

**Corporate Twitter Channels:  
The Impact of Engagement and Informedness on Corporate Reputation**

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**ABSTRACT**

This article examines firm communication on a corporate Twitter channel and its effects on corporate reputation. We identify the importance of user engagement and informedness in explaining corporate reputation, and examine three design factors that likely affect user engagement in a corporate Twitter channel. We conduct an exploratory  $2 \times 2 \times 2$  experiment among Twitter users to collect data. We find that the depth of the relationship among users, the level of corporate involvement, and the purpose of the channel interactively influence user engagement. Our findings suggest that deeper relationships among users of a corporate Twitter channel lead to higher user engagement when the level of corporate involvement with the channel is high and when the channel has a specific purpose, but not when the level of corporate involvement is high and the channel has a generic purpose. Surprisingly, when the channel has a generic purpose, a high degree of corporate involvement actually decreases user engagement. This finding implies that, under certain circumstances, a lower degree of corporate involvement in a social media channel may be more desirable. We also find that channel credibility positively influences user informedness. This is the first study that examines the dynamics of communication through a corporate Twitter channel. It contributes to the previous research related to social media by identifying engagement and informedness as two major factors that influence firms' reputation. Our research can help marketing and social media managers to decide on channel design aspects such as whether to require users to register with an identity or to allow anonymous participation, whether to allocate dedicated employees to respond to user requests, and whether to set up different channels for different purposes.

**KEYWORDS:** corporate reputation, credibility, engagement, experiment, informedness, social influence, social media, Twitter.

## INTRODUCTION

Companies are actively engaging their online users by creating firm-specific social media communities such as Facebook fan pages, corporate Twitter channels, or YouTube channels, creating a whole new dimension of interactions. Firms such as coffee chain Starbucks, travel organizations JetBlue and KLM, and retailer Dell are actively experimenting on Twitter by opening up innovation platforms, by moving their service desk online, and by offering sales through a special Twitter outlet channel [19, 22]. Companies are so involved in social media because this new form of electronic word-of-mouth is approximately 20 times more effective than marketing events and 30 times more effective than media appearances [49].

Organizations acknowledge the importance of using social media, but often do not fully understand how their activities on social media platforms affect their corporate image and reputation [19, 38]. This study focuses on Twitter, a typical social media platform, and examines firm communications in a corporate Twitter channel. Twitter is a real-time information network that connects users to the latest information about what they find interesting, using micro-blogs (messages which contain a maximum of a 140 characters). The service presents itself as a tool for moving and finding information at an extremely rapid pace [40].

Jansen *et al.* [19] found that around 19% of the posts on Twitter mentioned an organization or brand, and that 80% of these were related to seeking information and asking questions. About 20% contained a brand expression combined with a sentiment or opinion regarding an organization's product or service. More than half of the people who log in to Twitter each day do not tweet themselves, but simply sign in to read about what is happening in their world. This can influence consumer attitude and behavior.

While companies across the globe are using Twitter as a marketing communication vehicle, its impacts on corporate reputation are not clear. In this paper, we address the following research questions: Do improved user engagement and informedness in a corporate Twitter channel influence a firm's image and credibility as perceived by the users of the channel? Can a firm improve user engagement and informedness by changing certain design factors in the Twitter channel setting?

The success of a company's involvement in Twitter critically depends on how users perceive information on the corporate Twitter channel. Effectively maintaining a corporate Twitter channel can enhance a firm's reputation and profitability. This is why we see an emerging stream of websites that profile corporate Twitter accounts to help companies monitor and analyze Twitter data (e.g., [twitalyzer.com](http://twitalyzer.com), [twitip.com](http://twitip.com), [www.tweetpsych.com](http://www.tweetpsych.com)), and provide metrics to improve and tailor Twitter campaigns for better results (e.g., [www.socialbro.com](http://www.socialbro.com), [www.tweetreach.com](http://www.tweetreach.com)) [23, 25].

Why do we focus on user engagement and informedness? People use Twitter mainly because they want to be engaged in conversations with other users and companies, and because they want to be informed about what goes on with the people and organizations they care about [20, 29, 45]. Prior theoretical work argues that social media community settings affect how people interact, what information they receive about one another and the community, and how they can participate in social media activities [42]. To this end, we examine three design factors that can change corporate Twitter community settings and that likely influence user engagement. These are relationship depth, corporate involvement and channel purpose. Twitter channels are likely to increase user engagement if they encourage their users to disclose their identity, stimulate more corporate involvement, and adopt a more specific rather than a generic channel purpose. This is because these factors help to clearly define the user community. We also examine how channel credibility impacts user informedness; the degree to which users feel that they know about the company who manages the Twitter channel.

We collected data using an experiment where we created a fictitious coffee company (named *Beans 'n Coffee*) and presented participants with eight versions of its Twitter channel by manipulating these three design factors. We found that relationship depth, corporate involvement and channel purpose interactively impact user engagement. Our results suggest that deeper relationships among users of a corporate Twitter channel increase user engagement when the level of corporate involvement with the channel is high, and when the channel has a specific purpose. However, when the channel has a generic purpose, a high corporate involvement decreases user engagement. This implies that, under certain circumstances, firms should reduce their involvement in their social media channels. Our research is relevant for marketing and

social media managers and can help them decide whether to require users to register with an identity or allow anonymous participation, whether to allocate dedicated employees to respond to user requests, and whether to set up different channels for different purposes.

## **THEORY**

In this section, we discuss the theoretical background and present the main constructs. We first introduce the concept of *corporate reputation*. Next, we explain the importance of *user engagement* and *user informedness* in a corporate Twitter channel. Based on social identity theory, we identify three design factors that play a significant role in determining the social context of a corporate Twitter channel and that influence users' social identification with the community. They include the depth of the relationships among users (*relationship depth*), the level of involvement of the channel's corporate sponsor (*corporate involvement*), and the scope of the channel's purpose (*channel purpose*). Last, we posit the importance of *message credibility* and *source credibility* in affecting user informedness.

### **Corporate Reputation**

*Corporate reputation* refers to social cognitions about a company, such as knowledge, impressions, perceptions, and beliefs, in the minds of external observers [43]. It is often defined in terms of the degree to which a company meets social expectations, for example, regarding the quality of products and services, industry leadership, and impact on society [4].

Another common conceptualization of corporate reputation equalizes it with *corporate credibility*, which is defined as the perceived willingness and ability of a company to fulfill its promises [36]. For primary stakeholders, who have a direct relationship with a company [10], the company's reputation is mostly based on the degree to which the company is willing and able to fulfill the promises it makes to these stakeholders, either explicitly or implicitly [13]. For example, in a corporate social responsibility setting, Alcaniz *et al.* [1] argued that the credibility of a company is key for reducing the tension between company and consumers. Consumers use company credibility as a means to judge and decrease their initial skepticism about the company.

## Engagement and Informedness

Today, people can choose from a large pool of media, ranging from blogs, online forums, online games, social networks, and micro-blogs. Different media compete for users' limited attention. There are different reasons that explain why individuals become involved in an event, process, or media platform. People use Twitter mainly to make connections with others and as a source of information [9]. Thus, we focus on two primary reasons that motivate users to become involved with a corporate Twitter account: engagement and informedness.

**Engagement.** The notion of engagement in the information systems (IS) literature has been primarily used in the context of learning and education. For example, Webster and Ho [51] discussed how participation in training and educational presentations can facilitate learning and described how multimedia technologies can influence listeners' engagement during presentations. Another popular usage of engagement refers to the emotional commitment of an employee to an organization and its goals [30]. This emotional commitment means engaged employees actually care about their work and their company. They do not work just for a paycheck, or for the next promotion, but work to achieve the goals of the organization. When employees care, when they are engaged, they use discretionary effort.

Prior research identified three dimensions of engagement that are relevant for this study: cognitive, relational, and behavioral [32, 46]. *Cognitive engagement* refers to the degree in which individuals are engrossed and intellectually involved in what they are learning. *Relational engagement* is the extent to which individuals feel connected to the environment. *Behavioral engagement* is reflective of individual participation and involvement in activities. In sum, engagement in social media can be considered as a measure of an individual's cognitive response, personal or emotional connection, and/or actions.

People who regularly connect to a corporate Twitter channel are genuinely interested in the company and its product offerings. They may have a desire to connect with the company and with other users who share similar interests. They are likely to feel comfortable communicating with the company and will actively tweet about the company with other users. They may also find a personal fit and a feeling of belongingness with the community. Chen [9] suggested that people are involved in Twitter because it

gratifies a need to connect with others. It can also fulfill several other types of needs such as convenience and entertainment [24]. A corporate Twitter channel can provide product updates, ideas, customer services, and support to the community of followers. We define *engagement* in a corporate Twitter channel as a positive affective state involving a feeling of attachment to a company or other followers of the company [30]. Our definition of engagement focuses on the relational engagement as identified by Mayer [32]. It implies the gratification of a person's intrinsic motivation not only to connect with similar others, but most importantly, to connect to the organization that develops and manages the channel.

User engagement is also closely related to the notion of the strength of the ties between people [16], which is defined as a combination of the amount of time, the emotional intensity, the intimacy (mutual confiding), and the reciprocation among people. These ties incorporate a feeling of belonging. Tie strength captures the closeness and interaction frequency of a relationship between two individuals [16]. The need to connect with others and the strength of the ties are likely to explain the extent to which people are engaged with the medium.

In addition, users of online forums who are more connected to other users may express higher trust in information provided by other members than users who are less connected [52]. Similarly, we may argue that in a corporate Twitter channel, people who are more connected with the channel are more likely to have stronger ties with the organization that manages the channel. This fosters greater trust, leading to a higher perceived corporate credibility and therefore a higher corporate reputation. We expect that user engagement in a corporate Twitter channel has a positive effect on corporate reputation, either in terms of social roles or in terms of corporate credibility, or both.

