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Twittering to the top: a content analysis of corporate tweets to measure organization-public relationships

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**TWITTERING TO THE TOP:
A CONTENT ANALYSIS OF CORPORATE TWEETS TO MEASURE
ORGANIZATION-PUBLIC RELATIONSHIPS**

A Thesis
Submitted to the Graduate Faculty of the
Louisiana State University and
Agricultural and Mechanical College
In partial fulfillment of the
Requirements of the degree of
Master of Mass Communication

in

Theanship School of Mass Communication

by
Haley Edman
B.A., Louisiana State University, 2007
May, 2010

DEDICATION

I dedicate this thesis to my mother, Karen Henderson, who has been a constant source of support and love throughout my entire life, especially during these past few years. I would also like to honor my father, Jeff Edman, who I know is looking down from heaven with pride. Thank you for always being my guardian angel. Finally, I dedicate this thesis to my stepfather, Bill Henderson, who has helped me through these past eight years and continues to watch over me from heaven.

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ABSTRACT

Corporations worldwide are realizing the potential to build relationships with publics using social media. The microblogging site, Twitter, has transformed from a platform in which people merely update the Twitterverse about their daily activities to a communication channel where interpersonal conversations between millions of users thrive. As public relations practitioners, it is important to utilize new media to reach out to publics in order to build mutually beneficial relationships. This study examines how 47 corporations use Twitter as a communication and relationship-building tool and works towards developing guidelines for practitioners on using and evaluating their communication efforts on Twitter.

Grounded in Grunig's four models of public relations, Hon and Grunig's (1999) relationship indicators, and theories of interactivity, this thesis utilized a content analysis to investigate corporate use of Twitter as a means of communication. This study analyzed 47 corporations' Twitter homepages ($n = 94$) and tweets ($n = 1,577$) during a one-week sampling period. This research is important because companies dedicate time and resources to communicate with publics through Twitter. Not only do public relations practitioners need to know how to effectively utilize this medium, but they also need to be able to demonstrate to corporations their return on investment.

The data show that 44.4% of the tweets follow the two-way symmetrical model of public relations, and 63.3% of the corporate tweets demonstrated a desire on behalf of the corporations to form communal relationships with users. In addition, trust and control mutuality were the most common relationship indicators used. Finally, the data reveal that corporations post higher interactive tweets, utilizing the "at reply" function to converse with publics. While these results

reflect the tweets as a whole, when analyzing individual companies, many are not following commonly accepted relationship building and communication strategies.

The first study of its kind, this thesis illustrates how corporations are using Twitter as a communication and relationship-building tool. This study concludes with implications of using Twitter and how public relations practitioners can effectively use Twitter for developing and maintaining long-term, mutually beneficial relationships with publics.

CHAPTER 1. INTRODUCTION

In today's world, people find themselves surrounded by a variety of media or communication channels. First, there are the traditional media, such as print, radio, and television. While these are proven methods of communication, traditional media lack interpersonal capabilities. Then, there is the Internet, which has dramatically changed the way society operates. The introduction of new methods of communication always modifies how people receive messages (McLuhan, 1964), and the Internet is no different. It revolutionizes the way people shop, pay bills, communicate, etc. Almost anything people want to know or do is virtually at their fingertips. A relatively recent aspect of the Internet is social media. With the emergence of social media, such as blogs and social networking sites, the Internet becomes even more interpersonal and a means in which instantaneous communication thrives.

The purpose of this study is to investigate how corporations use Twitter, a microblogging website, to communicate to or with their publics. This study analyzes how corporations communicate on Twitter via Grunig's four models of public relations. It also examines Hon and Grunig's relationship indicators as they apply to corporate tweets in an attempt to gauge the quality of relationships forming online. Finally this thesis investigates the interactive nature of Twitter and the individual tweets by each company.

Public Relations and the Internet

The Internet has affected how the mass communication field functions, so naturally, public relations is no exception. In fact, it has been a valuable tool for communicating to, and most importantly, with publics. Traditionally, public relations practitioners relied on third-party news sources to pick up news releases or attend press conferences to extend organizational messages to the mass public. For more interpersonal interactions with the public, practitioners relied on special events, town hall meetings, and the like. While practitioners still rely on all of

these tactics, social media allows organizations to marry the dissemination of information to a mass public with the interpersonal interaction with those publics.

While several different definitions exist, Cutlip, Center, and Broom (1985) define public relations as “the management function that builds and maintains mutually beneficial relationships between an organization and the publics on whom its success or failure depends” (p. 6). The key word in this definition of public relations is “relationships.” With the interpersonal nature of the Internet, public relations practitioners find themselves trying to figure out new ways in which they can successfully cultivate these mutually beneficial relationships using online social media. This technology presents unique opportunities for practitioners to foster organization-public relationships (OPRs). Millions of Internet users sign onto social networking sites and blogs every day. Facebook, the once college-only social networking site, surpassed the 300 million user mark in September 2009, almost reaching the population of people who live in the United States (307 million to be exact) (“Facebook Nearly As,” 2009). Twitter, the microblogging site, boomed from 533,000 unique visitors in 2007 to 21 million unique visitors in 2009 (Nielson Wire, 2009a; Nielson Wire, 2009b). With so many people flocking to social media, it is no wonder practitioners have turned to these sites to help foster relationships. The question remains: How does one measure whether social media help develop successful OPRs?

The practice of setting up communication objectives and evaluating outcomes, through a four-step process of ROPE (Research, Objectives, Programming, and Evaluation) or RACE (Research, Action, Communication, and Evaluation), has long since been the go-to method for practitioners in demonstrating their value (Swann, 2008). “Practitioners must complete the public relations process and evaluate the results of their efforts so that management can clearly see a return on its investment in money, staffing, and time,” says Swann (2008, p. 7). Similar to

alternative avenues of communication such as print, television, and radio, public relations practitioners need tangible ways in which they can measure their efforts in building relationships using social media.

Using a content analysis, this study investigates how corporations use Twitter to communicate with their publics, as well as analyzes OPRs on Twitter. I examine these relationships by measuring the posts, called tweets, on Twitter according to the four models of public relations (publicity/press agency, public information, two-way asymmetrical, and two-way symmetrical) and relationship indicators (control mutuality, trust, satisfaction, commitment, exchange relationship, and communal relationship) (Hon & Grunig, 1999; Hallahan, 2008; Park & Reber, 2008).

Web 2.0, Social Networking, and Blogs

Social networking sites and blogs belong to a group of social media underneath the umbrella of Web 2.0, or the collaboration and use of the Internet for sharing information through social software (Cooke & Buckley, 2008). Web 2.0 allows communities to form around sharing information socially over the Internet, which creates great avenues for business communication (Cooke and Buckley, 2008). Cooke and Buckley (2008) argue, “In the Web 2.0 world, people will form online communities by combining one-to-one (e.g. email and instant messaging), one-to-many (web pages and blogs), and many-to-many (wikis) communication modes” (pp. 277-278). Social media (e.g. social networking sites and blogs) allow communities to form around particular organizations that help to build and maintain interpersonal relationships with publics. These relationships can ultimately benefit the outcome of how many people begin to adopt organizational products or services (Rajagopalan & Subramani, 2003).

As a microblogging site, Twitter is a mix between a social networking site and a blog. Boyd and Ellison (2007) define “social network sites” as “web-based services” where individuals

“(1) construct a public or semi-public profile within a bounded system, (2) articulate a list of other users with whom they share a connection, and (3) view and traverse their list of connections and those made by others within the system” (p. 211). Weblogs or blogs are “frequently updated Web sites containing dated entries arranged in reverse chronological order” (Trammell & Keshelashvili, 2005, p. 968). By measuring the quality of relationships on these sites, public relations practitioners can demonstrate their return on investment.

Since the launch of the first social networking site SixDegrees.com in 1997 (boyd & Ellison, 2007), similar sites exploded into the thousands. Friendster, MySpace, and Facebook represent the top three sites that shaped the business, cultural, and research landscape for social networking sites (Boyd & Ellison, 2007). The Pew Research Institute (2008) reported that one-in-five Americans use social networking sites, and two-thirds of those users range from the age of 18 to 29. This number is constantly growing, and the age group is expanding, which creates opportunities for public relations practitioners to form online relationships with diverse publics.

Practitioners from various industries use social media to communicate with their publics. From automotive manufacturers like Ford and General Motors to retailers like The Home Depot and Whole Foods Market, companies and organizations recognize the potential of social media for forming personal relationships with their publics. The interactive nature of social networking sites helps to strengthen the bond between the public and the brand. Dou and Krishnamurthy (2007) state that, “Greater interactivity promotes greater brand learning through better information assimilation and could help companies forge cognitive and emotional bonds with their brand users” (p. 204). Twitter is an ideal medium in which practitioners can utilize interactivity to promote “brand learning” through its interactive features.

To better understand how practitioners utilize social media, a recent survey of nearly 900 marketers in the March 2009 “Social Media Marketing Industry Report” found that 88 percent of

marketers surveyed use social media for business-related purposes, but 72 percent only recently logged onto this type of communication (Stelzner, 2009). Among the respondents, 64 percent of marketers use social media for five or more hours each week. The top reason for using social media is to “increase exposure” followed by “increasing traffic” and “building new business partnerships” (Stelzner, 2009, p. 5). The top four social media tools that respondents use are Twitter, blogs, LinkedIn, and Facebook, in that order (Stelzner, 2009). This demonstrates the potential of social media for building relationships with clients. While marketers seem to use social media more for publicity purposes, public relations practitioners should use it to engage in two-way symmetrical communication with their publics because the main purpose of public relations is to build relationships with the public.

Twitter

Television and radio personalities talk about it, billboards and business cards now include it, and almost every organizational website asks you to follow it. What is it? Twitter is the new “it” technology, and people in the millions have taken notice. From newscasters on CNN to celebrity gossipers on E! Entertainment Television, audiences cannot escape constant references to Twitter with announcers telling you to “follow us on Twitter” or “tell us what you think on Twitter” and “visit our Twitter page for the most up-to-date news.” This newfound popularity not only increased the user base of the site by millions, but it also became a source of news for many. Public relations practitioners have also taken notice. See Figure 1 for a screenshot of the Twitter login page and homepage.

Twitter is a microblogging site that also fits under the category of social media. Miller (2008) states, “Twitter is a kind of cross between social networking, blogging, and text messaging. It allows people to keep in touch with friends through the internet as well as mobile devices” (p. 396). Twitterers use the platform to obtain breaking news; communicate with

friends, celebrities, and companies; follow the latest score of sporting events; etc. This microblogging, social networking site launched in August 2006 and has since become a strong contender for one of the most visited websites. According to the Nielson Wire Website, "Unique visitors to Twitter increased 1,382 percent year-over-year, from 475,000 unique visitors in February 2008 to 7 million in February 2009, making it the fastest growing site in the Member Communities category for the month" (Nielson Wire, 2009a). Twitter once again dramatically increased to 21 million unique visitors in June 2009 (Nielson Wire, 2009b).

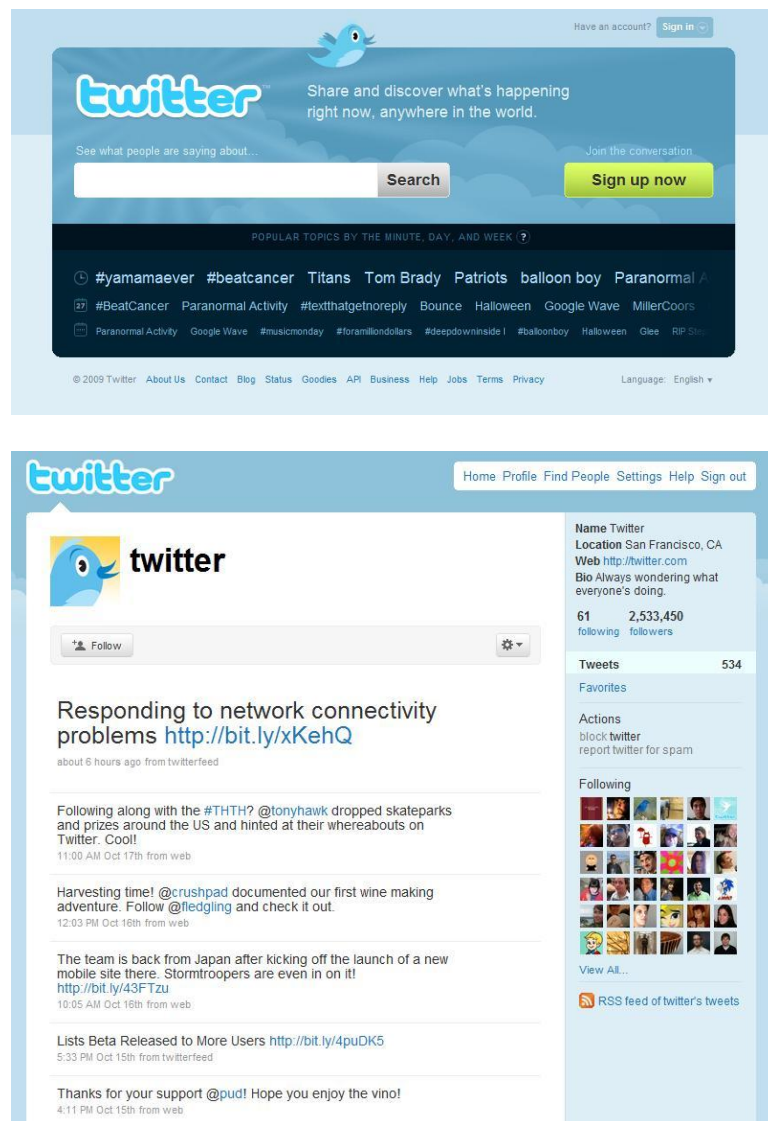


Figure 1. Screenshot of Twitter Login Page and Homepage.

