	0	0.000
7	Microsoft	59	1398	64	290	0.046
8	Johnson & Johnson	2	202	2	2	0.010
9	Nestle	1	38	1	3	0.026

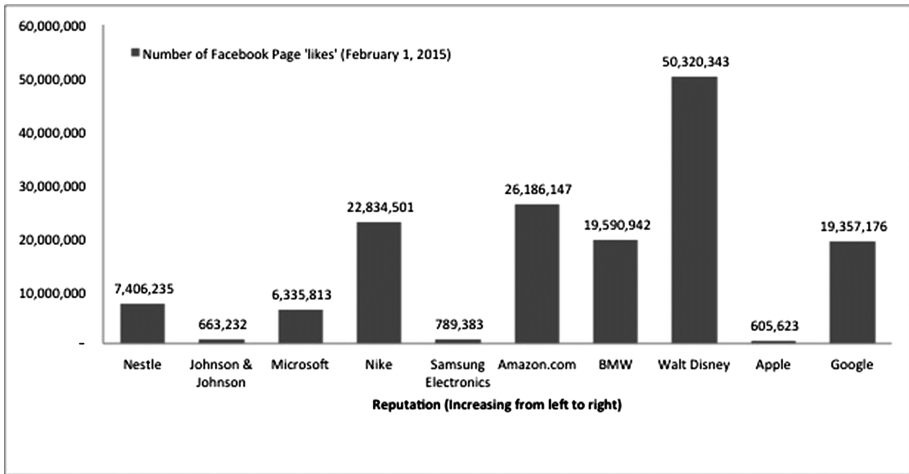


Fig. 1. Relationship between reputation and the number of Facebook page ‘likes’

Please refer to Table 1 for the summary of Facebook data. Overall, hypothesis 1 was not supported, while hypothesis 2 was partially supported. Please refer to Fig. 1 for the summary of the Facebook page ‘likes’.

5 Discussion

The present study examined whether social media is helpful for managing reputation online; in other words, it studied whether there is a significant relationship between a company’s reputation and the level of company’s direct interaction with users online, such as on its official Facebook page. The study’s main findings have several implications.

First, the results suggest that the upper half of the top-tier reputation companies are engaged in less interaction than those in the lower half, since four out of five companies in the upper half of the reputation ranking did not engage in any dialogic communication with the users, whereas only one out of five companies in the lower half of the reputation ranking had an interaction index that equaled 0. In fact, the company with the highest interaction index was Microsoft, which was in the lower half. Second, the fact that the lower half of the top-tier has a higher interaction index indicates the efforts of the lower half of the top-tier reputation companies’ to further improve their reputation by more actively engaging in conversations with their publics. At last, based on the present study’s findings, there was no direct positive correlation between the number of Facebook page ‘likes’ and the company’s reputation level, implying that the halo effect may not necessarily exist on social media.

6 Limitations and Future Research

There were several limitations to the present study. First, the organization's official Facebook pages were examined, thus leaving out other affiliated branches, which may result in a higher number of page 'likes'. Second, since the collected data represent only a 1-month period, it is just a snapshot of the company's overall online interaction with users on Facebook. Third, regarding the Facebook 'like' button feature, a survey on the motivation of 'liking' a company's Facebook page should be conducted in order to assess whether it is an adequate indicator of Facebook users' motivations towards the company's reputation.

At last, since communication is just one aspect of many other components that influence a company's reputation, it may be difficult to generalize the implications to the overall reputation. Furthermore, since dialogic communication is based on both frequency and content. The present study focused only on frequency. Thus, for future studies, it is recommended that researchers conduct a semantic network analysis to examine the content as well. Furthermore, other major social media platforms, such as Twitter and Instagram, should be analyzed concurrently to gather a more comprehensive data on online dialogic communication and its relations to the company's reputation.

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