**Informedness.** Our notion of user informedness in a corporate Twitter channel is different from the notion used in the IS literature [11, 28, 44]. For example, Clemons [11] referred to consumer informedness as the degree to which consumers know about products in the marketplace in terms of availability, attributes and price. In the electronic commerce setting, Smith et al., [44] defined informedness as perceived awareness of the consequences of using, consuming, or owning a product, as a result of interacting with product data. However, user informedness on Twitter refers not only to

information about products, but also and most importantly to information about the company. Therefore, in this context we define *user informedness* as the degree to which consumers are informed about the company that manages the Twitter channel and its product and service offering.

Assuming that the information provided on a corporate Twitter channel is mainly positive, users are likely to regard the company responsible for the channel as credible when they feel informed about the company through the channel. In contrast, when users feel that they lack information on the company, they are likely to judge the firm's credibility as neutral because they simply do not have enough information to form a positive or a negative judgment [6]. We expect that user informedness in a corporate Twitter channel has a positive effect on corporate reputation.

### **Determinants of User Engagement**

According to social identity theory, an important reason why people want to connect with others is that such connections help them to maintain a positive self-concept or identity [47, 50]. *Social identity* refers to people's knowledge of their membership of a social group (or groups) together with the emotional significance attached to that membership [47]. It is widely recognized that groups shape people's definitions of themselves and their feelings of well being and self-worth [18]. Some parts of people's personal identity are derived from the groups that they conceive themselves to be part of. They tend to perceive those groups as favorable compared to other groups to which they do not belong. In turn, social identity influences attitudes, values, and behaviors [50]. In their *group engagement model*, Tyler and Blader [50] distinguished three aspects of social identity: identification, pride, and respect.

*Identification* reflects the degree to which people cognitively merge their sense of self and their evaluations of self-worth with their judgments of the characteristics and status of their groups. *Pride* reflects people's evaluation of the status of their group, whereas *respect* reflects their evaluation of their status within the group.

Prior research argues that online community design is important in shaping social identity, as it strongly influences how people interact, what information they receive about one another and the community, and how they participate in community activities [8, 42]. Likewise, different corporate

Twitter channel designs are likely to influence the strength of users' social identity related to the community. Thus, depending on the context and its channel designs, a corporate Twitter channel contributes differently to fostering relationships, providing external communication, and gathering marketplace information.

The depth of the relationship among users, the level of corporate involvement, and the purpose of the channel are important aspects of channel design and all play a significant role in determining the social context of a corporate Twitter channel, and influencing users' social identification with the community. From a social identity viewpoint, we argue that these three design factors of Twitter channel settings determine the clarity of the identity of the user community, and therefore will likely individually and interactively influence the degree to which users merge their sense of self with the characteristics of the community (i.e., their identification with the community), and hence their engagement with the channel.

**Relationship Depth.** *Relationship depth* refers to the emotional relationship between community members. Self-presentation is an important factor in users' perception of community belonging [17]. People want to create an image that is consistent with their personal identities. This is often done through self-disclosure, which is the conscious or unconscious revelation of personal information. As relationships deepen, people tend to disclose more personal information, therefore providing ground to establish higher intimacy [37]. Deeper relationships imply a higher degree of self-disclosure.

Different from face-to-face communication, self-disclosure in an online environment such as Twitter relies mainly on information such as name, profile, status, photos, interest and/or previous comments to determine one's personality and to foster bonding [42]. A high degree of self-disclosure may encourage sharing and relationship building. By deepening relationships among users and between users and the organization, users may feel more connected and engaged with the channel. In addition, a higher degree of self-disclosure may make it easier to determine the characteristics and status of the community, and enable users to identify with the community more easily. Thus, we expect that deeper relationships among users of a corporate Twitter channel, through a higher degree of self-disclosure, are likely to lead to a higher user engagement.



**Corporate Involvement.** Previous research defines online corporate involvement as publishing and managing of content [26]. True involvement, however, goes beyond using the web as a mere platform to advertise. It should hold a purpose of interacting. We define *corporate involvement* in an online environment as the publishing and managing of content with the purpose of interacting with online communities. Some firms appoint a public relationship or community manager to interact with online communities on behalf of the firm. In other firms, employees from across the organization interact with the community, and respond to customers' inquiries quickly and effectively. These employees can share their genuine ideas and exhibit candor and passion for the company's vision, mission and values. In addition, if the company's employees are involved in a community, it creates a clearer sense of the degree of involvement of the company in the social media community. Therefore, as the identity of the people behind the firm becomes more visible and the involvement becomes greater, the emotional connection between the firm and the community will increase, leading to greater engagement.

**Channel Purpose.** The pre-determined purpose served by a community creates some value for its members, i.e., purpose value [12]. Having a high purpose value for the community will lead community members to create a group identity [12, 42]. Research has indicated that common identity of a virtual community is influenced by the purpose of the channel, using objective criteria such as organizational membership or subjective criteria, such as political values, both of which can create a single identity or purpose that binds the community [42].

Most multinational companies have multiple Twitter accounts, which vary in their degree of specificity. A corporate Twitter channel usually clearly specifies the channel purpose on its Twitter page. For example, PricewaterhouseCoopers (PwC), a multinational professional services firm and the largest of the "Big Four" accountancy firms, has many Twitter accounts. Besides country specific accounts (@PwC\_Nederland, @PwC\_UK), the company has accounts for different job functions (e.g., @PwCAdvisory, @PwCInnovate) and accounts for different interest groups. For example, @PwC\_US\_Careers account is for the latest updates on the firm and to learn more about what it is like to work at PwC. @PwC\_Press account is for the latest news from and about firms in the PwC network.

As the purpose becomes more specific, it is easier for users to identify themselves with the community, because the community is more clearly defined [40]. In addition, the community will be able to share information more efficiently, in line with a clear goal. One may expect a corporate Twitter channel that has a specific purpose is more likely to generate higher user engagement within the community compared to one that has a generic purpose.

### **Determinants of User Informedness**

Publishing in today's digital world is no longer centrally organized and controlled, but has shifted to a decentralized networked information system, fostered through social networks, via which a blend of commercial and noncommercial content is shared with the world. It is up to the consumer to decide whether online information and its sources are perceived as credible. *Credibility* can best be defined as believability, thus credible information is believable information. Perceived credibility of web-based information can be highly situational and is dependent on the credibility of the source of the message, and on the credibility of the message itself [2, 14, 15]. While source credibility and message credibility overlap to some degree, some attributes affecting credibility belong uniquely to sources, while others belong uniquely to the message itself [33]. Source attributes include the reputation of the website's sponsor and the type of sponsor (e.g., whether the sponsor is a person, an NGO, or a commercial organization). Message attributes include the way in which the message is structured and the relevance and quality of evidence given [33].

If messages in the channel are believable (e.g., because they tend to give convincing evidence), users are more likely to feel informed about the latest developments regarding the organization than when messages are less believable (e.g., because they tend to give only opinions without evidence). The source of a message can refer to the medium or the person(s) posting the messages [15]. Since this research focuses on Twitter channels, we define the source of a message as the users who post messages or tweets within the channel. Earlier research has shown that sources with persuasive intent are generally perceived as less credible [14]. In addition, people tend to perceive sources who are similar to themselves as more credible [5]. Therefore, we expect that in a corporate Twitter channel, the credibility of the channel, as

reflected in the credibility of the users and the messages in the channel, is likely to lead to improved user informedness about the focal company.

## METHODOLOGY

In this section, we present the experimental design of the study, explain the experimental procedure, and describe the sample.

### Experimental Design

For this study, we created a fictitious coffee company, named *Beans 'n Coffee*, for the following three reasons. First, a large audience can relate to the theme of coffee and/or a company selling brewed coffee. Second, we wanted to create an experiment to reflect a naturalistic exposure setting about a corporate Twitter channel in order to measure truthful consumer perceptions. Starbucks is well represented on Twitter and a large number of coffee-related topics are discussed there. This made it somewhat easier to find comments/topics, which were similar to real conversations on Twitter, thus increasing realism. Third, we wanted to avoid controversial contexts that would generate a wide variety of opinions and would leave little space for the manipulations to influence attitudes.

Figure 1 shows an overview of the company's website with some background information on its history, performance, and brand promise. This information was used to introduce the company on Twitter. We manipulated different Twitter community settings and explored the relationship between the three design factors using a  $2 \times 2 \times 2$  factorial experimental design with relationship depth (high versus low), corporate involvement (high versus low), and purpose (generic versus specific) as between-subjects factors. All versions of the experiment resemble a real Twitter channel both in look and feel. See Figure 2.

INSERT FIGURE 1 ABOUT HERE

INSERT FIGURE 2 ABOUT HERE

**Relationship Depth.** We manipulated relationship depth as the extent to which users self-disclose their identity. We altered several factors to create high and low depth scenarios, including photo, name and writing style. In the high-depth condition, profile pictures of users and their real names were posted.

In some instances, we also added a user's occupation. In some other cases, nicknames and real names were provided. In the low-depth condition, an avatar and nicknames were used, but no profile pictures or real names were added. In addition, prior research shows that users express additional depth in their writing style by adding exclamation marks, emoticons and embedded expressional words (e.g., "just kidding") in their tweets [37]. We used the same technique in the high-depth condition. See Figure 3.