The creators of Twitter claim the simplicity of the site makes Twitter a successful medium. Twitter.com states, “People are eager to connect with other people and Twitter makes that simple” (“About Twitter,” 2009). Twitter asks the question, “What are you doing?” Users post “tweets” or mini-posts up to 140 characters in length via mobile texting, instant messaging, third-party applications, or the web. Users can set their updates to private or they can allow the entire “Twitterverse” to view their pages. The Twitterverse includes the cyberspace area of Twitter. Once members join Twitter, they choose which people they wish to follow. Unlike other social networking sites, “following” users on Twitter is not mutual. When a user chooses to follow one user, he or she opts into seeing that user’s updates. Two users can follow each other, but Twitter does not make that an automatic option. Other users can follow members if their profiles are public, or they can ask permission to follow private member profiles. For more Twitter definitions, see Table 1. According to Nielson Wire (2009a), the top three age groups on Twitter are the 35 to 49 age group with nearly 3 million unique visitors, the 25 to 34 age group with nearly 1.4 million unique visitors, and the 55+ age group with nearly 1.2 million unique visitors, respectively.

Table 1.

Common Twitter Terms

Term	Definition
Twitter	A microblogging site that allows users to post updates up to 140 characters in length
Twitterverse	The cyberspace area of Twitter
Timeline	The feed on the user’s Twitter homepage that displays updates from the Twitter pages the user follows in reverse chronological order
Twitterers, Tweepers, Tweepie	People or users on Twitter
Followers	Twitter users opting to follow or see a certain user’s updates
Following	Other Twitter users a certain user opts to follow

(Table 1 Continued)

Term	Definition
De-Follow	When a user decides to stop following other users
DM – Direct Message	A private message sent from one Twitter user to another
Block	An action in which a Twitter user blocks access to his or her account by another Twitter user
Tweet	A Twitter post containing up to 140 characters in length
@reply	A tweet directed at a certain user
RT- Retweet	A tweet repeating another Twitter user’s original post usually preceded by RT@twitteruser or followed by (via @twitteruser). It is proper Twitter etiquette to give the original poster credit for information.
#hashtag	A marker using the pound sign, #, that prefixes a word or phrase to organize, track, or filter topics; hashtags often are in response to trending topics
Trending Topic	The most common words or phrases posted by users on Twitter at any given time
Twitpic	A picture posted on Twitter
Mistweet	A tweet directed to the wrong user
Protected Profile	A private profile of a certain user in which other users need to ask permission to follow or see that user’s tweets
Search Feed	A feed displaying tweets pertaining to a certain term or phrase
Nudge	An alert sent by one user to another that tells the user he or she has not posted in a while
Lists	Timelines or groups Twitter users create, consisting of people or organizations the user follows according to a certain category defined by the user.
Twaffic	Traffic on Twitter that sometimes slows down the server

In addition, Twitter is a new and interesting tool for bypassing the news media. Breaking news can oftentimes hit Twitter before it reaches traditional news media outlets. In addition, Twitter, on its own, is often the topic of news. One of the first incidents of this nature was during the 2007 Southern California wild fires. Twitter became a source of news to dispatch urgent news to large groups of mobile people (Palser, 2009). After the death of the “King of Pop,”

Michael Jackson, Twitter collapsed from the influx of users trying to find breaking information regarding the pop singer's demise. Tech Crunch reports that thousands of users posted tweets about Jackson at the same time, causing multiple websites, including Twitter, to collapse (Siegler, 2009).

A more recent occurrence is when ABC news reporter Terry Moran tweeted that President Obama called Kanye West a "jackass" for his interruption of Taylor Swifts' acceptance speech at the 2009 MTV Music Video Awards. President Obama made the comment during an off-the-record portion of a CNBC interview. Upon hearing the comment from the President, Moran posted this on his Twitter page (see Figure 2).



Figure 2. Terry Moran's Tweet (Gavin, 2009).

Terry Moran quickly removed the comment from his Twitter page but not before millions of other Twitter users retweeted the comment to all of their followers. The Moran incident only illustrates how massive this medium has become. In a matter of seconds, people from all over the world retweeted or reposted Moran's comment. This demonstrates two lessons for public relations practitioners. The first lesson is that people are listening, so tell them interesting things about your organization. The second lesson is that users should be careful and forewarned before posting anything on Twitter, for you may regret the post later.

Summary

With the increasing popularity of social media, public relations practitioners are realizing the potential to build mutually beneficial relationships with publics online. Like all other tactics, public relations practitioners need tangible ways in which they can evaluate their efforts and

demonstrate to management their return on investment (Swann, 2009). This study examines how corporations use Twitter to communicate with their publics. It also investigates how corporations use this microblogging site in an attempt to build mutually-beneficial relationships with publics as measured by Hon and Grunig's (1999) relationship indicators and Grunig's four models of public relations. This is important because many companies dedicate company time and resources to communication with publics through Twitter. Public relations practitioners have constantly searched for a quantifiable way to measure organizational relationships (Kelleher & Miller, 2006). This quantifiable measurement is also known as the practitioners' return on investment. Finally, this thesis investigates the interactive nature of Twitter and the individual tweets by the 47 companies. This research will not only identify the common trends in the use of this medium but also measure the relationships that exist between organizations and their publics on Twitter.

CHAPTER 2. REVIEW OF LITERATURE

Public Relations Strategies and Models

Previous scholarship on public relations theory advocated for a two-way symmetrical relationship between organizations and their publics or some mixture of advocacy and accommodation. From Grunig's situational theory to Hon and Grunig's relationship indicators, researchers have continued to search for the best way to achieve and measure effective public relations practices. With the evolution of new media, older public relations theories must adapt to the new communication channels, so organizations can measure their effectiveness in communication with publics.

Researchers have cited Grunig's situational theory as the closest bridge between theory and practice (Grunig & Hunt, 1984; Hamilton, 1992). The situational theory of publics helped explain when and how people communicate by segmenting publics from a large population of people into active versus passive communicators. Grunig and Hunt (1984) argued, "...communication behaviors of publics can be best understood by measuring how members of publics perceive situations in which they are affected by such organizational consequences" (p. 148). To distinguish between active or passive communicators, Grunig used the three independent variables of problem recognition, constraint recognition, and level of involvement. These independent variables determined two dependent variables of information seeking and information processing. Figuring out whether publics are high or low information seekers allowed the public relations practitioner to understand what medium to use for particular communication strategies. Originally, Grunig (2006) wanted to know why people seek information, but he ended up finding the following:

I realized that the situation theory provides a tool to segment stakeholders into publics, to isolate the strategic publics with whom it is most important for organizations to develop

relationships to be effective, and to plan different strategies for communicating with publics whose communication behavior ranged from active to passive. (p. 155)

Grunig (1976) applied his situational theory to organizations. He found that organizations were more likely to give information than to seek it and rarely, if ever, engage in dialogue with publics. This led to Grunig's development of the four models of public relations (see Table 2): press agency/publicity, public information, two-way asymmetrical, and two-way symmetrical (Grunig & Hunt, 1984).

Both the press agency/publicity and public information models are asymmetric in nature, attempting to highlight the good aspects of the organization (Grunig, 1990). The press agency/publicity model practices one-way persuasive communication from the organization to its publics with the absence of research or feedback. Practitioners use this model when they are only interested in positive publicity. The public information model provides one-way communication but does not focus on persuasion. This model uses straightforward, relatively objective information.

Both the two-way asymmetrical and two-way symmetrical models represent more sophisticated models of strategic public relations (Grunig, 1990). The two-way asymmetrical model involves two-way persuasive communication but only for the sake of the organization. This model uses research "to produce the support of publics without having to change the behavior of the organization" (Grunig, 1990, p. 21). The two-way symmetrical model involves two-way communication to benefit both the organization and its publics. This model employs research in order to better form long-term, mutually beneficial relationships with publics. This model "uses communication to manage conflict and improve understanding with strategic publics" (Grunig, 1990, p. 5). Grunig, Grunig, and Dozier (2002), in talking about the function of symmetry, said, "...the function must be based on values that reflect a moral obligation to

balance the interests of an organization with the interests of publics with which it interacts in society” (p. 306). These four models are not mutually exclusive in nature, so some overlap naturally occurs between the models.

Table 2.

Grunig’s Four Models of Public Relations

Description	Public Information	Press Agency/ Publicity	Two-way asymmetrical	Two-way symmetrical
Flow of communication	One-way/ Organization communicates to the public	One-way/ Organization communicates to the public	Two-way/ Organization communicates with the public	Two-way/ Organization communicates with the public
Research	No research	No Research	Research to benefit the organization but not the publics	Research for mutual benefit
Goal of Communication	Get information out to the public	Persuade publics to do or buy something or some service	Communicate with publics to focus on overall organizational goals, benefiting the corporation more than the publics	Communicate with publics to build long- term mutually beneficial relationships

Some researchers have argued against the four models of public relations as presented by Grunig, citing the models are merely a normative theory or what practitioners should be doing instead of what they are doing (Grunig et al., 2002). The model that received the most criticism in previous research is the two-way symmetrical model (Grunig et al., 2002). Laskin (2009) found that the “two-way symmetrical model is a utopian ideal” (p. 45). Some researchers stated that although some communication seems symmetrical in nature, it may actually be

asymmetrical in that it helps the company more in the end (Stauber & Rampton, 1995). Grunig et al. (2002), however, have also mentioned that the two-way symmetrical model serves the organization's interest better than the asymmetrical model because "organizations get more of what they want when they give up some of what they want" (Grunig & White, 1992, p. 39), but it is still symmetrical in nature because both parties have equal power in persuasion. In addition, Grunig et al. (2002) still admitted that the two-way symmetrical model is more of a normative ideal for public relations practice, but it is still practiced in organizations. In addition, persuasion, Grunig et al. (2002) argued, is continues to remain a part of the symmetrical model (one of the many faulty criticisms of the two-way symmetrical model), but it remains symmetrical because publics can influence organizations just as organizations influence publics.

Cancel, Cameron, Sallot, and Mitrook (1997) stated that, "The practice of public relations is too complex, too fluid, and impinged by far too many variables for the academy to force it into the four boxes known as the four models of public relations" (p. 32). Cancel et al. (1997) explained that public relations practices "depend" on numerous factors and variables. As a way to conceptualize this variability, Cancel et al. presented a continuum between pure advocacy and pure accommodation, which illustrated that the contingency theory of accommodation is more realistic than the four models of public relations. Grunig et al. (2002) argued that the symmetrical model "cannot be equated with accommodation" (p. 314). For symmetry to work, Grunig et al. (2002) argued that total accommodation and total advocacy cannot be useful because the interests of organizations' publics and the organizations should be balanced.

Other research, however, suggested that excellent public relations practices implement the two-way symmetrical model in communicating with publics. The International Association of Business Communicators (IABC) Research Foundation funded a five-year study to determine the characteristics of excellent public relations and how to measure and maintain effective

organizations (Grunig, 1990). “The major premise of the Excellence theory states that communication has value to an organization because it helps to build good long-term relationships with strategic publics, so measures of the value of public relations were perhaps the most important variables...” (Grunig & Grunig, 2000, p. 12). The Excellence study provided evidence that those practitioners who set objectives and measured short-term communication efforts enjoyed successful long-term relationships with their publics (Hon & Grunig, 1999).

Part of obtaining excellent public relations includes being strategic. Hon & Grunig, (1999) argued a strategic public relations department first identifies “the most strategic publics with which an organization needs to develop a relationship,” then plans and implements “communication programs to build relationships with these publics,” and finally measures and evaluates “the long-term relationships between the organization and these strategic publics” (p. 9). Two-way symmetrical or mutually beneficial relationships are key to measuring the effectiveness of relationships between organizations and their publics (Hon & Grunig, 1999). Many symmetrical relationships depend on interpersonal communication. Previous research on interpersonal relationships helped shape Hon and Grunig’s (1999) relationship indicators.

Measuring Relationships

Since the professionalization of the practice, public relations researchers and practitioners have searched for a proper way to measure relationships (Kelleher & Miller, 2006). Kelleher and Miller (2006) said, “Organizational relationships, which may include professional, personal, or community relations, can increase organizational effectiveness, reduce the cost of litigation, regulation, boycotts, etc., and may also contribute to an organization’s financial well being through shareholder, consumer, and/or donor support” (p. 400).

In one method of measuring OPRs, Hon and Grunig (1999) developed the Public Relations Relationship Measurement Scale, which provided a tangible way practitioners could

measure OPRs. Scholars and public relations professionals alike have since used this scale in measuring the effectiveness of relationships. Previous research using Hon and Grunig's (1999) relationship measurement scale included relationships in a university setting (Hon & Brunner, 2002; Jo, Hon, & Brunner, 2004; Ki and Hon, 2007a), fundraising (O'Neil, 2007; Waters, 2008), and cyberspace (Hallahan, 2008; Park and Reber, 2008). I will discuss this body of research in detail in a later section.

Grounded in the Excellence study, situational theory, and interpersonal communication research, Hon and Grunig (1999) developed guidelines for measuring relationships in public relations. The IABC Excellence study provided "evidence that there is a correlation between achieving short-term communication effects and maintaining quality long-term relationships" (Hon & Grunig, 1999, p. 9). Hon and Grunig's (1999) guidelines are third in a series of booklets published by the Institute for Public Relations, which gave public relations practitioners guidelines for measuring their effectiveness.

Most practitioners focus on outputs and outcomes, but Hon and Grunig (1999) focused on relationships as a part of measuring the effectiveness of public relations. Hon and Grunig (1999) developed a set of relationship indicators that seek to answer the question, "How can PR practitioners begin to pinpoint and document for senior management the overall value of public relations to the organization as a whole?" (p. 2). Since the implementation of social media in everyday public relations is still new, public relations practitioners need a way to measure the quality of relationships they have with their publics through social media.

The Hon and Grunig (1999) relationship measurement scale focused on six relationship elements or indicators: control mutuality, trust, satisfaction, commitment, exchange relationship, and communal relationship (see Table 3). The first four elements answer the question, "What are the outcomes of successful relationships?" and the last two elements answer the question, "How

are outcomes of public relations relationships different from other public relationships?” (Hon & Grunig, 1999, pp. 18-20).

The first four relationship indicators encompass the positive relationship outcomes organizations strive to achieve. First, control mutuality measures the relationship of power between the organization and its publics. While an imbalance of power is natural, “stable relationships require that organizations and publics each have some control over the other” (Hon & Grunig, 1999, p. 3).

Second, organizations must earn their publics’ trust. Trust involves the publics’ confidence in the organization and the willingness of that public to form a relationship with the organization. Trust depends on integrity, dependability, and competence on behalf of the organization (Hon & Grunig, 1999). The organization possesses integrity if the public considers the organization as fair and just. Dependability deals with the publics’ perception that the organization follows through with promises. Finally, the organization demonstrates competence if the public perceives the organization possesses the ability to accomplish what it sets out to do.

Third, satisfaction is the “extent to which each party feels favorable toward the other because positive expectations about the relationship are reinforced” (Hon & Grunig, 1999, p. 3). The benefits must outweigh the costs before a relationship can generate satisfaction. Organizations must ensure customer satisfaction in order to achieve effective OPRs.

The fourth relationship outcome is commitment. This outcome involves both parties devoting energy to “maintain and promote” the relationship (Hon & Grunig, 1999, p. 3). To exhibit commitment, both parties must feel fostering a relationship warrants the expended energy to do so. Two dimensions of commitment are continuance and affective commitment. Continuance commitment refers to action, while affective commitment refers to emotion.

Finally, researchers look into whether public relations practitioners strive to form exchange or communal relationships with their publics. According to Hon and Grunig (1999), an exchange relationship refers to a relationship in which one party helps another party only due to the fact the other party helped the first party in the past or will help that party in the future. Conversely, a communal relationship acts more as a mutually beneficial relationship. In a communal relationship, one party helps the other party regardless of past or future benefits produced by the other party. According to Hon and Grunig (1999), public relations practitioners should strive to form communal relationships.

Table 3.

Relationship Indicators Applied to OPRs

Relationship Indicator	Definition as it applies to organization-public relationships
Control Mutuality	Measures the relationship of power between the organization and its publics; an imbalance of power is natural
Trust	The public's confidence in an organization and the willingness of those publics to form a relationship with the organization (and/or vice versa); depends on integrity, dependability, and competence on behalf of the organization.
Satisfaction	The degree to which the organization and publics feel positive towards each other; benefits outweigh the costs
Commitment	The extent to which both the organization and its publics devote energy to maintain relationships; has two dimensions: continuance commitment (action) and affective commitment (emotion)
Exchange Relationship	The organization gives benefits to publics only because those publics gave benefits to the organization in the past or expected to do so in the future (and/or vice versa)
Communal Relationship	Mutually beneficial relationship where both the organization and its publics give benefits to each other even when they receive nothing in return; most ideal relationship

Measuring the Relationship Elements. Hon and Grunig (1999) suggested conducting a survey to measure the effectiveness of a relationship, using the relationship elements as

measures. Their questionnaire consisted of a series of agree/disagree statements pertaining to the relationship. Using a 1-to-9 scale, the respondents indicated their agreement to a particular question, based on the relationship elements. Researchers reverse coded negative indicators in order to tally the score of the relationship. The researchers then calculated the overall mean score, or the average, of each relationship outcome to determine the effectiveness of a relationship.

As reported in Hon and Grunig (1999), James Grunig, Yi-Hui Huang, Chun-ju Hung, and fellow graduate students at the University of Maryland conducted research to identify reliable indicators of public perceptions of OPR. Using an online survey, the researchers conducted a pilot study to measure the relationships between respondents and five organizations (General Electric, the National Rifle Association, the Social Security Administration, Microsoft, and the American Red Cross). Grunig and colleagues sent the questionnaires to randomly chosen e-mail addresses to measure OPR. They explained that this provided a limitation to the study because the general public does not necessarily represent the companies' strategic publics.

In addition, the researchers developed reliable scales for the six relationship indicators (trust, control mutuality, satisfaction, commitment, and communal versus exchange relationships). Most of the indicators reached Cronbach's alphas above .80. The results of the pilot study demonstrated that public relations professionals could reliably measure the value of strategic public relations, using the measurement scale.

Relationship Indicators in Previous Scholarship

Research using the Public Relations Measurement Scale as identified by Hon and Grunig (1999) spreads across a diverse array of topics from university relations to fundraising to cyberspace. Many studies have adapted Hon and Grunig's measurement scale along with other

relationship measurements from different areas of research such as psychology and interpersonal relationship management.

Since its creation, several studies investigated Hon and Grunig's relationship measurement scale (Jo, Hon, and Brunner, 2004; Ki & Hon, 2007a; Huang, 2001; Hon & Brunner, 2002; Kim, 2001). Jo et al. (2004) tested Hon and Grunig's OPR measurement scale in a large southern university setting, examining the perceptions of student relationships with the university in a two-part study. Part one measured student perceptions using a 1-to-7 Likert scale. Part two measured student perceptions using Hon and Grunig's measurement scale. Both groups of subjects found the six-factor indicators as valid and reliable for measuring their relationships with the university. Most importantly, Jo et al. (2004) found a limitation in that the four relationship outcomes (trust, commitment, control mutuality, and satisfaction) closely resembled each other, which suggests, "discriminant validity may be in doubt" (p. 25).

Ki and Hon (2007a) most recently investigated Hon and Grunig's relationship indicators in a university setting by testing the link between OPR, attitudes, and behavioral intentions. They found satisfaction and control mutuality provided strong indications of positive student attitudes and organization-benefiting behaviors. Ki and Hon, however, found no significant effects on attitudes or behavioral intentions when measuring the perceptions of trust, commitment, communal relationship, and exchange relationship. Several factors could have influenced the lack of effects with trust and commitment, but one of the top reasons may have resulted from the close resemblance and predictive behavior of these relationship outcomes.

In addition, previous research found several limitations when looking at the relationship indicators in a university setting. Some studies found that merely looking at student perceptions left out strategic publics such as employees and alumni (Jo et al., 2004). Other studies ran into age-related problems, stating that age affects how much a student perceives control mutuality (Ki

and Hon, 2007a). In addition, these studies assumed a two-way symmetrical model of public relations, which cannot always represent the public relations model used in every organization.

Other research focused on Hon and Grunig's relationship indicators and fund raising (O'Neil, 2007; Waters, 2008). O'Neil (2007) used Hon and Grunig's relationship measurement scale to link strong public relationships and donor support. Her study utilized a mail survey of respondents who donated to the Tarrant Area Food Bank. O'Neil found the amount of money donated did not soundly relate to strong public relationships in the designated nine-month period. Trust, commitment, satisfaction, and communal relationships, however, did increase according to donation amounts in an 18-month period. O'Neil identified control mutuality as the only indicator that increased as the frequency of donations increased within an 18-month period. This research strongly supported the idea that long-term, successful relationships influence behavior.

Waters (2008) used an online survey to compare annual giving and major gift donors to the donor relationships with a particular organization. The results showed a correlation between the frequency of donations and the perception of stronger relationships, which, according to Waters, provided evidence that fund raising is another subsection of public relations. Water's results also validated Hon and Grunig's relationship indicators as a reliable form of measurement. In addition, his study demonstrated that the relationship measurement scale allowed practitioners to predict future behavior.

Relationship Indicators and Online Relationships

Public relations researchers have used the relationship indicators, as presented by Hon and Grunig (1999), to measure online relationships. Park and Reber (2008) investigated Fortune 500 companies' application of corporate Web sites for organization-public relationship building, using Hon and Grunig's relationship indicators. They found "the key to developing mutually beneficial relationships with multiple publics will be the extent to which the corporations utilize

their Web sites effectively with an understanding of the dialogic capacity of Web sites to promote dialogue” (p. 411). Dialogic communication refers to “any exchange of ideas and opinions” (Kent & Taylor, 1998, p. 325). Kent and Taylor (1998) argue, “Without a dialogic loop in Webbed communication, Internet public relations becomes nothing more than a new monologic communication medium, or a new marketing technology” (p. 325). A dialogic loop is a feedback loop between organizations and publics that allows for two-way symmetrical communication where the public gives feedback and the organization responds to that feedback (Kent & Taylor, 1998). Not only should organizations quickly respond to publics, but the information they provide should also prove useful to their publics.

In addition, Hallahan (2008) discussed the relationship between organizations and their publics in cyberspace while looking at Hon and Grunig’s relationship indicators. “These benchmarks provide a valuable foundation for measuring relationships with key publics, but also provide useful guidelines for effective offline and online communications” (Hallahan, 2008, p. 51). Similar to developing and measuring relationships offline, Hallahan argued that organizations need to develop and measure their relationships with publics online. The following sections will address how Hon and Grunig’s (1999) relationship indicators relate to online communication between organizations and publics.

Control Mutuality. The key to measuring control mutuality for online communication is to look at whether publics have the ability to share in the conversation about the organization. “Interactivity represents the critical component of control mutuality in online communications,” and “lower-level forms of interactivity are also possible, such as responsive discourse and simple feedback” (Hallahan, 2008, p. 53). This is especially true when organizations and publics engage in two-way communication (van Es & Meijlink, 2000). Hallahan (2008) further explained that “responsive discourse” must be “timely, pertinent, and authentic” (p. 53). Twitter allows for

“responsive discourse” through its “@reply” and “direct messaging” functions, which directs messages from one user to the next.

Trust. To gain trust among their users, organizations should make virtual communication easy, safe, authentic, and reliable (Hallahan, 2008). Park and Reber (2008) measured trust by “the conservation of visitors and usefulness of information” (p. 410). Organizations, seeking relationships, should utilize new media as they would in an interpersonal communication setting, minimizing publicity efforts and maximizing two-way communication.

Satisfaction. Hallahan (2008) argued that “satisfaction is a summary measure of a person’s experience – based on a user’s perceptions about organizational commitment, control mutuality, communality, and trustworthiness,” as well as “providing users a choice about whether to use online communication at all” (p. 57). Hallahan (2008) said that users seek personalized and customized information, and this could play into the satisfaction of users online. Park and Reber (2008) measured satisfaction with returned visits to corporate websites.

Commitment. Several factors influence whether users will engage in online communication with organizations including the following: ability and desire to use online communication, prior experience and exposure to the organization, personality type, attitudes toward technology, and user skills and confidence (Hallahan, 2008). “By merely making technology-based access available, organizations demonstrate their commitment to communicate with key constituents” (Hallahan, 2008, p. 52). Organizations can demonstrate an online commitment by using up-to-date software that is easy for publics to use and that provides relevant and useful information (Hallahan, 2008).

Communal versus Exchange Relationship. Online communities form when people can identify with one another based on “perceived commonality of interests, values, and goals” (Hallahan, 2008, p. 55). Hallahan (2008) further explained, “Organizations can serve either as

sponsors of internal online communities...or as active and coequal participants in external virtual communities organized around topics important to the organization” (p. 55). Park and Reber (2008) measured communality by looking at organizational good will and favorable deeds.

Exchange relationships fit under marketing, where one party does something because they expect something in return. This is often not good enough for public relations (Hon & Grunig, 1999). Public relations practitioners should utilize social media as another way to interpersonally communicate with publics. Social media sites, like Twitter, do not exist for publicity-only purposes. In other words, practitioners should not use new media to merely sell something to publics. These sites operate for people to network and communicate with others on a personal level.