INSERT FIGURE 3 ABOUT HERE

**Corporate Involvement.** We manipulated the degree of corporate involvement through the presence of users who post tweets on Twitter behalf of *Beans 'n Coffee*. In the high corporate involvement condition, we created a corporate user called *BeansCoffee Inc*, and two company employees who responded to users' requests on behalf of the company. Their positions are listed after their username (e.g., manager at *Beans 'n Coffee* or *Beans 'n Coffee* employee). In the low corporate involvement condition, there was no involvement from company employees. See Figure 4 for an illustration of the manipulation of high and low corporate involvement.

INSERT FIGURE 4 ABOUT HERE

**Channel Purpose.** We created two types of corporate Twitter channels with different scope: a generic purpose channel and a specific purpose channel for frequently asked questions. See Figure 5. We gave some examples of topics at the top of each Twitter channel to help guide respondents to on-going discussions. All comments and posts in both types of channels were created based on actual messages that appear in a real-life Twitter channel. In the generic purpose channel, virtually any topics related to coffee or the company *Beans 'n Coffee* could be discussed and shared. Six topics were discussed in the scenario, including the number of *BeansCoffeeCorner* in New York, a new product, a user's preference for *Beans 'n Coffee* espresso, a personal experience at a *BeansCoffeeCorner*, a person drinking coffee while watching a series, and a new hot beverage at the *BeansCoffeeCorner*. This type of channel is often used for marketing purposes [22]. The specific purpose channel, on the other hand, can be seen as a dynamic customer service desk where questions and answers are provided. Only three question-and-answer-based topics (out of the above mentioned six) were discussed.

INSERT FIGURE 5 ABOUT HERE

### **Experimental Procedure and Sample**

At the start of the experiment, we first asked participants whether they were familiar with Twitter. People who were not familiar with Twitter were excluded from further participation. The rest were presented with a page describing the fictional company *Beans 'n Coffee*. After this page, the participants continued to a fictional setting of the *Beans 'n Coffee* corporate Twitter channel. The participants were randomly assigned to one of the eight scenarios and were asked to read the content of the Twitter page carefully before moving to the survey questions.

To determine whether the manipulations were perceived as intended, we conducted two rounds of pre-tests. First, we created different Twitter channel designs based on different levels of relationship depth, corporate involvement, and channel purpose. We invited five Master's degree students from a leading European business school and two people with several years of working experience at a large corporation to check if there were sufficient differences across the designs. We changed several messages to represent more accurate and real-life tweets, and altered some pictures to characterize more genuine users. We also made adjustments to ensure that the number of tweets was sufficient. All participants agreed that the page with background information had enough look and feel to make *Beans 'n Coffee* look like a real company.

Second, we conducted a pre-test on the complete questionnaire with 32 respondents (four in each scenario), assessing the manipulations, the survey length, and the appropriateness of the questions. Based on the comments we received, we made adjustments to remove any uncertainties, and added additional information so that respondents could navigate through the questionnaire more easily. We invited people to participate in the research study via e-mail across several departments of a large multinational company. We also recruited respondents through a nation-wide online survey panel. The total number of valid responses used for analysis was 208. The respondents were almost equally distributed across the eight scenarios, ranging from 25 to 29. See Table 1. The measurement items, which were adapted from previously used scales, are summarized in Appendix A. We also collected data on gender, age, education, the frequency of social network site usage, the frequency of Twitter usage, and the perceived realism of

the scenario. Table 2 gives more details on our respondents, and their representativeness for the population of Twitter users worldwide.<sup>1</sup>

INSERT TABLE 1 ABOUT HERE

INSERT TABLE 2 ABOUT HERE

## RESULTS

Before conducting our analyses, we examined the distributions of our measures through Q-Q plots to see whether they satisfy the assumption of normal distributions made by parametric significance tests. The plots did not show any substantial deviations from normality, with all observed frequencies being close to those predicted from a normal distribution. In addition, we assessed the construct validity of our measures through a principal component analysis.<sup>2</sup>

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<sup>1</sup> The majority of returned questionnaires were completed by males. Although the population of Twitter users seems to have more females, the difference is not that big. Most respondents were below 30 years of age. While the population of Twitter users seems to be even younger (with almost half being under 20), this seems to be because younger Twitter users are more willing to publicly disclose their age (see [3]). The majority of the respondents had completed a Master's degree. On average, respondents visited social network sites frequently ( $M = 6.5$  on a scale from 1 to 8). People indicated they logged in to Twitter between once a month to multiple times a month ( $M = 3.25$  on a scale from 1 to 8). This usage frequency seems to be substantially lower than in the population, where users post multiple Tweets per week on average. Respondents answered that the experimental designs represented a realistic scenario ( $M = 5.28$  on a scale from 1 to 7). To test whether the distributions of the variables were approximately equal across the scenarios, we conducted an ANOVA for the quantitative variables, and a non-parametric ANOVA for the ordinal and nominal ones. The results show no significant differences between any of the conditions. Kruskal-Wallis statistics (gender:  $p = 0.97$ , education:  $p = 0.52$ ) as well as F-values (age:  $F_{7,206} = 1.65$ ,  $p = 0.12$ ; social media frequency:  $F_{7,206} = 1.75$ ,  $p = .10$ ; Twitter frequency:  $F_{7,206} = 0.94$ ,  $p = .48$ ; scenario realism:  $F_{7,206} = 1.97$ ,  $p = 0.06$ ) were all insignificant at the 5% level.

<sup>2</sup> The scree plot resulting from the analysis suggests that four factors underlie our measures. After rotating the factors using the Varimax method, they could be interpreted as corporate reputation, channel credibility, user engagement, and informedness, respectively. However, the first item in the scale to measure the credibility of the messages, as well as the final items in the scales to measure the credibility of the messages and users had high loadings on the factor representing user engagement. Closer inspection of these items shows that they actually relate more to the interest generated by the channel than to its credibility. We therefore removed these three items. A new principal component analysis on the revised scales again showed four factors, with the same interpretation after rotation. This time, all items had high loadings on the factors to which they match in terms of content. There were a few cross-loadings (above .30), but these were always substantially lower than the largest loading (see Table 3). Furthermore, after grouping the items according to their highest loadings, all four of the resulting scales had sufficient internal consistency. Cronbach Alpha's were 0.93, 0.94, 0.92, and 0.91 for corporate reputation, channel credibility, engagement, and informedness respectively. To form construct scores, we ran separate principal component analyses for each of the four sets of items and calculated the factor scores for the first principal component of each analysis using the item loadings. We also conducted canonical correlation analyses in which we divided our items into three blocks: (1) items related to credibility, (2) items related to engagement and informedness, and (3) items related to corporate reputation. This structure reflects our assumption that the credibility of messages and users are antecedents of user engagement and informedness, while engagement and informedness are antecedents of corporate reputation. Canonical correlations were then estimated (through SPSS' MANOVA procedure) between the first and the second block, and between the second and the third block. These analyses suggest two factors for each block, resulting in a

INSERT TABLE 3 ABOUT HERE

### Tests of Structural Relationships

We tested the relationships among our constructs using a multiple regression. Table 4 shows the results for the main effect, including unstandardized regression coefficients, standardized effect sizes, significance levels, and  $R^2$  values.<sup>3</sup> In the main effects analysis, the results show that engagement and informedness have strong and significant positive relationships with corporate reputation. The results also show that the credibility of the channel has strong positive effects on engagement and on informedness. In addition, none of the manipulated variables (relationship depth, corporate involvement, and channel purpose) has a significant main effect on engagement and informedness.

INSERT TABLE 4 ABOUT HERE

Next, we examined the interaction effects and presented the results in Table 5. In the model with engagement as the dependent variable, we observed two two-way interaction effects: (1) a significant negative two-way interaction effect between relationship depth and channel purpose (1 = specific purpose; 0 = generic purpose); and (2) a significant negative interaction effect between corporate involvement and channel purpose. The results also suggest a significant positive three-way interaction effect. We presented the pattern of this three-way interaction in Figure 6. It shows that when the corporate Twitter channel has a specific purpose, a high degree of depth increases the degree of engagement with the community, but only when company involvement in the channel is *high*. In contrast, when the channel has a more generic purpose, a high degree of depth also increases engagement, but only when company involvement is *low*. In the model with informedness as the dependent variable, we observed a similar three-way interaction effect. The overall  $F$ -tests for the interaction effects (see [39]) are significant for both engagement ( $F_{4,198} =$

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total of six factors. However, the second factor of each of the blocks was hard to interpret because all items had high correlations with the first factor and low correlations with the second factor.

<sup>3</sup> We checked the residuals of the regression models through normal probability plots and partial regression plots. They revealed no deviations from normality or homoscedasticity, except for the dummy variables representing the experimental conditions where residuals were naturally not normally distributed because of the categorical nature of these variables. In addition, we checked for potential multicollinearity through variance inflation factors (VIF). The highest VIF value was 6.81 (for the three-way interaction term between our experimental conditions), which is well below the commonly used cutoff value of 10 (see [30]).

7.45,  $p < 0.01$ ) and informedness ( $F_{4,198} = 13.02$ ,  $p < 0.01$ ), suggesting that any significant interactions that occur are not spurious.

INSERT TABLE 5 ABOUT HERE

INSERT FIGURE 6 ABOUT HERE

### **Mediation**

Our reasoning assumes that engagement and informedness act as mediators in the relationships between characteristics of the corporate Twitter channel and corporate reputation. Therefore, we examined the indirect as well as the direct effects on of our independent variables on corporate reputation. To determine the significance of the indirect effects, a bootstrap of 5,000 resamples was used at a confidence level of 95% as proposed by Preacher and Hayes [41], using these authors' "Mediate" macro for SPSS. The results are shown in Table 6. It can be seen that channel credibility, which has a significant positive effect on engagement and informedness, also has a significant indirect effect on corporate reputation. On the other hand, channel credibility also has a direct (non-mediated) effect on corporate reputation. Because both the indirect and the direct paths are significant for channel credibility, the sign of the product of the indirect and direct effects ( $a \times b \times c$ ) also needed to be checked [53]. This product shows a positive sign, so that the mediation effect can be classified as complementary mediation, meaning that indirect and direct effects point in the same direction. The direct effect could be explained by an omitted mediator [53].