Interactivity

Over the years, many researchers have maintained one of the key variables in studying new media is interactivity (Rafaeli, 1988; Sundar, Kalyanaraman, & Brown, 2003). Sundar et al. (2003) argued, “With the increasing convergence of media, interactivity often refers to users having the potential to be both sources and recipients of content and interaction” (p. 32). There is a vast amount of research on interactivity, but many scholars differ on its conceptualization. As defined by Rogers (1995), interactivity is “the degree to which participants in a communication process can exchange roles and have control over their mutual discourse” (p. 314).

Sundar et al. (2003) identified two main views of interactivity, which include the contingency view, or “a message-based conceptualization of interactivity” (p. 34), and the functional view, or “an interface’s capacity for conducting a dialogue or information exchange between users and the interface” (p. 33). Under the contingency view, Rafaeli (1988) defined interactivity as “an expression of the extent that in a given series of communication exchanges, any third (or later) transmission (or message) is related to the degree to which previous

exchanges referred to even earlier transmissions” (p. 111). This definition of interactivity looks at the behavior of the user rather than the technology, that in order for a message to be considered interactive, a previous, related message had to occur. Conversely, the functionality view considers the technological aspects of the medium, such as links, video, chat rooms, feedback, etc. (Sundar et al., 2003).

Sundar et al. (2003), in experimental research, tested the interactivity of political websites among a group of undergraduate students. The researchers used three conditions, low, medium, and high interactivity, to test the effects of interactivity on the impression formation surrounding the candidates’ websites. The low stimulus condition did not contain any hyperlinks. The medium condition contained links related to the biographical information on the webpage. The third or high-interactivity condition mirrored the medium-interactivity condition, but the subsequent page posted links for further reading as well. They found that higher interactivity led to more positive impressions of a candidate, and this can extend to organizations.

Social Media Research

Communication researchers have only begun to investigate Twitter, but research on social media, in general, and social networking sites and blogs, in particular, is on the rise. Some scholarship has investigated social networking sites such as Facebook and MySpace, but it mostly has dedicated a lot of effort in descriptive research of the social networking sites’ users (Thelwall, 2008) as well as the perceptions of user profiles (Walther, Van Der Heide, Kim, Westerman, & Tong, 2008; Tufekci, 2008; Tong, Van Der Heide, Langwell, & Walther, 2008; Ellison, N., Steinfield, C., & Lampe, C., 2007). Other research has also focused on politics and new media. The following section will focus on social media as it relates to public relations. I will highlight practitioners’ adoption of social media, organizational use of social networking sites like Facebook, and organizational use of blogs.

Some public relations research has focused on the adoption and use of social media among practitioners. With the introduction of each new technology, research has shown that public relations practitioners are frequently slow to adopt new media (Porter, Sallot, Cameron, & Shamp, 2001; Eyrich, Padman, & Sweetser, 2008). This research has also illustrated that practitioners who are quick to adopt new media feel a sense of empowerment. Eyrich et al. (2008) found that practitioners seem comfortable with more established tools such as e-mail and Intranets as well as newer media such as blogs and podcasts. Porter et al. (2001) argue that these new technologies allow practitioners to “pursue a proactive or strategic management approach to issues management” due to the instantaneous reception and dissemination of information (p. 174). Porter et al. (2001) also found that women were slower to adopt new media, and those practitioners who see themselves as managers, rather than technicians, were quicker to adopt new media and used it more often. In a later study, Porter and Sallot (2003) found that public relations practitioners were no longer laggards in adopting new technologies. They also found that women were catching up to men in the use of new media.

Current research analyzes the actual practitioner adoption of social networking sites like Facebook. Bortree and Seltzer (2009) examined to what degree environmental advocacy groups used dialogic strategies on their organizations’ Facebook pages as well as whether these strategies led to better dialogic engagement between the organizations and their visitors. They found that most of the advocacy organizations inadequately used Facebook for facilitating dialogue. “This is unfortunate as dialogic strategy use appears to be closely related to positive dialogic outcomes...,” argue Bortree and Seltzer (2009, p. 318).

Waters, Burnett, Lamm, and Lucas (2009) also investigated organizational profiles on Facebook. They defined three key elements important in communicating with stakeholders online. These elements included transparency or disclosure, usefulness of information, and

interactivity. In examining how 275 non-profit organizations used Facebook to advance their organizations' missions and programs, Waters et al. (2009) found that organizations most often used disclosure as a strategy and often ignored dissemination and involvement. Like Bortree and Seltzer (2009), Waters et al. (2009) found that organizations failed to partake in the interactive nature of social networking sites. "Most nonprofits lack the resources or time to provide constant attention to a Facebook page. Creating a profile and then abandoning it will create only minimal exposure for the organization," argued Waters et al. (2009, p. 105). This lack of activity, the authors argue, could turn off organizational stakeholders.

A larger area of social media research and public relations involves the use of blogs. Blogs can serve as strategic interpersonal communication tools. Strengths in blogging for helping public relations practitioners with their jobs include the capabilities for research, environmental scanning, and issues management (Kent, 2008). Conversely, blogs also have some weaknesses, for example, the communicative risks involved in blogging, the exaggerated significance attached to blogging, and blogger credibility and status (Kent, 2008). Kent (2008) stated, "A blog will only be useful to an organization if it has someone to maintain it, someone trained in effective dialogic communication, and someone who has the trust of individuals and publics" (p. 39). He warns against practitioners jumping in headfirst into blogging without learning how to swim in the sea of the blogosphere.

Other public relations research on blogging has looked at the perceived credibility practitioners assign to blogs. Sweetser, Porter, Chung, and Kim (2008) investigated the credibility and use of blogs among journalists and public relations practitioners. The most common use for blogs, Sweetser et al. (2008) discovered, is for surveillance and research. In addition, the use of blogs for surveillance served as a strong predictor in how credible practitioners found blogs. Younger professionals tended to prescribe more credibility to blogs,

but all professionals reported that blogs will have a huge impact on their profession. As mentioned by Kent (2008), this impact can be either positive or negative in nurturing relationships with publics.

Some research has demonstrated a clear link between the use of new media and a sense of empowerment among public relations practitioners. This research has cited that practitioners who blog feel a greater sense of expertise and prestige power but not structural power (Porter, Trammell, Chung, and Kim, 2007). On the contrary, other scholarship has found that practitioners who more readily use social networking sites report higher personal sense of structural power and feel it allows them to advance in their organization (Diga and Kelleher, 2009). These researchers have all stated that public relations practitioners use social media to demonstrate expertise in dealing with media relations (Porter et al., 2007; Diga & Kelleher, 2009). “Practitioners who use social network sites may be more likely to perceive their prestige as enhanced by having influential ‘followers’ or ‘friends’ through sites such as Twitter or Facebook, respectively,” argued Diga and Kelleher (2009, p. 442).

Other research has looked at blogs and how they help maintain relationships with publics. Seltzer and Mitrook (2007) stated that “weblogs incorporate dialogic communication principles to a greater degree than traditional Web sites, potentially making them better suited for online relationship building” (p. 227). They found blogs utilize the dialogic communication principles of conservation of visitors, ease of interface, and usefulness to media, to a greater degree than traditional websites (Seltzer & Mitrook, 2007). Some researchers have argued that blogs possess better relationship-building abilities due to this increased opportunity for dialogic communication (Seltzer & Mitrook, 2007).

In addition, Kelleher and Miller (2006) looked into organizational “blogs as antecedents to people’s perceptions of a corporation’s relational maintenance strategies” and means of

organizational-public communication (p. 396). They found some support that organizational blogs are valuable in building and maintaining relationships with publics because the blogs convey some sense of human voice to a stiff organizational façade. Their findings reported that consumers found blogs to sound more conversational than corporate websites and that voice correlated with positive relationship outcomes. Sweetser and Metzgar (2007) also looked at blogs as a relationship management tool by using a crisis to rate organizational blogs. Those respondents who viewed organizational blogs thought the organization did a better job at maintaining relationships as well as reported lower levels of crisis for the organization compared to the other experimental groups. Both studies involved the transparency and disclosure aspect that blogs bring to the public relations communication arsenal.

Like blogs, Twitter possesses the opportunity for dialogic communication between organizations and publics. With the proliferation of organizational use of Twitter, it is important to investigate how organizations try to build relationships by using this medium. The scholarship on blogs and OPRs can help shed light on how to investigate the relationships on Twitter. Taking from blog research and the use of Hon and Grunig's relationship measurement scale, this study aims to look into the trends and evaluate the efforts in organizations' use of Twitter to build relationships with publics.

CHAPTER 3. SUMMARY, RESEARCH QUESTIONS, AND HYPOTHESIS

Twitter, as a social medium, offers public relations practitioners a unique opportunity to cultivate mutually beneficial relationships with publics. The platform of Twitter marries mass communication with interpersonal communication, meaning many users can read every tweet, but organizations can target posts to individuals as well. Since Twitter is a social medium, organizations could use it to communicate with audiences on a more personal level. If organizations choose not to use the site for implementing two-way communication, those organizations might as well stick with the antiquated corporate website. As seen in previous literature regarding OPRs, two-way symmetrical communication is vital in developing successful relationships (Hon & Grunig, 1999).

According to previous research, practitioners should aim for forming communal relationships in which both parties work together for the benefit of each other using two-way symmetrical communication (Hon & Grunig, 1999). Twitter sets organizations up for easy use of the dialogical loop in which publics can provide feedback to organizations. This allows organizations to use the feedback to respond to publics. In short, long-term beneficial relationships influence behavior (O'Neil, 2007). Twitter gives organizations an ideal platform in which to cultivate these relationships. In addition, the interactive nature of Twitter allows corporations not only to communicate to their publics but also to converse with those publics.

By using Grunig's four models of public relations and Hon and Grunig's relationship indicators, this study investigated the relationships between corporations and their publics on Twitter through a qualitative and quantitative content analysis. The content analysis also looked at descriptive features of corporate Twitter pages to investigate how these organization use Twitter on a daily basis.

Twitter is a relatively under researched social medium in which many corporations have adopted in their everyday communication with publics. As previously mentioned, the main role of public relations practitioners is building relationships with their publics.

RQ1: How are companies using Twitter as a communication tool?

RQ2: According to Grunig's four models of public relations, do corporate tweets closely align with the press agency/publicity model, public information model, two-way asymmetrical model, or two-way symmetrical model of public relations?

Research on the Internet as an OPR building tool involves the potential of the web for implementing dialogic principles (Kent & Taylor, 1998; Seltzer & Mitrook, 2007; Park & Reber 2008; Bortree & Seltzer, 2009). Seltzer and Mitrook (2007) concluded that "public relations practitioners who are versed in two-way symmetrical communication skills....will be capable of practicing the type of excellent public relations that effective blogging demands, thus allowing the weblog to reach its full dialogic potential in online relationship building" (p. 229). One of these principles is the conservation of visitors. In investigating conservation of visitors, Park and Reber (2008) found that "Corporations' efforts to maintain repetitive interactions or dialogue demonstrate their commitment to building successful long-term relationships" (p. 410). Therefore, those companies that implement two-way symmetrical communication on Twitter will foster trust and commitment with their publics, which will, in turn, keep their publics engaged. That is why the following hypothesis investigated whether two-way symmetrical communication conserves or builds on corporations' follower base.

H1: Those companies that implement two-way symmetrical communication on Twitter will retain or expand their number of followers.

RQ3: According to Hon and Grunig's (1999) relationship indicators, how effectively are corporations building relationships with publics on Twitter?

Over the years, many researchers maintain one of the key variables in studying new media is interactivity (Rafaeli, 1988; Sundar, Kalyanaraman, & Brown, 2003). While Twitter limits tweets to 140 characters, it offers a great space to interact with publics. Corporations can link information to users, and they can talk directly to and with users.

RQ4: How interactive are corporate posts on Twitter?

CHAPTER 4. METHOD

The objective of this research project was to demonstrate how corporations use Twitter to communicate to and with their publics and whether their communication efforts align closely with Grunig's four models of public relations and Hon and Grunig's relationship indicators. This study implemented a quantitative and qualitative content analysis to investigate how corporations use Twitter. Wright (1986) defined content analysis as "a research technique for the systematic classification and description of communication content according to certain usually predetermined categories" (p. 125). Hon and Grunig (1999) suggested using a questionnaire to measure the relationship indicators; however, this study implemented a content analysis because content analysis is an ideal way to measure media messages. Semantics can get lost in translation when posting on the Internet, so by utilizing a content analysis with set definitions, I was able to objectively analyze the corporate Twitter messages. In addition, a content analysis is an unobtrusive selection of research where "the researcher does not 'intrude' on what is being studied and thus does not affect the outcome of the research" (Berger, 2000, p. 181). Wright (1986) said, "Researchers have used content analysis not only to study the characteristics of communication content, but also to draw inferences about the nature of the communicator" (p. 126). Previous research also used content analyses to investigate how Hon and Grunig's relationship indicators apply to online communication (Park & Reber, 2008).

The quantitative portion of the content analysis measured frequencies and other descriptive and inferential statistics of the corporations Twitter homepages and tweets as defined by predetermined categories. The qualitative aspect of the content analysis helped to make meaning out of the quantitative portion. It went beyond the numbers and gave concrete examples of how corporations used Twitter to communicate. The qualitative content analysis helped

identify common themes that emerged from the data and to highlight actual text of the corporations' tweets.

This study employed a convenience sample of 37 companies currently using Twitter as identified by the article "40 of the Best Twitter Brands and the People Behind Them" from Mashable.com (van Grove, 2009) and a random sample of 10 Fortune 50 companies. Because of the nature of this study and its newness, a convenience sample proved to be the best method to investigate the relationship-building mechanisms corporations used on Twitter. In order to accomplish this, I needed to examine sites predetermined by social media experts as successful in using Twitter. Some companies on the top 40 list had more than one Twitter site, but this study only used the main site from each company. The content analysis used a sample provided by Mashable.com because it is "the world's largest blog focused exclusively on Web 2.0 and Social Networking news" (Mashable, 2009). The authors who contribute to the site are social media experts who know the ins and outs, as well as the most up-to-date news, regarding social media. I wanted to investigate if these companies implemented proper public relations tactics on Twitter as noted in previous public relations literature on OPRs. I also chose to select 10 random companies from the Fortune 50 list to add variability to the research. See Table 4 for a list of the companies in the sample.

This study considered each company's Twitter homepage (n=94) at 8 p.m. on November 18, 2009, and 8 p.m. on November 25, 2009, as well as all the tweets (n=1,577) posted by the 47 companies between 8 p.m. on November 18, 2009, and 8 p.m. on November 25, 2009. I chose this one-week period because it fell right before the Thanksgiving and Christmas seasons, so holiday messages would not interfere with everyday tweeting. The sampling process included screenshots of the current Twitter homepages and PDF printouts of the companies' tweets every

day for a 24-hour period during the span of a week. Each homepage and each tweet acted as one unit of analysis.

Table 4.

List of Companies in Sample

Name of Company	Twitter ID	Type of Company
92Y	92YTribeca	Entertainment
American Apparel	Americanapparel	Retail
Best Buy	BestBuyRemix	Retail
Burger King	theBKlounge	Food and Beverage
Carnival Cruise Lines	CarnivalCruise	Travel
Chevrolet	AdamDenison	Car
Chevron	Chevron	Car
Chicago Bulls	Chicagobulls	Sports Team
Comcast	Comcastcares	Entertainment
Dell	RichardatDELL	Big Brand
Detroit Pistons	DETPistons	Sports Team
Direct TV	DIRECTV	Entertainment
Dunkin' Donuts	DunkinDonuts	Food and Beverage
EMC	Emccorp	Big Brand
Ford	ScottMonty	Car
General Electric	GE_Reports	Big Brand
General Motors	GMblogs	Car
H&R Block	HRBlock	Finance
Hertz	ConnectByHertz	Travel
Honda	Alicia_at_Honda	Car
Intuit	Intuit	Finance
Jet Blue Airways	JetBlue	Travel
Luxor Las Vegas	LuxorLV	Travel

(Table 4 Continued)

Name of Company	Twitter ID	Type of Company
Marriott International Hotels and Resorts	MarriottIntl	Travel
Marvel Entertainment	Marvel	Entertainment
McKesson Health IT	McKesson_HIT	Big Brand
Microsoft	Microsoft	Big Brand
Pfizer News	pfizer_news	Big Brand
PopCap	popcap_games	Entertainment
Popeyes Chicken	PopeyesChicken	Food and Beverage
Portland Trail Blazers	Pdxtrailblazers	Sports Team
Rubbermaid	Rubbermaid	Retail
San Diego Chargers	Chargers	Sports Team
Sears Holdings	SearsHoldings	Retail
Southwest Airlines	SouthwestAir	Travel
Starbucks	Starbucks	Food and Beverage
State Farm	StateFarm	Other
Tasti D-Lite	Tastidlite	Food and Beverage
The Home Depot	HomeDepot	Retail
The Travel Channel	Travelchannel	Entertainment
TV Guide	TVGuide	Entertainment
Verizon Wireless	VZWOffers	Big Brand
Wachovia	Wachovia	Finance
Walgreens	Walgreens	Retail
Wells Fargo	Ask_WellsFargo	Finance
Whole Foods	WholeFoods	Retail
Zappos.com	Zappos	Retail

There were two code sheets for this content analysis. Code sheet one (see Appendix B) measured descriptive aspects of the Twitter homepages. The researchers coded each homepage

twice, once at 8 p.m. on November 18, 2009, and once at 8 p.m. on November 25, 2009. I used code sheet one to show any changes in the general aspects of each company's Twitter homepage. Coders used code sheet two (see Appendix D) for each tweet posted during the one-week period. Code sheet two measured descriptive aspects of each tweet. See Appendix A and Appendix C for codebooks one and two, which operationalized the coding categories for both code sheets.

I served as the primary coder of both code sheets. I used two additional coders to test for intercoder reliability. The first second coder analyzed the Twitter homepages, while the other second coder analyzed the corporate tweets. The coders analyzed a randomly selected 10% of the data to test for intercoder reliability. To ensure intercoder reliability, I conducted separate training sessions with the second coders. I conducted one training session with the second coder of the Twitter homepages, and I conducted several training sessions with the second coder of corporate tweets. I conducted multiple training sessions for the corporate tweets to better identify and define types of tweets.

Twitter Homepages

Code sheet one analyzed general descriptive aspects of each company's Twitter homepage. Coding Twitter homepages included both quantitative and qualitative aspects of the Twitter homepages. The first coding category consisted of time (time coded and date coded). The second coding category consisted of descriptive aspects of the Twitter homepage (type of company, name of company, Twitter ID, name of author if available, number of people following company, number of people the company follows, and number of lists). The third category described the background and picture used on the corporate Twitter homepage. The final category consisted of the biography of the corporation (location, web address, biography). I used simple agreement and Scott's pi to test for intercoder reliability. All nine quantitative variables had a simple agreement of 100% and a perfect Scott's pi of 1 (see Table 5).

Table 5.**Intercoder Data for Twitter Homepages**

Code Sheet One Variable	Simple Agreement	Scott's pi
Date	100%	1
Time	100%	1
Type of Company	100%	1
Name of Company	100%	1
Name of author	100%	1
Twitter ID	100%	1
Number of people the company follows	100%	1
Number of followers the company has	100%	1
Listed	100%	1

Corporate Tweets

Researchers used code sheet two, which also included both quantitative and qualitative variables, to examine each individual tweet from the organization's Twitter homepages. The first coding category was the Twitter ID. The second coding category consisted of time (date of post and time of post). Coders copied and pasted the exact tweet in the third coding category. This helped identify qualitative aspects of the tweet. The fourth coding category labeled the type of tweet (original post, retweet "RT," or @reply). Each post that the coders identified as an "at reply" underwent further investigation. When available, the coders clicked the "in reply to" link to see the original message to which the company responded. This helped to identify later categories, as well as helped in the qualitative portion of the research. The fifth coding category marked a presence or absence of a link, and the coders copied and pasted the link as well as

identified the type of webpage to which it linked. The sixth coding category marked from where the tweet was posted (web, Twitterberry, CoTweet, TweetDeck, etc.).

Grunig's Four Models of Public Relations. The seventh category investigated the four models of public relations (press agency/publicity, public information, two-way asymmetrical, two-way symmetrical). Researchers coded each model individually for a presence or absence of the model. The coders were encouraged to pick the model that best fit the tweet, or the one that most represented the tweet. At times, researchers found that some posts could fit two different models, so the coders picked the one that best fit the tweet.

Researchers coded for press-agentry/publicity when tweets demonstrated obvious propaganda for the company or attempt to persuade the reader to use a product or a service. Researchers coded for press agency when companies used one-way communication, with the distinct use of persuasive or biased language. This included promotional offers, such as “15% off.” A press agency post could also demonstrate obvious publicity of the company, using biased language, such as “the best in town.” This type of post did not try to communicate with others using at replies. An example of this type of post is one from H&R Block, “Only 2 days left. Never put off until tomorrow, what you can forget about forever. Except for your taxes! File today <http://bit.ly/bkqwN>.”

Public information tweets were posts that seemed informative in nature without using persuasive or biased language. A public information post used one-way communication, with direct, objective language. This included scores from a game, directions to a location, current events, etc. Even if the post was about the company posting the information, it could still fit under this model if it lacked biased language. If the post used at replies, it did not fit under public information because at replies demonstrate two-way communication. An example of this type of post is one from the Portland Trail Blazers basketball team, “Blazers beat Thunder 113-83 for

win No. 53. Roy plays 21 minutes, scores 20 points. Outlaw with 21, Oden with 16 and 9. DEN up next #uprise.”

Two-way asymmetrical posts used two-way communication that advocated feedback or suggested a certain product or service to help the corporation (most of the time will include @replies). Two-way asymmetrical posts communicated with publics to focus on overall organizational goals with obvious intentions to solicit the user to buy a new product or service. The only instance in which a post did not include an at reply and still fit under this category was when the company generally asked all users for feedback about company products or services. An example of this type of post is one from Tasti D-lite, “@keintzb Can I ask how you heard about our Flavor Alerts? <http://bit.ly/WF2uS>.”

Two-way symmetrical posts used two-way communication that helped manage conflicts and promoted better understanding between the company and the public (most of the time will include @replies). Two-way symmetrical posts will demonstrate a desire to build long-term mutually beneficial relationships with the public. These posts included a company’s desire to fix a problem a user may have with the company, to give advice on how to use products, to direct users to information, and to have casual conversations with users. An example of a post demonstrating two-way symmetrical communication is one from The Home Depot, “@WarehouseMedia Justin - I saw your tweet. We've made changes/progress. Try us again & send me your feedback information@homedepot.com.”

Hon and Grunig’s Relationship Indicators. The eighth category investigated Hon and Grunig’s relationship indicators (control mutuality, commitment, satisfaction, and trust). The researchers coded each indicator separately to identify an absence or presence of the indicator. Each tweet could have no signs of the relationship indicators or all of the indicators.

Posts that demonstrated control mutuality showed a desire to create a conversation

around the company with the other Twitter users. Control mutuality included “responsive discourse” that was “timely, pertinent, and authentic” (Hallahan, 2008, p. 53). Most @replies fell under “yes” for control mutuality. Posts that solicited ideas, information, or other feedback about the company or company products and services to users also fit under this category because this gave the users an opportunity to make their experience with the company better. Only posts that related to the company or company products or services fit under control mutuality. The posts did not have to use the actual company or product name to constitute starting a conversation around the company. An example of control mutuality in a tweet is from Starbucks Coffee, “@hi_its_michelle Yes, neither ground nor whole bean coffee should go in the fridge or freezer.”

Posts that showed commitment demonstrated a desire to foster a long-term relationship with the public. Committed posts also tried to provide useful information to other Twitter users so they will continue to build relationships with the company. Commitment posts included answers to questions, tips, useful information, attempts to make the experience with the company better, affirmations that the company enjoys conversing with users, etc. Emotional responses expressing appreciation, connection, or care also fit under commitment. An example of a post utilizing commitment came from Southwest Airlines, “@dacort it's not pretend. I care about you! :).”

Researchers coded for satisfaction when posts revealed that Twitter users let the company know they are satisfied with the company. Posts that showed satisfaction were those where “positive expectations about the relationship are reinforced” (Hon & Grunig, 1999, p. 3). Retweets (RT), or posts that originated from other Twitter users reposted by the company, also demonstrated customer satisfaction, which fell under the category of satisfaction. In addition, attempts to correct company mistakes or pointing the user to the correct place for feedback demonstrated a desire for customer satisfaction, even when the customer seemed dissatisfied in

the original posts. Many customer service responses fit under satisfaction. If posts were obvious remarks of customer dissatisfaction, and the company did not try to help that user, the coders identified the post by coding “dissatisfaction” for that variable. An example of a post showing satisfaction was one from Wachovia, “@KyleHepp - We're glad you switched too! :-) If you ever need anything, we're here on Twitter ready to help.”

Posts that demonstrated trust included tweets where the company showed a desire to extend useful information to other users (the information did not have to always associate with the company or products and services of that company). These posts showed the competence, dependability, and integrity of the company. Posts that also included positive, casual conversations with customers (can be unrelated to the company) demonstrated the company’s attempt at achieving consumer trust. Attempting to correct company mishaps or to report a delay, infraction, recall, etc. also demonstrated trust because this showed the company’s willingness to be transparent. An example of a post fostering trust came from Jet Blue Airways, “Weather and winds in the Northeast may be causing delays or cancellations. Go to <http://jetblue.com/flightst...> to check flight status.”