INSERT TABLE 6 ABOUT HERE

## **DISCUSSIONS AND CONCLUSIONS**

In this section, we discuss the key findings, the theoretical and managerial implications of the study, and the limitations and suggestions for future research.

### **Discussions of Key Findings**

The aim of this paper is to determine whether user engagement and informedness in a corporate Twitter channel influence the firm's reputation as perceived by the users of the channel, and to examine whether a company can change certain design factors in the Twitter channel setting to improve user



engagement and informedness. We conducted an exploratory experiment and have three key findings. First, we found that *user engagement and informedness in a corporate Twitter channel have a positive relationship with corporate reputation*. Second, the findings show that *the credibility of the corporate Twitter channel has a positive relationship with user informedness about the focal company*. Third, more interestingly, we found that the three design factors - relationship depth, corporate involvement, and channel purpose - interactively affect user engagement and informedness. More specifically, the findings suggest a three-way interaction effect among these factors. That is, *deeper relationships among users of a corporate Twitter channel result in higher user engagement and informedness when the level of corporate involvement with the channel is high and the channel has a specific purpose; the opposite is true when the channel has a generic purpose*. Our findings are summarized in the conceptual model in Figure 7.

#### INSERT FIGURE 7 ABOUT HERE

The findings imply that the type of channel (specific or generic) influences the effect of corporate involvement in a Twitter channel on user engagement and informedness. When the channel is specific, a higher level of corporate involvement improves user engagement and informedness. In a specific channel, only certain topics are discussed and users focus their discussions on pre-defined subjects. The company can play a clear role in answering questions about these specific topics. User interactions on such a channel usually focus on sharing and exchanging information based on a single shared interest or specific task, such as problem solving or idea generation. In such a specific channel, where only certain topics are discussed, a high degree of disclosure and a high corporate involvement may encourage sharing and relationship building, leading to a higher level of user engagement and informedness. However, when the channel is generic, a higher level of corporate involvement reduces user engagement and informedness. In a generic channel, where diverse topics and opinions are discussed, a high degree of disclosure and a high corporate involvement may raise concerns that the firm is monitoring user activity and content, and may make users feel uncomfortable. If privacy concerns are made salient in a corporate Twitter channel, they will likely lead to a lower degree of user engagement because users may feel that they cannot be fully

honest in their posts [7]. Similarly, because users might believe that other users are also not completely honest in their tweets, their feeling of informedness will also be lower.

Privacy concerns have always been an important issue in online consumer behavior, especially concerns about access to personal information by third parties (e.g. [34]). While social media have allowed more freedom to individuals through rapid access to information, they have also raised concerns about being watched by 'Big Brother' (governments) and 'Little Brother' (private organizations and fellow 'netizens'). For example, a study showed that people who have integrated the use of social media in their lives tend to use them to monitor their romantic partners [48]. The public nature of much of the information that is posted on a social medium prompts concerns that one cannot be completely honest and open, which can induce people to post inaccurate information or to create fake user accounts [7]. While privacy issues regarding Twitter have not been as widespread compared to other social media, certain conditions could make privacy concerns more salient.

### **Theoretical and Managerial Implications**

Twitter spreads brand messages further than traditional media can do by itself, and at far lower cost. Unlike Facebook, Twitter allows anyone to follow anyone else. This allows connections to form quickly, which makes Twitter a unique platform for corporate communication. To the best of our knowledge, this is the first study that examines the dynamics of communication through a corporate Twitter channel. It contributes to the previous IS research related to social media by identifying engagement and informedness as two major factors that influence firms' reputation. Moreover, it explored the impact of three channel design factors on user engagement and informedness: the depth of the relationships in an online channel, the degree of corporate involvement, and the specificity of the channel purpose.

The results suggest that the effects of these design factors are dependent on each other, and that each factor only increases engagement when certain other factors are present or absent. Surprisingly, we found that engagement and informedness are a function of the combination of all three aspects. Particularly, a deep relationships and a high corporate involvement increase user engagement with the channel, but only when the channel has a specific purpose. When the channel has a generic purpose, a high level of

corporate involvement in the channel will *decrease* engagement and informedness. Presumably, this pattern occurs because a firm that is closely involved with a generic channel in which people disclose a lot about themselves (i.e., deep relationships) could appear to be controlling and monitoring the contents of the channel too much, given that the generic purpose of the channel would require freedom in terms of the topics and opinions discussed. Such concerns can decrease the level of openness and trust within a channel, and therefore lower the degree of user engagement with the channel.

This study also has a number of practical implications. First, this research provides insights for marketing and social media managers on how to design their corporate Twitter channels. This study suggests that when an organization wants to use a Twitter channel to share information about the organization and its products, it is important to jointly consider the effects of three design factors, namely, the depth of the relationship, the corporate involvement, and the purpose of the channel. Designing the channel in such a way that users can find out more about the people they interact with is likely to be beneficial. Organizations can post a wide range of content to engage their users. For example, they can ask open-ended or rhetorical questions, they can share their expertise with users; they can request feedback from users, and they can invite users to participate in special events or give them opportunities to get involved.

Organizations need to consider carefully how they wish to communicate effectively through a corporate Twitter channel. A high level of corporate involvement is the key to keep the community live and active. Corporate involvement does not only include posting brand content, but also sharing, forwarding, or retweeting relevant and interesting content from other users. Organizations should create an environment to stimulate interactive discussions among users who share information, to share content with followers, and to really drive conversations around it. On the other hand, the findings of our study suggest that the effectiveness of a high degree of corporate involvement likely depends on the scope of the channel. If relationship depth and corporate involvement (i.e., the degree to which the organization mingles in the interaction on Twitter) are high, it is best to make the purpose of a channel clear and specific. This could also be the reason why companies increasingly create multiple accounts for different purposes, which

leaves little purpose for their main accounts [35] because user participation tends to be lower there. If an organization has a generic Twitter account, less corporate involvement or a distanced approach may be more appropriate. It could be that listening is more essential in such a channel. The company can look at trends and identify whether influential individuals are talking about the brand. Listening tools (e.g., Infegy, Radian6) can help companies monitor tweets and identify overall sentiment [27].

Furthermore, this research has shown that interaction via Twitter can indeed have a positive impact on corporate reputation. This suggests that firms could leverage the power of social media in establishing a better corporate reputation among users. They could monitor how often the firm and its products are mentioned and examine trends and identify potential problems. Company followers can amplify the message and retweet it to their own followers. Using it right, a corporate Twitter channel has the power to turn detractors into promoters [27]. Successful organizations will make full use of social media to reach their audiences and improve their corporate reputation.

### **Limitations and Future Research**

We discuss some limitations of this study and the avenues for future research. First, in this study we focused on relational engagement and used the feeling of connectedness to the company and other users as a measure of engagement. This is because the experimental setting makes it unrealistic to examine the degree to which people are involved in a learning process, or their intentions to use the channel in the future. Future research should include the other two dimensions of engagement: cognitive engagement and behavioral engagement. In a real-world setting, one can also measure engagement using the amount of time or frequency people interact with the company, and the time they spend on social media platforms.

Second, we created a Twitter channel for a coffee company in which the company's products and services were discussed, which is a simple but commonly seen form of a Twitter setting. Future studies can test the generalizability of our findings in other high-stake situations such as crises or controversial organizational decisions. They can include settings that are more emotionally involving, and focus more on "corporate" aspects of the company (rather than only its products and services). An example is a corporate Twitter channel that aims at diffusing information about corporate sustainability or green

initiatives, or acts as the firm's public relations arm. In matters that are critical for public relations, the involvement of higher-level managers may become more critical to facilitate the credibility of corporate communication. In other words, it does not matter much who announces a \$1 rebate on cappuccinos, but it may be very important that the CEO or other executives personally respond to corruption claims.

Third, we only looked at Twitter, and it is unclear to what degree our model would also hold for other types of social media platforms. While it seems likely that relationship depth, corporate involvement, channel purpose, and the credibility of the channel are also important in other media, the relative importance of these factors could differ in other platforms. Finally, future research should increase the size and representativeness of the sample, which may improve the reliability and validity of the findings.

## REFERENCES

1. Alcaniz, E.B., Cáceres, R.C., and Pérez, R.C. Alliances between brands and social causes: The influence of company credibility on social responsibility image. *Journal of Business Ethics*, 96, 2 (October 2010), 169-186.
2. Armstrong, C.L., and McAdams, M.J. Blogs of information: How gender cues and individual motivations influence perceptions of credibility. *Journal of Computer-Mediated Communication*, 14, 3 (April 2009), 435-456.
3. Beevolve. An exhaustive study of Twitter users across the world. (October 10, 2012) (available at <http://www.beevolve.com/twitter-statistics>).
4. Berens, G., and Van Riel, C.B.M. Corporate associations in the academic literature: Three main streams of thought in the reputation measurement literature. *Corporate Reputation Review*, 7, 2 (summer 2004), 161-178.
5. Bickhart, B., and Schindler, R.M. Internet forums as influential sources of consumer information. *Journal of Interactive Marketing*, 15, 3 (summer 2001), 31-40.
6. Bitektine, A. Toward a theory of social judgments of organizations: The case of legitimacy, reputation, and status. *Academy of Management Review*, 36, 1 (January 2011), 151-179.
7. Boyd, D.M. Friendster and publicly articulated social networking. Conference on Human Factors in Computing Systems: CHI'04 Extended Abstracts on Human Factors in Computing Systems, 24, 29 (2004), 1279-1282.
8. Butler, B.S. Membership size, communication activity, and sustainability: A resource based model of online social structures. *Information Systems Research*, 12, 4 (December 2001), 346-362.
9. Chen, G.M. Tweet this: A uses and gratifications perspective on how active Twitter use gratifies a need to connect with others. *Computers in Human Behavior*, 27, 2 (March 2011), 755-762.
10. Clarkson, M.B.E. A stakeholder framework for analyzing and evaluating corporate social performance. *Academy of Management Review*, 20, 1 (January 1995), 92-117.