The ninth category looked at whether the tweet demonstrated the company’s attempt for forming a communal or exchange relationship. Posts that identified communal relationships showed the company’s desire to do good deeds. In addition, researchers coded for communal relationship if the post demonstrates that “both parties provide benefits to the other because they are concerned for the welfare of the other – even when they get nothing in return” (Hon & Grunig, 1999, p. 3). These posts included helpful information, directing users to appropriate people to talk to about complaints, etc. Most customer service tweets fit under a communal relationship. An example of communal relationship in a post is one from Whole Foods, “@OffHerCork For those totes, it's best to wipe clean with a damp sponge or rag rather than

machine washing, which could damage them.” Tweets that fostered exchange relationships demonstrated obvious marketing techniques. These posts also showed the company helps the Twitter user because they expected something in return. An example of this type of post is one from American Apparel, “15% off swimwear on our online store! <http://bit.ly/swimwear4men> and <http://bit.ly/swimwear4women>.”

Interactivity. The tenth category measured the level of interactivity of the Twitter post. Since the Twitter limits user posts to 140 characters and the ability to see conversations between users, the coders used a low, medium, and high interactivity scale. Posts, with low interactivity, included tweets with no links, @replies, RT’s, or any extra features other than the original message. An example of a tweet with low interactivity included this from Wachovia, “Have a great evening. I’ll be back to help you in the morning. ^JR.” Posts, with medium interactivity, included tweets with links to pictures, videos, websites, or any other further information to accompany the original message. RT’s of other messages that do not include a response to the other user’s original message also fit under the medium category. Mentions (not actual replies), using the at symbol, “@,” also fit under medium interactivity. Examples of medium interactivity include the following: Starbucks, “I’m drinking a cup of Verona through the Clover. #nomnom <http://yfrog.us/1122594891z>,” Tastidlite, “RT @MobileBehavior: Tasti D-Lite uses YouTube to explain their Foursquare check-in specials: <http://ow.ly/T5ms>,” TV Guide, “No decisions made on @kathygriffin 's future with CNN: <http://bit.ly/7ElS0b>.” Posts, with high interactivity, included tweets that were at replies to other users. When companies retweeted other posts with comments before the RT, the tweet fell under high interactivity. Examples of high interactivity included the following: Comcast, “Always good to see @blankbaby RT Jack_Beitz A meeting of the minds !!! (@blankbaby and @comcastcares) pic: <http://twitpic.com/wtqtq>” and “@EECE2 Always interested in hearing about experiences. My email is

frank_eliason@comcast.com18 minutes ago from web in reply to EECE2.”

The eleventh category served as an open area to mark down any other interesting information coders found while coding. In addition, coders used this area to post any common themes found in the corporate tweets.

I used simple agreement and Scott's pi to test for intercoder reliability (See Table 6). Four out of the 15 quantitative variables had a simple agreement of 100% and perfect Scott's pi of 1, while Scott's pi between .801 and .958 were found for 10 out of 15 quantitative variables. An unacceptably low Scott's pi of .563 was found for the two-way asymmetrical model variable, but a simple agreement of 91.4% was found for the same variable. When the researchers recoded the press agency and public information models into one-way communication and the two-way asymmetrical and two-way symmetrical models into two-way communication, Scott's pi of .938 and .951 were found.

Table 6.

Intercoder Data for Corporate Tweets

Code Sheet Two Variable	Simple Agreement	Scott's pi
Twitter ID	100%	1
Date of Post	100%	1
Time of Post	100%	1
Type of Post	97.5%	.958
From where the user posted the tweet	100%	1
Press Agency/Publicity	96.9	.926
Public Information	96.3	.877
Two-way Asymmetrical	91.4%	.563
Two-way Symmetrical	93.2%	.859
One-way Communication	96.9%	.938
Two-way Communication	97.5%	.951

(Table 6 Continued)

Code Sheet Two Variable	Simple Agreement	Scott's pi
Control Mutuality	91.4%	.802
Commitment	92%	.826
Satisfaction	92.6%	.801
Trust	92.6%	.822
Communal vs. Exchange Relationship	92.6%	.824
Interactivity	96.3%	.938

CHAPTER 5. RESULTS

Twitter is a social medium that corporations have adopted and added to their communication arsenal. The platform of this medium allows those companies to communicate to a mass audience, as well as to individuals. It is important to study how those corporations use Twitter as a communication tool according to public relations theories, since the nature of this medium allows for the cultivation of relationships between individuals and corporations. This chapter provides a detailed description of the research findings from a content analysis conducted for 47 corporations on Twitter. This section begins by presenting general data from the company Twitter homepages and corporate tweets as they relate to the research questions and the hypothesis. Qualitative data will help make meaning of the quantitative data in this section.

RQ1: How Are Companies Using Twitter as a Communication Tool?

Twitter Homepages. The number of people the companies follow (“following”), the number of people who follow the companies (“followers”), and how many users list the company (“listed”) differed from company to company (See Table 7). Whole Foods Market (WholeFoods) followed the highest number of users on Twitter ($n = 551,159$) on November 25, 2009, while Sears Holdings (SearsHoldings) followed the lowest number of users on Twitter ($n = 31$) on November 18, 2009. Fourteen companies reported a negative percent change in the number of people that the corporations followed. This could be the result of the company deleting Twitter accounts they follow or those Twitter account holders denying access to the companies. Five companies reported no change (0.0%) in the number of Twitter accounts they followed during the sampling timeframe. The four companies reporting the highest percent increase in the number of Twitter accounts they follow included DIRECTV (DIRECTV) with 4.5% increase, General Motors (GMblogs) with a 12.9% increase, Microsoft (Microsoft) with 4.5% increase, and Tastidlite (tastidlite) with an 8.3% increase.

Whole Foods Market (WholeFoods) had the highest number of followers on Twitter (n = 1,605,552) on November 25, 2009, while Sears Holdings (SearsHoldings) has the lowest number of followers on Twitter (n = 253) on November 18, 2009. All 47 companies increased the number of followers they had during the one-week sampling period. Three companies reported percent change of the number of followers below 0.5%, which included Hertz (ConnectByHertz, 0.4%), General Electric (GE_Reports, 0.4%), and H&R Block (HRBlock, 0.1%). The three companies with the highest percent change over 5% included Starbucks (Starbucks, 5.1%), TV Guide (TVGuide, 5.4%), and Walgreen (Walgreens, 8.3%).

Starbucks (Starbucks) was listed the most on November 25, 2009, (n = 4,048), while Sears Holdings (SearsHoldings) was listed the least on November 25, 2009, (n = 11). All companies, except Sears Holdings (SearsHoldings, 0.0%), reported an increased number of lists for their companies. Seven companies reported a percent changes below 8.0%, which included Carnival Cruise Lines (CarnicalCruise, 6.6%), Marvel Entertainment (marvel, 7.7%), Pfizer (pfizer_news, 7.8%), PopCap (popcap_games, 7.9%), Dell (RichardatDELL, 6.9%), Rubbermaid (rubbermaid, 6.7%), and Sears Holdings (SearsHoldings, 0.0%). Four companies reported percent changes above 20.0%, which included Chevron (Chevron, 26.2%), Hertz (ConnectByHertz, 20.8%), Burger King (theBKlounge, 28.3%), and Walgreens (Walgreens, 21.5%).

Companies generally reported lower following numbers compared to follower numbers (n = 42) except for five companies, which included Comcast (comcastcares), Hertz (ConnectbyHertz), Dell (RichardatDELL), Rubbermaid (rubbermaid), and Tastidlite (tastidlite). While 42 companies reported following fewer users, 18 companies followed relatively the same number of users as followed them (within 1,000 users). The other 29 companies followed relatively fewer users as followed them, which included but are not limited to Verizon Wireless

(VZWOffers), American Apparel (americanapparel), Carnival Cruise Lines (CarnivalCruise), Chicago Bulls (chicagobulls), JetBlue Airways (JetBlue), Marvel Entertainment (Marvel), Microsoft (Microsoft), Whole Foods Market (WholeFoods), and Zappos.com (zappos).

Table 7.

Twitter Homepage Frequencies by Twitter ID

Twitter ID (Company Name)	Following			Followers			Listed		
	11.18.09	11.25.09	% Change	11.18.09	11.25.09	% Change	11.18.09	11.25.09	% Change
92YTribeca (92Y)	3,795	3,836	1.1%	4,299	4,339	0.9%	150	169	12.7%
AdamDenison (Chevrolet)	436	437	0.2%	2,194	2,212	0.8%	48	55	14.6%
Alicia_at_Honda (Honda)	4,156	4,199	1.03%	6,043	6,098	0.9%	106	121	14.2%
americanapparel (American Apparel)	16,635	16,614	-0.1%	48,612	49,110	1.02%	641	705	10.0%
Ask_WellsFargo (Wells Fargo)	2,883	2,900	0.6%	3,627	3,653	0.7%	74	85	14.9%
BestBuyRemix (Best Buy)	2,137	2,144	0.3%	3,208	3,252	1.4%	51	57	11.8%
CarnivalCruise (Carnival Cruise Lines)	121	121	0.0%	11,455	11,574	1.0%	196	209	6.6%
chargers (San Diego Chargers)	25,027	25,569	2.2%	28,515	28,961	1.6%	459	499	8.7%
Chevron (Chevron)	93	95	2.2%	1,597	1,645	3.0%	42	53	26.2%
Chicagobulls (Chicago Bulls)	5,741	5,751	0.2%	23,424	24,002	2.5%	490	547	11.6%
comcastcares (Comcast)	33,837	34,837	3.0%	33,583	34,210	1.9%	434	482	11.1%
ConnectByHertz (Hertz)	12,215	12,237	0.2%	12,147	12,193	0.4%	77	93	20.8%
DETPistons (Detroit Pistons)	1,136	1,135	-0.1%	8,642	8,774	1.5%	209	228	9.1%
DIRECTV (DIRECTV)	1,036	1,083	4.5%	11,655	11,858	1.7%	254	285	12.2%
DunkinDonuts (Dunkin' Donuts)	38,223	38,721	1.3%	38,574	38,993	1.1%	689	747	8.4%

(Table 7 Continued)

Twitter ID (Company Name)	Following			Followers			Listed		
	11.18.09	11.25.09	% Change	11.18.09	11.25.09	% Change	11.18.09	11.25.09	% Change
emccorp (EMC)	3,054	3,054	0.0%	3,174	3,226	1.6%	85	94	10.6%
GE_Reports (General Electric)	2,421	2,418	-0.1%	3,977	3,992	0.4%	57	67	17.5%
GMblogs (General Motors)	2,746	3,101	12.9%	11,670	11,761	0.8%	267	298	11.6%
HomeDepot (The Home Depot)	14,486	14,796	2.1%	15,225	15,847	4.1%	299	338	13.0%
HRBlock (H&R Block)	3,302	3,302	0.0%	3,654	3,659	0.1%	47	55	17.0%
Intuit (Intuit)	10,871	11,035	1.5%	11,020	11,163	1.3%	147	165	12.2%
JetBlue (JetBlue Airways)	116,611	116,554	-0.05%	1,447,409	1,465,727	1.3%	1,720	1,907	10.9%
LuxorLV (Luxor Las Vegas)	4,114	4,118	0.1%	11,732	11,880	1.3%	335	366	9.3%
MarriottIntl (Marriott International Hotels and Resorts)	12,667	12,662	-0.04%	17,515	17,694	1.0%	386	430	11.4%
Marvel (Marvel Entertainment)	212	216	1.9%	43,378	43,812	1.0%	1,427	1,537	7.7%
McKesson_HIT (McKesson Health IT)	125	126	0.8%	1,018	1,042	2.4%	30	34	13.3%
Microsoft (Microsoft)	132	138	4.5%	34,995	35,992	2.8%	1,675	1,859	11.0%
Pdxtrailblazers (Portland Trail Blazers)	2,057	2,053	-0.2%	13,175	13,388	1.6%	386	418	8.3%
pfizer_news (Pfizer News)	1,137	1,169	2.8%	3,442	3,571	3.7%	129	139	7.8%
popcap_games (PopCap)	5,076	5,071	-0.1%	10,101	10,276	1.7%	379	409	7.9%
PopeyesChicken (Popeyes Chicken)	4,441	4,451	0.2%	6,500	6,531	0.5%	144	161	11.8%
RichardatDELL (DELL)	9,609	9,680	0.7%	9,143	9,195	0.6%	218	233	6.9%
rubbermaid (Rubbermaid)	6,352	6,399	0.7%	6,090	6,120	0.5%	120	128	6.7%
ScottMonty (Ford)	33,611	33,522	-0.3%	34,177	34,615	1.3%	952	1,081	13.6%

(Table 7 Continued)

Twitter ID (Company Name)	Following			Followers			Listed		
	11.18.09	11.25.09	% Change	11.18.09	11.25.09	% Change	11.18.09	11.25.09	% Change
SearsHoldings (Sears Holdings)	31	32	3.2%	253	264	4.3%	11	11	0.0%
SouthwestAir (Southwest Airlines)	8,935	8,944	0.1%	868,079	885,175	2.0%	1,875	2,054	9.5%
Starbucks (Starbucks)	84,677	84,597	-0.1%	515,415	541,618	5.1%	3,660	4,048	10.6%
StateFarm (State Farm)	2,744	2,744	0.0%	4,237	4,319	1.9%	83	95	14.5%
tastidlite (Tastidlite)	2,396	2,594	8.3%	2,369	2,443	3.1%	72	78	8.3%
theBKlounge (Burger King)	2,327	2,323	-0.2%	3,332	3,360	0.8%	53	68	28.3%
travelchannel (The Travel Channel)	2,754	2,766	0.4%	13,717	13,877	1.2%	397	447	12.6%
TVGuide (TV Guide)	3,128	3,127	-0.03%	351,650	370,517	5.4%	1,588	1,727	8.8%
VZWOffer (Verizon Wireless)	39	39	0.0%	9,309	9,709	4.3%	331	377	13.9%
Wachovia (Wachovia)	5,044	5,043	-0.02%	5,649	5,681	0.6%	84	97	15.5%
Walgreens (Walgreens)	1,006	1,003	-0.3%	4,351	4,711	8.3%	121	147	21.5%
WholeFoods (Whole Foods Market)	545,531	551,159	1.0%	1,587,035	1,605,552	1.2%	3,038	3,326	9.5%
zappos (Zappos.com)	396,014	395,739	-0.1%	1,525,746	1,543,458	1.2%	3,043	3,331	9.5%

In addition, the company Twitter homepages ranged in design, complexity, and information provided. Each company's Twitter homepage background, layout, and profile picture (n = 47) remained the same during the sampling timeframe. The majority of the Twitter homepages presented the company logo on either the background or the profile picture. For example, see Dunkin' Donuts' (DunkinDonuts) Twitter homepage in Figure 3. When the author(s) of the Twitter pages were identified, some companies presented pictures of the

author(s) either on the background (e.g. General Motors, GMblogs and Wells Fargo, Ask_WellsFargo) or in the profile picture location (e.g. Dell, RichardatDELL and Ford, ScottMonty). For an example, see Wells Fargo's Twitter homepage in Figure 4. Out of the 47 companies investigated, 21 companies (44.7%) identified the Twitter site author(s), while 26 companies (55.3%) did not list author(s) on the Twitter homepage.

Some of the Twitter homepage backgrounds included further information on how to contact or connect with the company, as well as author and company information (e.g. Comcast, comcastcares and Marriott International Hotels and Resorts, MariottIntl). Burger King (theBKlounge) and McKesson Health IT (McKesson_HIT) were the only companies that did not list a website for further information about the company in the company information column. The biographies of the 47 companies remained the same between November 18, 2009, at 8 p.m. and November 25, 2009, at 8 p.m.

Company Tweets. From the sample of the 47 companies, 45 companies posted 1,577 tweets from 8 p.m. on November 18, 2009, to 8 p.m. on November 25, 2009. Of the 1,577 tweets, 695 (44.1%) were original posts, 215 (13.6%) were retweets, and 667 (42.3%) were at replies. Comcast (comcastcares) posted the most with 219 tweets (13.9%), followed by the Portland Trail Blazers (Pdxtrailblazers) with 85 tweets, Verizon Wireless (VZWoffers) with 83 tweets (5.3%), Marvel Entertainment (Marvel) with 82 tweets (5.2%), 92Y (92YTribeca) with 79 tweets (5.0%), and Tastidlite (tastidlite) with 76 tweets (4.8%). Two companies, H&R Block (HRBlock) and Burger King (theBKlounge), did not post any tweets ($n = 0$) during the one-week sampling timeframe. After the companies that did not post any tweets, EMC Corporation (emccorp) posted the least with one tweet, which was an original post (See Table 8)¹.

¹ For the purpose of this study, the four companies (JetBlue Airways, Southwest Airlines, TV Guide, and Whole Foods Market) were not included in the section comparing the most and least tweets. Due to technical glitches, the sample was missing some tweets from these four companies.



Figure 3. DunkinDonuts Twitter Homepage (11.25.09)



Figure 4. Ask_WellsFargo Twitter Homepage (11.25.09)

Table 8.**Type of Post by Twitter ID²**

Twitter ID	Type of Post			
(Company Name)	Original	RT	At Reply	Total
92YTribeca (92Y)	66 (83.5%)	7 (8.9%)	6 (7.6%)	79
AdamDenison (Chevrolet)	1 (14.3%)	3 (42.9%)	3 (42.9%)	7
Alicia_at_Honda (Honda)	6 (40.0%)	6 (40.0%)	3 (20.0%)	15
Americanapparel (American Apparel)	7 (87.5%)	1 (12.5%)	0 (0.0%)	8
Ask_WellsFargo (Wells Fargo)	10 (25.6%)	1 (2.6%)	28 (71.8%)	39
BestBuyRemix (Best Buy)	11 (45.8%)	6 (25.0%)	7 (29.2%)	24
CarnivalCruise (Carnival Cruise Lines)	7 (100.0%)	0 (0.0%)	0 (0.0%)	7
chargers (San Diego Chargers)	19 (30.6%)	42 (67.7%)	1 (1.6%)	62
Chevron (Chevron)	5 (71.4%)	2 (28.6%)	0 (0.0%)	7
Chicagobulls (Chicago Bulls)	41 (78.8%)	5 (9.6%)	6 (11.5%)	52
comcastcares (Comcast)	17 (7.8%)	4 (1.8%)	198 (90.4%)	219
ConnectByHertz (Hertz)	14 (66.7%)	1 (4.8%)	6 (28.6%)	21

² For the purpose of this study, the four companies (JetBlue Airways, Southwest Airlines, TV Guide, and Whole Foods Market) were not included in the section comparing the most and least tweets due to technical glitches. These companies are listed at the bottom of the table.

(Table 8 Continued)

Twitter ID (Company Name)	Type of Post			
	Original	RT	At Reply	Total
DETPistons (Detroit Pistons)	51 (94.4%)	2 (3.7%)	1 (1.9%)	54
DIRECTV (DIRECTV)	2 (4.0%)	0 (0.0%)	48 (96.0%)	50
DunkinDonuts (Dunkin' Donuts)	12 (20.3%)	15 (25.4%)	32 (54.2%)	59
emccorp (EMC)	1 (100.0%)	0 (0.0%)	0 (0.0%)	1
GE_Reports (General Electric)	8 (100.0%)	0 (0.0%)	0 (0.0%)	8
GMblogs (General Motors)	8 (42.1%)	7 (36.8%)	4 (21.1%)	19
HomeDepot (The Home Depot)	8 (18.6%)	4 (9.3%)	31 (72.1%)	43
HRBlock (H&R Block)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0
Intuit (Intuit)	5 (33.3%)	10 (66.7%)	0 (0.0%)	15
LuxorLV (Luxor Las Vegas)	12 (52.2%)	6 (26.1%)	5 (21.7%)	23
MarriottIntl (Marriott International Hotels and Resorts)	3 (27.2%)	1 (9.1%)	7 (63.6%)	11
Marvel (Marvel Entertainment)	51 (62.2%)	1 (1.2%)	30 (36.6%)	82
McKesson_HIT (McKesson Health IT)	13 (92.9%)	1 (7.1%)	0 (0.0%)	14
Microsoft (Microsoft)	21 (80.8%)	5 (19.2%)	0 (0.0%)	26

(Table 8 Continued)

Twitter ID (Company Name)	Type of Post			
	Original	RT	At Reply	Total
Microsoft (Microsoft)	21 (80.8%)	5 (19.2%)	0 (0.0%)	26
Pdxtrailblazers (Portland Trail Blazers)	51 (60.0%)	13 (15.3%)	21 (24.7%)	85
pfizer_news (Pfizer News)	5 (100.0%)	0 (0.0%)	0 (0.0%)	5
popcap_games (PopCap)	4 (20.0%)	1 (5.0%)	15 (75.0%)	20
PopeyesChicken (Popeyes Chicken)	5 (20.8%)	8 (33.3%)	11 (45.8%)	24
RichardatDELL (DELL)	5 (29.4%)	6 (35.3%)	6 (35.3%)	17
rubbermaid (Rubbermaid)	4 (80.0%)	1 (20.0%)	0 (0.0%)	5
ScottMonty (Ford)	8 (13.6%)	5 (8.5%)	46 (78.0%)	59
SearsHoldings (Sears Holdings)	6 (100.0%)	0 (0.0%)	0 (0.0%)	6
Starbucks (Starbucks)	10 (21.3%)	3 (6.4%)	34 (72.3%)	47
StateFarm (State Farm)	19 (54.3%)	6 (17.1%)	10 (28.6%)	35
tastidlite (Tastidlite)	24 (31.6%)	22 (29.0%)	30 (39.5%)	76
theBKlounge (Burger King)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0
travelchannel (The Travel Channel)	8 (53.3%)	0 (0.0%)	7 (46.7%)	15

(Table 8 Continued)

Twitter ID	Type of Post			
(Company Name)	Original	RT	At Reply	Total
VZWOffer (Verizon Wireless)	20 (24.1%)	2 (2.4%)	61 (73.5%)	83
Wachovia (Wachovia)	9 (50.0%)	0 (0.0%)	9 (50.0%)	18
Walgreens (Walgreens)	8 (100.0%)	0 (0.0%)	0 (0.0%)	8
zappos (Zappos.com)	9 (100.0%)	0 (0.0%)	0 (0.0%)	9
JetBlue (JetBlue Airways)	11 (100.0%)	0 (0.0%)	0 (0.0%)	11
SouthwestAir (Southwest Airlines)	9 (42.9%)	12 (57.1%)	0 (0.0%)	21
TVGuide (TV Guide)	69 (100.0%)	0 (0.0%)	0 (0.0%)	69
WholeFoods (Whole Foods Market)	12 (63.2%)	6 (31.6%)	1 (5.26%)	19
Total	695 (44.1%)	215 (13.6%)	667 (42.3%)	1577

The companies that posted the most original tweets included 92Y (92YTribeca) with 66 tweets (83.5%), Chicago Bulls (chicagobulls) with 41 tweets (78.8%), Detroit Pistons (DETPistons) with 51 tweets (94.4%), Marvel Entertainment (Marvel) with 51 tweets (62.2%), Portland Trail Blazers (pdxtrailblazers) with 51 tweets (60.0%), and TV Guide (TVGuide) with 69 tweets (100.0%). The Chargers (chargers) retweeted the most with 42 RTs (67.7%). The companies that posted the most at replies included Comcast (comcastcares) with 198 tweets (90.4%), Verizon Wireless (VZWoffers) with 61 tweets (73.5%), DIRECTV (DIRECTV) with 48 tweets (96.0%), and Ford (ScottMonty) with 46 tweets (78.0%).

Looking at the percentage of posts for each company, 24 companies posted 50.0% or more original posts, and of those 24 companies, nine companies only posted original tweets (100.0%). Two companies posted zero (0.0%) original posts. Only three companies posted 50.0% or more retweets, which included the San Diego Chargers (chargers) with 42 tweets (67.7%), Intuit (Intuit) with 10 tweets (66.7%), and Southwest Airlines (SouthwestAir) with 12 tweets (57.1%). No companies posted only (100.0%) retweets. Fourteen companies posted zero (0.0%) retweets. Eleven companies posted 50.0% or more at replies, and no companies posted only (100.0%) at replies. Eighteen companies posted zero (0.0%) at replies.

As previously mentioned, the sample included tweets from the 47 companies during the one-week sampling period between 8 p.m. on November 18, 2009, and 8 p.m. on November 25, 2009. The day with the most tweets from the companies was Monday, November 23, 2009 with 282 tweets (17.9%), followed by Thursday, November 19, 2009, with 279 tweets (17.7%); Tuesday, November 24, 2009, with 262 tweets (16.6%); and Friday, November 20, 2009, with 261 tweets (16.6%). See Table 9 for a breakdown of tweets per day.

Twitter allows users to post tweets from the web, mobile phone, or third-party application. The most common place from where the companies posted tweets was TweetDeck with 618 tweets (39.2%), followed by the web with 588 tweets (37.3%) and CoTweet with 146 tweets (9.3%). See Table 10 for a complete list of where the company tweets originated.

After analyzing general descriptive aspects of companies' Twitter homepages and tweets, the following section will examine corporate tweets as they apply to Grunig's four models of public relations (press agency/publicity model, public information model, two-way asymmetrical model, and two-way symmetrical model). This section will also break down the corporate tweets into one-way communication versus two-way communication to analyze whether corporations are engaging in building relationships with online users.

Table 9.**Total Tweets per Day**

Date	Frequency	Percent
Wednesday, 11.18.09 (8 p.m. – 11:59 p.m.)	19	1.2%
Thursday, 11.19.09 (12 a.m. – 11:59 p.m.)	279	17.7%
Friday, 11.20.09 (12 a.m. – 11:59 p.m.)	261	16.6%
Saturday, 11.21.09 (12 a.m. – 11:59 p.m.)	138	8.8%
Sunday, 11.22.09 (12 a.m. – 11:59 p.m.)	87	5.5%
Monday, 11.23.09 (12 a.m. – 11:59 p.m.)	282	17.9%
Tuesday, 11.24.09 (12 a.m. – 11:59 p.m.)	262	16.6%
Wednesday, 11.25.09 (12 a.m. – 8 p.m.)	249	15.8%
Total	1577	100.0%

Table 10.**Web or Third-party Applications**

Posted from	Frequency	Percent
Web	588	37.3%
CoTweet	146	9.3%
Seismic	16	1.0%
SimplyTweet	55	3.5%
TweetDeck	618	39.2%
Twitterberry	16	1.0%
TweetDeck	618	39.2%
Other	138	8.8%
Total	1577	100.0%

RQ2: According to Grunig's Four Models of Public Relations, Do Corporate Tweets Closely Align with the Press Agency/Publicity Model, Public Information Model, Two-way Asymmetrical Model or Two-way Symmetrical Model of Public Relations?