11. Clemons, E.K. How information changes consumer behavior and consumer behavior determines corporate strategy. *Journal of Management Information System*, 25, 2 (Fall 2008), 13-40.
12. Dholakia, U.M., Bagozzi, R.P., and Pearo, L.K. A social influence model of consumer participation in network- and small-group-based virtual communities. *International Journal of Research in Marketing*, 21, 3 (September 2004), 241-263.
13. Fombrun, C.J. *Reputation: Realizing value from the corporate image*. Boston: Harvard Business School Press, 1996.
14. Flanagin, A.J., and Metzger, M.J. Perceptions of Internet information credibility. *Journalism & Mass Communication Quarterly*, 77, 3 (September 2000), 515-540.
15. Flanagin, A.J., and Metzger, M.J. The role of site features, user attributes, and information verification behaviors on the perceived credibility of web-based information. *New Media & Society*, 9, 2 (April 2007), 319-342.
16. Granovetter, M. The strength of weak ties. *The American Journal of Sociology*, 78, 6 (May 1973), 1360-1380.
17. Gruzd, A., Wellman, B., and Takhteyev, Y. Imagining Twitter as an imagined community. *American Behavioral Scientist*, 55, 10 (October 2011), 1294-1318.
18. Hogg, M.A., and Terry, D.J. Social identity and self-categorization processes in organizational contexts. *Academy of Management Review*, 25, 1 (January 2000), 121-140.
19. Jansen B.J., Zhang, M., Sobel, K., and Chowdury, A. Twitter power: Tweets as electronic word of mouth. *Journal of the American Society for Information Science and Technology*, 60, 11 (November 2009), 2169-2188.
20. Java, A., Finin, T., Song, X. and Tseng, B. Why we Twitter: Understanding microblogging usage and communities. *Proceedings of the 9th WebKDD and 1st SNA-KDD 2007 Workshop on Web Mining and Social Network Analysis*. (2007), 56-65.
21. Javalgi, R.G., Traylor, M.B., Gross, A.C., and Lampman, E. Awareness of sponsorship and corporate image: An empirical investigation. *Journal of Advertising*, XXIII, 4 (December 1994). 47-58.
22. Kaplan, A., and Haenlein, M. The early bird catches the news: Nine things you should know about micro-blogging. *Business Horizons*, 54, 2 (March-April 2011), 105-113.
23. Kilpatrick, G. 10 Awesome Twitter analytics and visualization tools. *Twitter Tools and Tips Blog*, (December 27, 2012) (available at <http://twittertoolsbook.com/10-awesome-twitter-analytics-visualization-tools/>).
24. Ko, H., Cho, C.H., and Roberts, M.S. (2005), Internet uses and gratifications: A structural equation model of interactive advertising. *Journal of Advertising*, 34, 2 (summer 2005), 57-70.
25. Lee, A. Twitter analytics tools to improve your marketing. *Social Media Examiner*, (December 26, 2012) (available at: <http://www.socialmediaexaminer.com/6-twitter-analytics-tools/>).
26. Lee, S., Hwang, T., and Lee, H.H. Corporate blogging strategies of the Fortune 500 companies. *Management Decision*, 44, 3 (2006), 316-334.
27. Li, C., and Bernoff, J. *Groundswell: Winning in a world transformed by social technologies*. Boston, MA: Harvard Business School Press. 2011.
28. Li, T., Kauffman, R.J., van Heck, E., Vervest, P., and Dallaert, B. Consumer informedness and heterogeneous preferences: An empirical study using a stated choice experiment. Working Paper. (2013).

29. Liang, T.P., Ho, Y.T., Li, Y.W., and Turban, E. What drives social commerce: The role of social support and relationship quality. *International Journal of Electronic Commerce*, 16, 2 (winter 2011-12), 69-90.
30. Macey, W. H., and Schneider, B. The meaning of employee engagement. *Industrial and Organizational Psychology*, 1, 1 (March 2008), 3-30.
31. Mason, C. H., and Perreault, W. D. Jr. Collinearity, power, and interpretation of multiple regression analysis. *Journal of Marketing Research*, 28 (August 1991), 268-280.
32. Mayer, J. Engagement lessons from outside of journalism. (April 26, 2011) (available at: <http://www.rjionline.org/news/engagement-lessons-outside-journalism>).
33. Metzger, M.J., Flanagin, A.J., Eyal, K., Lemus, D.R., and McCann, R.M. Credibility for the 21st century: Integrating perspectives on source, message, and media credibility in the contemporary media environment. *Communication Yearbook*, 27, (2003), 293-336.
34. Miyazaki, A.D., and Fernandez, A. Consumer perceptions of privacy and security risks for online shopping. *Journal of Consumer Affairs*, 35, 1 (summer 2001), 27-44.
35. Morrison, J. Seriously: How many Twitter accounts does a national brand need? *Sprout Insight* (August 6, 2012) (available at: <http://sproutsocial.com/insights/2012/08/multiple-twitter-accounts/>).
36. Newell, S., and Goldsmith, R. The development of a scale to measure perceived corporate credibility. *Journal of Business Research*, 52, 3 (June 2001), 235-247.
37. Parks, M.R., and Floyd, K. Making friends in cyberspace. *Journal of Communication*, 1, 4 (March 1996), 80-97.
38. Pentina, I., Gammoh, B.S., Zhang, L., and Mallin, M. Drivers and outcomes of brand relationship quality in the context of online social networks. *International Journal of Electronic Commerce*, 17, 3 (spring 2013), 63-86.
39. Ping, R. A. *Latent variable interactions and quadratics in survey data: A source book for theoretical model testing*. Second Edition (2003) (available at: <http://www.wright.edu/~robert.ping/intquad2/toc2.htm>).
40. Potts, L., and Jones, D. Contextualizing experiences: Tracing the relationships between people and technologies in the social web. *Journal of Business and Technologies Communication*, 25, 3 (July 2011), 338-360.
41. Preacher, K.J., and Hayes, A.F. Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*, 40, 3 (August 2008), 879-891.
42. Ren, Y., Kraut, R., and Kiesler, S. Applying common identity and bond theory to design of online communities. *Organizational Studies*, 28, 3 (March 2007), 377-408.
43. Rindova, V.P., Williamson, I.O., and Petkova, A.P. Reputation as an intangible asset: Reflections on theory and methods in two empirical studies of business school reputations. *Journal of Management*, 36, 3 (May 2010), 610-619.
44. Smith, S.P., Johnston, R.B., and Howard, S. Putting yourself in the picture: An evaluation of virtual model technology as an online shopping tool. *Information Systems Research*, 22, 3 (September 2011), 331-369.
45. Stieglitz, S., and Dang-Xuan, L. Emotions and information diffusion in social media sentiment of microblogs and sharing behavior. *Journal of Management Information Systems*, 29, 4 (spring 2013), 217-248.

46. Suárez-Orozco, C., Onaga, M., and De Lardemelle, C. Promoting academic engagement among immigrant adolescents through school-family-community collaboration. *Professional School Counseling*, 14, 1 (2010), 15-26.
47. Tajfel, H. Social identity and intergroup behavior. *Social Science Information*, 13, (1974), 65-93.
48. Tokunaga, R.S. Social networking site or social surveillance site? Understanding the use of interpersonal electronic surveillance in romantic relationships. *Computers in Human Behavior*, 27, 2 (March 2011), 705-713.
49. Trusov, M., Bucklin, R.E., and Pauwels, K. Effects of word-of-mouth versus traditional marketing: Findings from an Internet social networking Site. *Journal of Marketing*, 73, 5 (September 2009), 90-102.
50. Tyler, T.R., and Blader, S.L. The group engagement model: Procedural justice, social identity, and cooperative behavior. *Personality and Social Psychology Review*, 7, 4 (November 2003), 349-361.
51. Webster, J., and Ho, H. Audience engagement in multi-media presentations. *ACM SIGMIS Database*, 28, 2 (spring 1997), 63-77.
52. Yuki, M., Maddux, W.W., Brewer, M.B., and Takemura, K. Cross-cultural differences in relationship- and group-based trust. *Personality and Social Psychology Bulletin*, 31, 1 (2005), 48-62.
53. Zhao, X., Lynch, J.G., and Chen, Q. Reconsidering Baron and Kenny: Myths and truths about mediation analysis. *Journal of Consumer Research*, 37, 2 (August 2010), 197-206.



Figure 1. Background Information of Beans 'n Coffee



### *About us*

**Beans 'n Coffee Inc.** is active in the coffee industry and was founded in 1935 (Genoa, Italy) by Marcos & Stefano Cerrado. Starting with a small factory the brothers created their own coffee brand, selling **premium coffee** to retailers, hotels, restaurants, and since 1967 through a branch of **coffeehouses** (Beans 'n Coffee Corners).

The **Beans 'n Coffee headquarters** is located in Milan and has over 35.000 employees across Europe. Beans 'n Coffee Inc. showed a solid financial performance over the past decade, with increasing revenue of +8% annually. The company expects to continue this performance in the coming years.

### *Our brand promise*

**Coffee is about people!** Whether enhancing a good conversation; or complementing a relaxing moment, while enjoying the smell of **fresh grind coffee beans**: Coffee connects with people's daily lives around the world! From one hand stretching out to another hand, serving a fresh brewed cup of coffee, we at Beans 'n Coffee have valued the connection between people and their coffee for over 75 years.

**We engage** with our customers & communities, connecting you with the best premium quality coffee in the world. As our beans travel from our **fair trade producers**, through **roasting & shipment**, to the variety of retailers, hotels, restaurants, and over 2.500 Beans 'n Coffee Corners across Europe, we try to make our products a little better every step!



### *Let's get connected!*

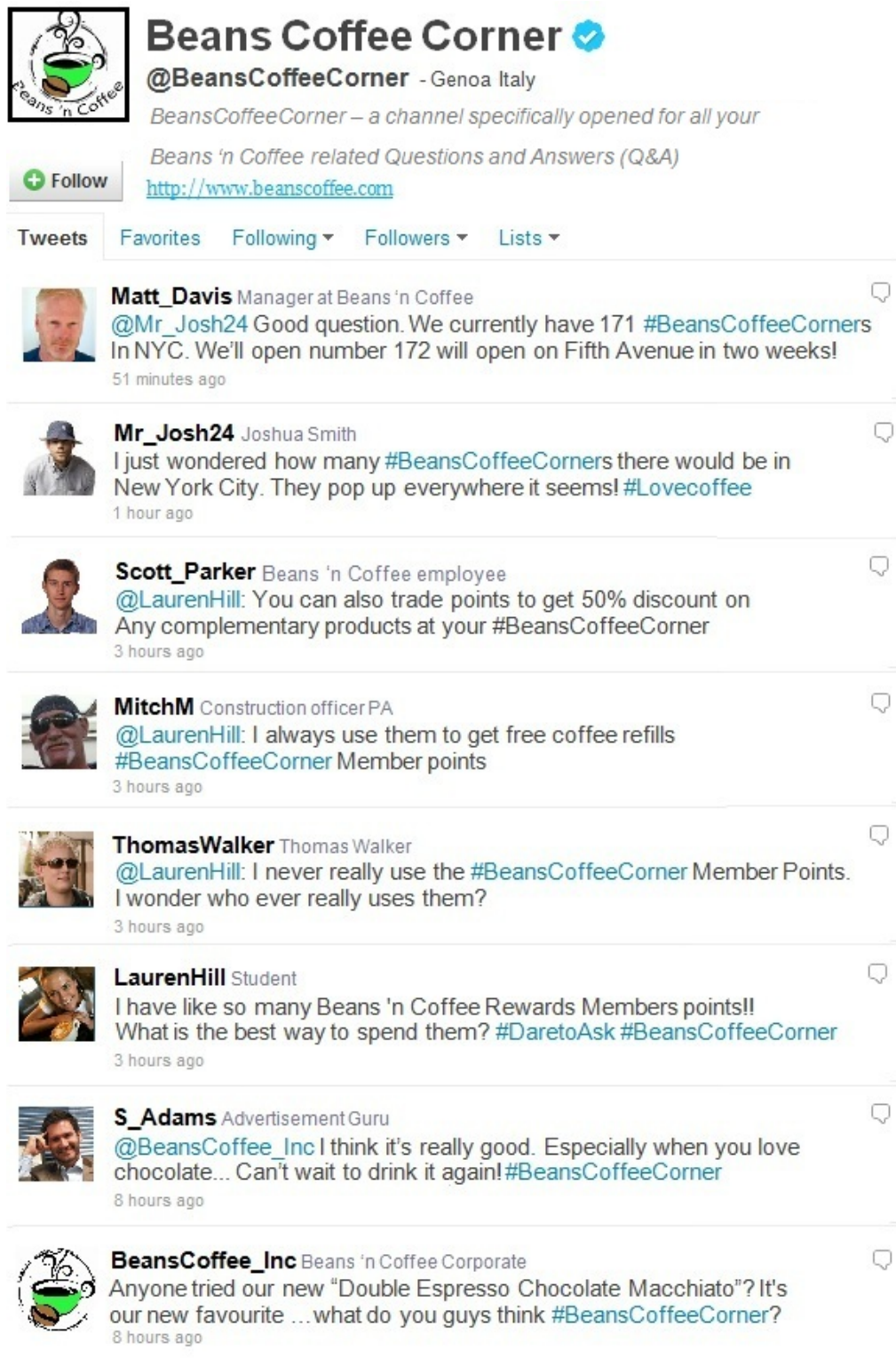
**Beans 'n Coffee now** connects in the real world and online!

For all your questions, answers and ideas we have opened the **#BeansCoffeeCorner** Twitter channel

**Share your Questions: Follow us on Twitter!**



Figure 2. An Example Scenario of High Relationship Depth, Low Corporate Involvement and Specific Purpose



The screenshot shows a Twitter profile for Beans Coffee Corner (@BeansCoffeeCorner) with a verified account. The bio states it is a channel for Beans 'n Coffee related Q&A, located in Genoa, Italy, with a link to www.beanscoffee.com. Below the profile are eight tweets in a thread. The first tweet is from Matt\_Davis, a manager at Beans 'n Coffee, who answers a question from Mr\_Josh24 about the number of coffee corners in NYC. The following tweets are from Mr\_Josh24, Scott\_Parker, MitchM, ThomasWalker, LaurenHill, S\_Adams, and BeansCoffee\_Inc, all discussing the rewards program and coffee products. The tweets are timestamped from 51 minutes ago to 8 hours ago.

**Beans Coffee Corner** ✓  
@BeansCoffeeCorner - Genoa Italy  
BeansCoffeeCorner – a channel specifically opened for all your Beans 'n Coffee related Questions and Answers (Q&A)  
<http://www.beanscoffee.com>

+ Follow

Tweets Favorites Following ▾ Followers ▾ Lists ▾

**Matt\_Davis** Manager at Beans 'n Coffee  
@Mr\_Josh24 Good question. We currently have 171 #BeansCoffeeCorners In NYC. We'll open number 172 will open on Fifth Avenue in two weeks!  
51 minutes ago

**Mr\_Josh24** Joshua Smith  
I just wondered how many #BeansCoffeeCorners there would be in New York City. They pop up everywhere it seems! #Lovecoffee  
1 hour ago

**Scott\_Parker** Beans 'n Coffee employee  
@LaurenHill: You can also trade points to get 50% discount on Any complementary products at your #BeansCoffeeCorner  
3 hours ago

**MitchM** Construction officer PA  
@LaurenHill: I always use them to get free coffee refills #BeansCoffeeCorner Member points  
3 hours ago

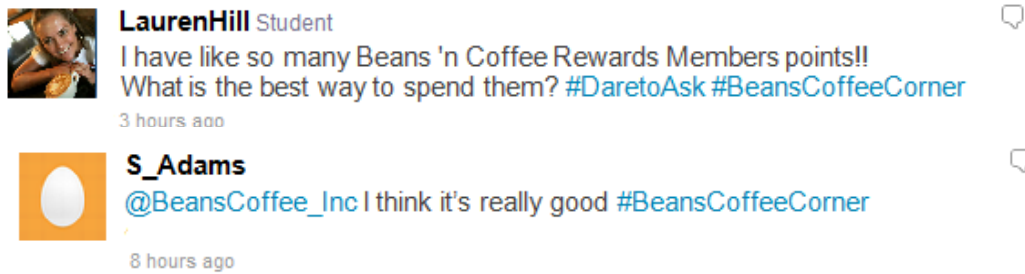
**ThomasWalker** Thomas Walker  
@LaurenHill: I never really use the #BeansCoffeeCorner Member Points. I wonder who ever really uses them?  
3 hours ago

**LaurenHill** Student  
I have like so many Beans 'n Coffee Rewards Members points!! What is the best way to spend them? #DaretoAsk #BeansCoffeeCorner  
3 hours ago

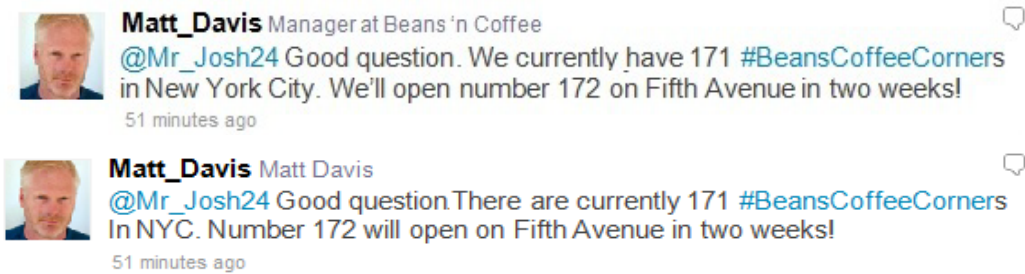
**S\_Adams** Advertisement Guru  
@BeansCoffee\_Inc I think it's really good. Especially when you love chocolate... Can't wait to drink it again! #BeansCoffeeCorner  
8 hours ago

**BeansCoffee\_Inc** Beans 'n Coffee Corporate  
Anyone tried our new "Double Espresso Chocolate Macchiato"? It's our new favourite ...what do you guys think #BeansCoffeeCorner?  
8 hours ago

**Figure 3. Relationship Depth Manipulation: Example Tweets of High Depth (Above) and Low Depth (Bottom)**



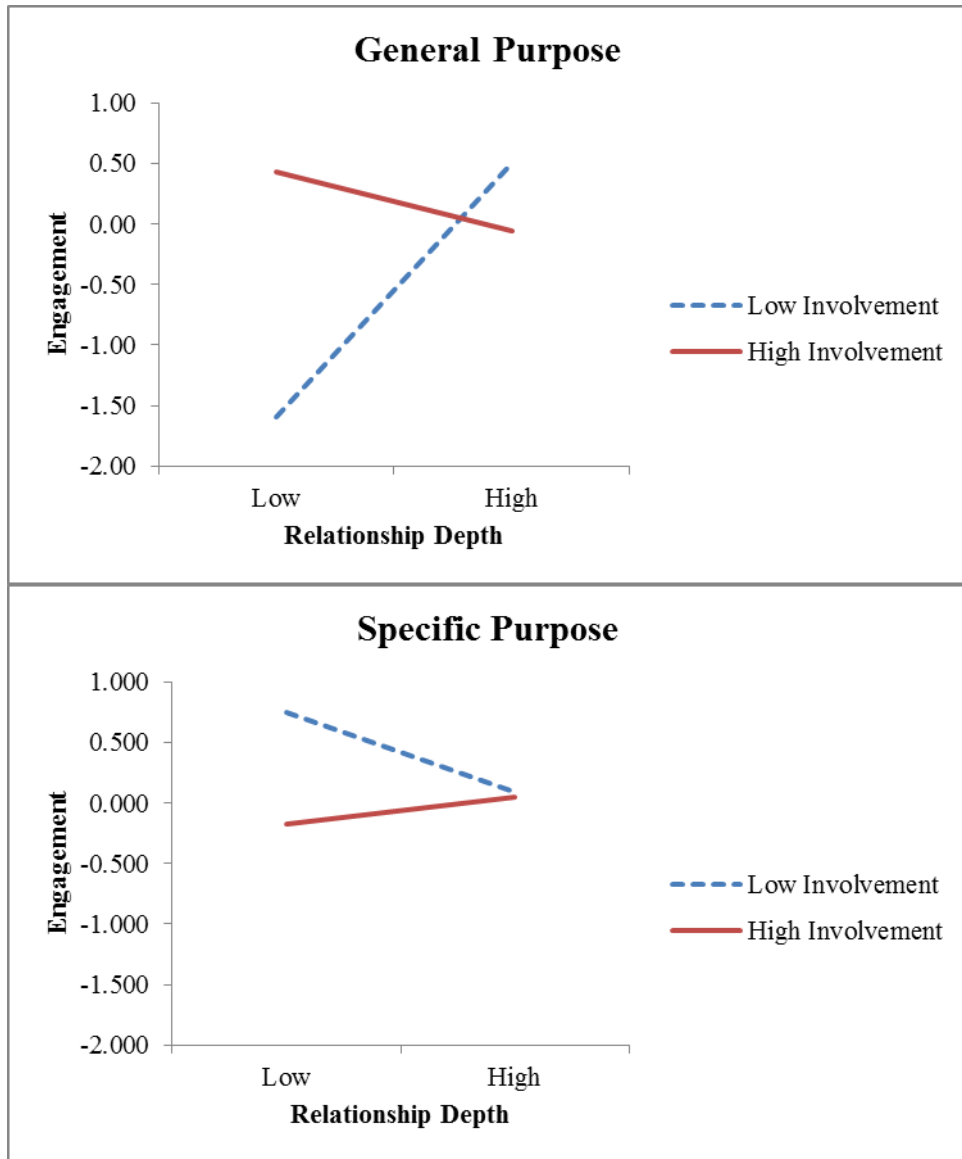
**Figure 4. Corporate Involvement Manipulation: Example Tweets of High (Above) and Low (Bottom) Corporate Involvement**



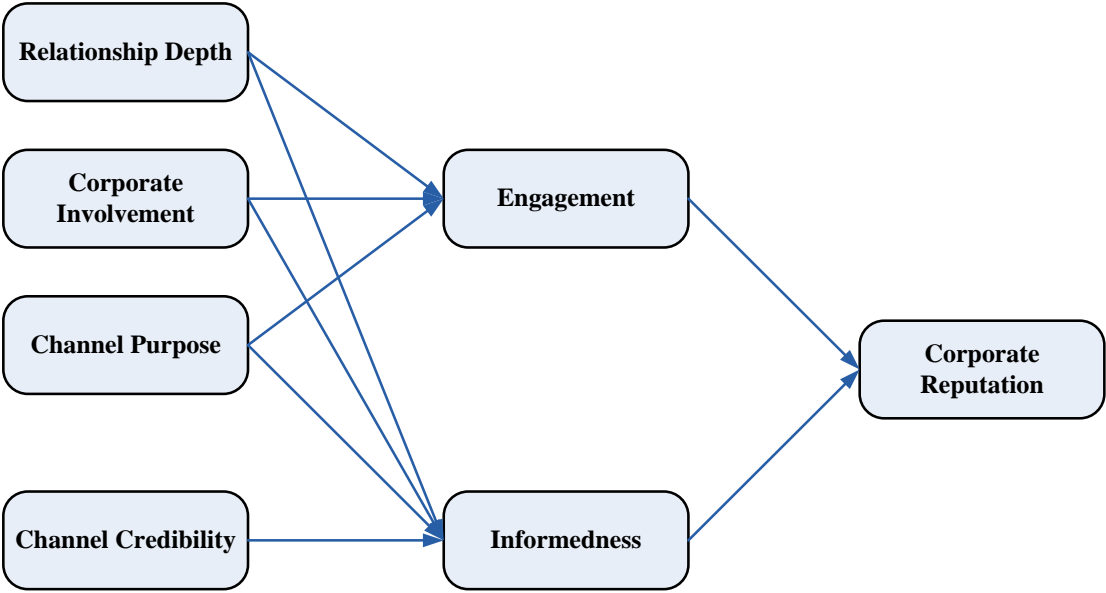
**Figure 5. Channel Purpose Manipulation: Generic Purpose (Left) and Specific Purpose (Right)**

Beans Coffee Corner	Beans Coffee Corner
<p><i>"A channel to Share, Discuss, Engage, and Connect with B 'n C and our coffee drinkers the world!"</i></p> <ul style="list-style-type: none"> <li>• The number of <i>BeansCoffeeCorner</i> in New York</li> <li>• A new product at the <i>BeansCoffeeCorner</i></li> <li>• A user's preference for Beans 'n Coffee espresso</li> <li>• A person's experience at a <i>BeansCoffeeCorner</i></li> <li>• A person drinking coffee while watching a series</li> <li>• A new hot beverage at the <i>BeansCoffeeCorner</i></li> </ul>	<p><i>"A channel specifically opened for all your Beans 'n Coffee related Questions and Answers (Q&amp;A)!"</i></p> <ul style="list-style-type: none"> <li>• The number of <i>BeansCoffeeCorner</i> in New York</li> <li>• <i>BeansCoffeeCorner</i> member points</li> <li>• A new hot beverage at the <i>BeansCoffeeCorner</i></li> </ul>

**Figure 6. Interaction Effects of Relationship Depth, Corporate Involvement, and Channel Purpose on Engagement**



**Figure 7. Conceptual Model**



**Table 1. The Number of Respondents per Condition**

			Corporate Involvement	
			High	Low
Relationship Depth	High	Generic Purpose	26	26
		Specific Purpose	25	25
	Low	Generic Purpose	25	27
		Specific Purpose	29	25

**Table 2. Descriptive Statistics**

	Sample			Population	
<b>Gender – % Male</b>	61%			47%	
<b>Age</b>					
< 20	1.9%		10-20	45.2%	
21-30	64.7%		21-25	25.1%	
31-40	16.4%		26-35	15.5%	
41-50	11.6%		36-45	5.9%	
> 50	5.3%		> 46	7.4%	
<b>Age groups per gender</b>	Male	Female		Male	Female
< 20	.8%	3.7%	10-20	42%	48%
21-30	67.5%	60.5%	21-25	24%	26%
31-40	15.1%	18.5%	26-35	16%	15%
41-50	10.3%	13.6%	36-45	7%	5%
> 50	6.3%	3.7%	> 46	10%	5%
<b>Education</b>					
Below Bachelor’s degree	15.5%				
Bachelor’s degree	34.3%				
Master’s degree	37.2%				
Professional degree	8.7%				
Doctorate degree	4.3%				
<b>Average SNS usage</b>	6.5				
<b>Average Twitter usage (1-8)</b>	3.25			approx. 6	
<b>Average scenario realism</b>	5.28				

Note: The population percentages for age and gender were obtained from Beevolve’s [3] analysis of 36 million Twitter accounts worldwide. The population percentages for “age groups per gender” are based on visual inspection of bar charts in the report, as exact percentages were not provided for these statistics. The frequency of social network site (SNS) usage and the frequency of Twitter usage are on a 1-8 scale anchored by (1) Never, (2) Less than once a month, (3) Once a month, (4) Multiple times a month, (5) Once a week, (6) Multiple times a week, (7) Once a day, (8) Multiple times a day. For the population, Beevolve reports an average of 794 Tweets over three years, implying on average one Tweet every 1.4 days, which would be closest to “multiple times a week” (6). Scenario realism is measured on a 7-point Likert scale.

**Table 3. Loadings and Cross-loadings Final Scales**

	<b>Corporate Reputation</b>	<b>Channel Credibility</b>	<b>Engagement</b>	<b>Informedness</b>
CorpREPUTATION1	<b>0.71</b>	0.22	0.19	0.23
CorpREPUTATION2	<b>0.59</b>	0.28	0.20	0.22
CorpREPUTATION3	<b>0.69</b>	0.14	0.05	0.28
CorpREPUTATION4	<b>0.60</b>	0.23	0.18	0.31
CorpCRED1	<b>0.73</b>	0.18	0.31	0.11
CorpCRED2	<b>0.76</b>	0.29	0.15	0.24
CorpCRED3	<b>0.79</b>	0.21	0.19	0.21
CorpCRED4	<b>0.73</b>	0.32	0.20	0.25
CorpCRED5	<b>0.74</b>	0.33	0.17	0.27
INFORM1	0.20	-0.07	0.20	<b>0.62</b>
INFORM2	0.08	0.13	0.31	<b>0.64</b>
INFORM3	0.29	0.26	0.17	<b>0.74</b>
INFORM4	0.21	0.28	0.18	<b>0.78</b>
INFORM5	0.22	0.32	0.12	<b>0.59</b>
INFORM6	0.34	0.20	0.21	<b>0.71</b>
INFORM7	0.28	0.30	0.19	<b>0.71</b>
INFORM8	0.35	0.27	0.16	<b>0.73</b>
ENGAGE1	0.20	0.25	<b>0.78</b>	0.24
ENGAGE2	0.31	0.27	<b>0.72</b>	0.37
ENGAGE3	0.31	0.35	<b>0.57</b>	0.37
ENGAGE4	0.35	0.28	<b>0.68</b>	0.27
ENGAGE5	0.23	0.20	<b>0.80</b>	0.30
MessCRED2	0.16	<b>0.66</b>	0.26	0.21
MessCRED3	0.26	<b>0.80</b>	0.14	0.21
MessCRED4	0.21	<b>0.82</b>	0.11	0.21
SourceCRED1	0.28	<b>0.80</b>	0.19	0.21
SourceCRED2	0.21	<b>0.73</b>	0.21	0.14
SourceCRED3	0.32	<b>0.82</b>	0.20	0.19
SourceCRED4	0.35	<b>0.76</b>	0.19	0.17

Note: Highest loadings are highlighted in bold; cross-loadings are underlined.

**Table 4. Results for Main Effects**

	Engagement		Informedness		Corporate Reputation	
	<i>b</i>	<i>r</i>	<i>b</i>	<i>r</i>		<i>r</i>
Relationship Depth	0.13 (1.19)	.08	0.03 (0.23)	.02		
Corporate Involvement	-0.15 (-1.35)	-.09	-0.08 (-0.71)	-.05		
Channel Purpose	0.06 (0.58)	.04	0.01 (0.04)	.003		
Channel Credibility	0.63 (11.43)**	.63	0.59 (10.38)**	.59		
Engagement					0.38 (5.66)**	.37
Informedness					0.40 (6.02)**	.39
<i>R</i> <sup>2</sup>	0.40		0.35		0.52	

Note: *t*-values are provided in brackets. \*\*:  $p < .01$ ; *b* = unstandardized regression coefficient; *r* = partial correlation.

**Table 5. Results for Interaction Effects**

	Engagement		Informedness	
	<i>b</i>	<i>r</i>	<i>b</i>	<i>r</i>
Relationship Depth	0.38 (1.78)	.13	0.18 (0.79)	.06
Corporate Involvement	0.19 (0.88)	.06	-0.06 (-0.27)	-.02
Channel Purpose	0.44 (2.06)**	.14	0.19 (0.84)	.06
Message and Source Credibility	0.63 (11.64)**	.64	0.60 (10.57)**	.60
Depth × Involvement	-0.57 (-1.88)	-.13	-0.26 (-0.82)	-.06
Depth × Purpose	-0.65 (-2.16)**	-.15	-0.59 (-1.86)	-.13
Involvement × Purpose	-0.80 (2.66)**	-.19	-0.31 (-0.99)	-.07
Depth × Involvement × Purpose	1.41 (3.30)**	.23	1.08 (2.41)**	.17

Note: *t*-values are provided in brackets. \*\*:  $p < .01$ ; \*:  $p < .05$ ; *b* = unstandardized regression coefficient; *r* = partial correlation.

**Table 6. Results of the Mediation Tests**

	Indirect Effect Through		Direct Effect On
	Engagement	Informedness	Corporate Reputation
Relationship Depth	0.10 (1.58)	0.05 (0.78)	-0.20 (-1.09)
Corporate Involvement	0.05 (0.84)	-0.02 (-0.26)	-0.07 (-0.41)
Channel Purpose	0.11 (1.75)	0.06 (0.70)	-0.25 (-1.34)
Channel Credibility	0.16 (3.75)**	0.18 (4.02)**	0.33 (5.20)**
Depth × Involvement	-0.15 (-1.68)	-0.08 (-0.80)	-0.23 (-0.88)
Depth × Purpose	-0.17 (-1.74)	-0.18 (-1.61)	0.25 (0.95)
Involvement × Purpose	-0.21 (-2.17)**	-0.10 (-0.94)	0.16 (0.61)
Depth × Involvement × Purpose	0.36 (2.55)**	0.33 (2.05)**	0.09 (0.25)
Engagement			0.26 (3.70)**
Informedness			0.31 (4.60)**

Note: *t*-values are provided in brackets. \*\*:  $p < .01$



## Appendix. Measurement Items

Constructs	Measurement Items	Comments
Corporate Reputation – Meeting social expectations [21]	<ol style="list-style-type: none"> <li>1. Beans 'n Coffee has good products/services.</li> <li>2. Beans 'n Coffee is well managed.</li> <li>3. Beans 'n Coffee is involved in the community.</li> <li>4. Beans 'n Coffee responds to consumer needs.</li> </ol>	We used a scale by Javalgi <i>et al.</i> [21]. The original scale consists of six items, but we excluded an item related to the company's quality as an employer because we felt that our respondents had too little information to answer this question. We also excluded an item stating that the company "Only wants to make money", because we felt it would be too ambiguous.
Corporate reputation - Corporate Credibility [35]	<ol style="list-style-type: none"> <li>1. Beans 'n Coffee has a great amount of experience.</li> <li>2. Beans 'n Coffee has great expertise.</li> <li>3. I trust Beans 'n Coffee.</li> <li>4. Beans 'n Coffee makes truthful claims.</li> <li>5. Beans 'n Coffee is honest.</li> <li>6. I do not believe what Beans 'n Coffee tells me.</li> </ol>	We used a scale by Newell and Goldsmith [35]. The scale consists of two dimensions (expertise and trustworthiness) each containing four items. We excluded two items on the expertise side which relate to the degree to which the company is skilled, because a qualitative pre-test showed that respondents had too little information to adequately answer these questions.
Engagement [9]	<ol style="list-style-type: none"> <li>1. I feel I am connected to the users on the Beans 'n Coffee Twitter channel.</li> <li>2. I feel like I fit in on the Beans 'n Coffee Twitter channel.</li> <li>3. I can easily make connections to other users of the Beans 'n Coffee Twitter channel.</li> <li>4. I feel comfortable communicating with users in the Beans 'n Coffee Twitter channel.</li> <li>5. I feel like I belong in the Beans 'n Coffee Twitter community.</li> </ol>	We focused on the relational engagement and developed a scale based on Chen [9]. We modified it to reflect connectivity with the company and with other users in the specific <i>Beans 'n Coffee</i> Twitter channel.
Informedness [42]	<ol style="list-style-type: none"> <li>1. What Beans 'n Coffee is all about.</li> <li>2. What Beans 'n Coffee can mean for me.</li> <li>3. What Beans 'n Coffee is really like.</li> <li>4. The overall quality of Beans 'n Coffee.</li> <li>5. Objective characteristics of Beans 'n Coffee.</li> <li>6. Parts of the Beans 'n Coffee experience that are relevant to my needs.</li> <li>7. What it is really like to consume Beans 'n Coffee products.</li> <li>8. The extent to which Beans 'n Coffee meets my requirements.</li> </ol>	We used a 12-item scale by Smith <i>et al.</i> [42] to measure informedness. We changed the questions so that they referred to an organization rather than a product, and excluded four items related to future use of the product, because respondents would find it difficult to answer such questions given the fictitious nature of the experiment. Our pre-test showed that one additional item lacked relevance for this study, whereas one reversed item was removed due to duplication.
Message Credibility [2]	<ol style="list-style-type: none"> <li>1. I find the posts/comments in this Twitter channel to be interesting.*</li> <li>2. I find the posts/comments in this Twitter channel to be accurate.</li> <li>3. I find the posts/comments in this Twitter channel to be believable.</li> <li>4. I find the posts/comments in this Twitter channel to be trustworthy.</li> <li>5. The posts/comments in this channel are able to retain my attention.*</li> </ol>	We measured message credibility by asking respondents to what degree the posts in the Twitter channel were interesting, accurate, believable, trustworthy, and able to retain readers' attention. These items were adapted from Armstrong and McAdams [2].
Source Credibility [2]	<ol style="list-style-type: none"> <li>1. I find the users in this Twitter channel to be trustworthy.*</li> <li>2. I find the users in this Twitter channel to be knowledgeable.</li> <li>3. I find the users in this Twitter channel to be believable.</li> <li>4. I find the users in this Twitter channel to be honest.</li> <li>5. I am likely to continue reading posts placed by users in this Twitter channel.</li> </ol>	We measured perceived source credibility through five items adapted from Armstrong and McAdams [2]. We did not include an item related to 'dynamism' because we felt that respondents had too little information to adequately judge this aspect.

Note: All constructs were measured on Likert scales ranging from 1 (completely disagree) to 7 (completely agree).

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