Grunig's four models of public relations have influenced the way in which many scholars study public relations communication, as well as how many public relations practitioners implement public relations strategies. Previous literature states that organizations should strive to practice two-way symmetrical communication with publics (Grunig, 1990; Grunig & Grunig, 2000). Critics of the four models argue that two-way symmetrical communication is not always practical, and merely using two-way communication with publics is acceptable (Cancel et al., 1997; Laskin, 2009). The following results report tweets as they fit within the four models, as well as one-way versus two-way communication. See Table 11 for a breakdown of one-way versus two-way communication by industry and Table 12 for complete breakdown of the four models of public relations identified in the corporate tweets by industry. See Table 13 for a detailed breakdown of the four models by Twitter ID, as well as the breakdown between one-way and two-way communication by Twitter ID.

I conducted a one-sample chi-square test to assess the relationship between one-way communication versus two-way communication and the corporate tweets reported by industry (entertainment, retail, food and beverage, travel, car, sports team, big brand, finance, and other). The results of the test were significant, $\chi^2(8, N = 1577) = 114.98, p < .001$. The sports team industry with 175 tweets (69.2%) used one-way communication when posting tweets on Twitter the most, followed by the retail industry with 75 tweets (61.5%) and the travel industry with 46 tweets (61.3%), respectfully. The food and beverage industry with 147 tweets (71.4%) utilized the two-way communication the most when posting tweets on Twitter, followed by the finance industry with 45 tweets (62.5%), the entertainment industry with 317 tweets (59.6%), and the car industry with 69 tweets (57.0%), in that order.

Table 11.**One-way versus Two-way Communication by Industry**

Industry	One-way Communication	Two-way Communication	Total
Entertainment	215 (40.4%)	317 (59.6%)	532
Retail	75 (61.5%)	47 (38.5%)	122
Food and Beverage	59 (28.6%)	147 (71.4%)	206
Travel	46 (61.3%)	29 (38.7%)	75
Car	52 (43.0%)	69 (57.0%)	121
Sports Team	175 (69.2%)	78 (30.8%)	253
Big Brand	89 (55.3%)	72 (44.7%)	161
Finance	27 (37.5%)	45 (62.5%)	72
Other	23 (65.7%)	12 (34.3%)	35
Total	761 (48.3%)	816 (51.7%)	1577

Note: $\chi^2(8, N = 1577) = 114.98, p < .001$

I conducted a one-sample chi-square test to assess the relationship between the four models of public relations and the corporate tweets reported by industry (entertainment, retail, food and beverage, travel, car, sports team, big brand, finance, and other). The results of the test were significant, $\chi^2(24, N = 1575) = 212.13, p < .001$. The industry that posted the most tweets representing the two-way symmetrical model was the food and beverage industry with 135 tweets (65.5%). The entertainment industry with 291 tweets (54.7%), the car industry with 63 tweets (52.1%), and the finance industry with 31 tweets (44.3%) also posted more two-way symmetrical tweets compared to the other three models. The press agency model was represented the most in the sports team industry with 108 tweets (42.7%), the travel industry with 34 tweets (45.3%), the big brand industry with 73 tweets (45.3%), and the retail industry

with 47 tweets (38.5%). The public information and two-way asymmetrical model were used the least by all industries in the sample.

Table 12.

Grunig's Four Models by Industry

Industry	Press Agency	Public Information	Two-way Asymmetrical	Two-way Symmetrical	Total
Entertainment	178 (33.5%)	37 (7.0%)	26 (4.9%)	291 (54.7%)	532
Retail	47 (38.5%)	29 (23.8%)	8 (6.6%)	38 (31.1%)	122
Food and Beverage	36 (17.5%)	23 (11.2%)	12 (14.5%)	135 (65.5%)	206
Travel	34 (45.3%)	12 (16.0%)	9 (12.0%)	20 (26.7%)	75
Car	31 (25.6%)	21 (17.4%)	6 (5.0%)	63 (52.1%)	121
Sports Team	108 (42.7%)	67 (26.5%)	19 (7.5%)	59 (23.3%)	253
Big Brand	73 (45.3%)	16 (9.9%)	13 (8.1%)	59 (36.6%)	161
Finance	8 (11.4%)	17 (24.3%)	14 (20.0%)	31 (44.3%)	70
Other	18 (51.4%)	5 (14.3%)	4 (11.4%)	8 (22.9%)	35
Total	533 (33.8%)	227 (14.4%)	111 (7.0%)	704 (44.7%)	1575

Note: $\chi^2(24, N = 1575) = 212.13, p < .001$

As previously reported, the 47 companies posted 1,577 tweets over the sampling timeframe of a week. I will not address the companies that posted zero tweets in this section (H&R Block and Burger King). Combining the press agency and public information models into one-way communication, 761 (48.3%) of the tweets represented one-way communication. Ten companies only posted one-way communication tweets (100.0%), which included American Apparel (americanapparel) with eight tweets, Chevron (Chevron) with seven tweets, EMC Corporation (emccorp) with one tweet, General Electric (GE_Reports) with eight tweets, Intuit (intuit) with 15 tweets, Microsoft (Microsoft) with 26 tweets, Pfizer (pfizer_news) with five tweets, Sears Holdings (SearsHoldings) with six tweets, Walgreens (Walgreens) with eight

tweets, and Zappos.com (zappos) with nine tweets. Not including those 10 companies that posted only one-way communication tweets, the majority (50.0% or more) of 20 companies' tweets classified as one-way communication. Combining the two-way asymmetrical and the two-way symmetrical models into two-way communication, 813 (51.6%) of the tweets represented two-way communication. No company posted 100.0% two-way communication tweets, but 15 companies posted 50.0% or more two-way communication tweets.

Now that I identified corporate tweets by one-way versus two-way communication, I analyzed the four models of public relations as presented by Grunig below, breaking down one-way communication and two-way communication into the four models. The two-way symmetrical model was represented the most with 700 (44.4%) of the tweets, followed by the press agency model with 533 (33.8%) of the tweets, the public information model with 228 (14.5%) of the tweets, and the two-way asymmetrical model representing 111 (7.0%) of the tweets, respectively.

The two-way symmetrical model was the most common model used in 700 tweets (44.4%) from the 45 companies that posted during the one-week sampling timeframe. No companies posted 100.0% two-way symmetrical tweets, but 13 companies posted 50.0% or more two-way symmetrical tweets, which included: Wells Fargo (Ask_WellsFargo) with 22 tweets (56.4%), Comcast (comcastcares) with 194 tweets (88.6%), DIRECTV (DIRECTV) with 46 tweets (92.0%), Dunkin' Donuts (DunkinDonuts) with 45 tweets (76.3%), The Home Depot (HomeDepot) with 30 tweets (69.8%), Marriot International Hotels and Resorts (MarriottInt) with six tweets (54.5%), PopCap (popcap_games) with 15 tweets (75.0%), Popeyes Chicken (PopeyesChicken) with 17 tweets (70.8%), Ford (ScottMonty) with 43 tweets (72.9%), Starbucks (Starbucks) with 32 tweets (68.1%), Tastidlite (tastidlite) with 41 tweets (53.9%), Verizon Wireless (VZWOffers) with 52 tweets (62.7%), and Wachovia (Wachovia) with nine tweets

(50.0%). Eighteen companies posted zero (0.0%) two-way symmetrical tweets. Some examples of tweets that represented the two-way symmetrical model included the following:

- Comcast (comcastcares): “@Greeblemonkey I DM'ed the info to our DNS engineers to see what is going on and how quickly can be fixed10:35 AM Nov 25th, 2009 from web in reply to Greeblemonkey.”
- Dunkin’ Donuts (DunkinDonuts): “@peemmfivekay A good DDecision. If all your DDecisions this morning are as strong, it will be a good day.7:31 AM Nov 23rd, 2009 from TweetDeck in reply to peemmfivekay.”
- General Motors (GMblogs): “@jshuey - thanks! We're glad we are real people too ! Let us know if you have any other thoughts/ suggestions! - Annalisa :)11:21 AM Nov 19th, 2009 from TweetDeck in reply to jshuey.”

The press agency model was the second most common model used in 533 tweets (33.8%) from the 45 companies that posted during the one-week sampling timeframe. Of the 45 companies, 43 companies posted at least one tweet encompassing the press agency model of public relations. Five companies only posted tweets that fit under the press agency model (100%), which included Chevron (Chevron) with seven tweets, EMC Corporation (emccorp) with one tweet, Pfizer (pfizer_news) with five tweets, Sears Holdings (SearsHoldigns) with six tweets, and Walgreens (Walgreens) with eight tweets. Not including the companies that posted 100.0% press agency tweets, the majority (50.0% or more) of tweets from 11 companies fit under the press agency model, which included 92Y (92YTribeca) with 41 tweets (51.9%), American Apparel (americanapparel) with seven tweets (87.5%), Carnival Cruise Lines (CarnivalCruise) with five tweets (71.4%), the Detroit Pistons (DETPistons) with 32 tweets (59.3%), General Motors (GMblogs) with 10 tweets (52.6%), JetBlue Airways (JetBlue) with eight tweets (72.7%), Marvel Entertainment (Marvel) with 52 tweets (63.4%), McKesson Health

IT (McKesson_HIT) with 11 tweets (78.6%), Microsoft (Microsoft) with 21 tweets (80.0%), State Farm (statefarm) with 18 tweets (51.4%), and TV Guide (TVGuide) with 66 tweets (95.7%). Two companies did not post any tweets that utilized the press agency model, which included Wells Fargo (Ask_WellsFargo) and Zappos (zappos). Some examples of tweets that represented the press agency model included the following:

- Walgreens (Walgreens): “L'Oreal Paris Cosmetics, skincare, haircare and haircolor in one place. Shop our L'Oreal Brand Store now: <http://bit.ly/5NqT036>:43 AM Nov 24th, 2009 from web”
- Chargers (chargers), “Come to ‘Chargers Blood Drive XXXI 31’ Tuesday, November 24 from 9:00 am to 7:00 pm. The Chargers Annual Blood...<http://bit.ly/3xtL755>:01 PM Nov 19th, 2009 from Facebook”
- 92Y (92YTribeca), “‘What's with you, kid? You think the death of Sammy Davis left an opening in the Rat Pack?’ #classicmoviequotes <http://bit.ly/6gcLX58>:44 AM Nov 24th, 2009 from web.”

The public information model was the third most common model used in 228 tweets (14.5%) from the 45 companies that posted during the one-week sampling timeframe. Out of the 45 companies, 31 posted at least one tweet, utilizing the public information model of public relations. With nine tweets, Zappos.com (zappos) was the only company in which all of its tweets fit under the public information model. Other than Zappos.com, only one company used the public information model in the majority of its tweets (50.0% or more), which was Intuit (intuit) with eight tweets (53.3%). Fourteen companies did not post any tweets that utilized the public information model of public relations. Some examples of tweets that illustrated the public information model included the following:

- Zappos.com (zappos): “Still love watching this! 100+ students, ONE SINGLE camera shot, happiness! "I Gotta Feeling" - <http://bit.ly/3omlf> 11:39 AM Nov 22nd, 2009 from web.”
- Intuit (intuit): “RT @smallbiztrends: Reminder to join the conversation: 2 small business chats this evening at 8 pm EST (5 Pacific): @sbbuzz and @smbiz4:09 PM Nov 24th, 2009 from TweetDeck.”
- Tastidlite (tastidlite): “First tweet above 10,000 feet. Free Wifi on @Delta courtesy of Ebay <http://bit.ly/620stk> Woot Woot!12:41 PM Nov 21st, 2009 from TweetDeck.”

The two-way asymmetrical model was the least common model used in 111 tweets (7.0%) from the 45 companies that posted during the one-week sampling timeframe. Out of the 45 companies that posted tweets, 29 companies used the two-way asymmetrical model in one or more of their tweets. No companies used the two-way asymmetrical model in all of their tweets. In addition, 16 companies did not use the two-way asymmetrical model in any of their tweets. Some examples of the corporate tweets that represented the two-way asymmetrical model included the following:

- Carnival Cruise Lines (CarnivalCruise): “What’s your favorite time of year for cruising?12:56 PM Nov 24th, 2009 from web.”
- Chargers (chargers): “Make the drive. It will be worth it. RT @Concudan: Can the Chargers have a small block party up in the Temecula for us cast-a-ways?3:50 PM Nov 23rd, 2009 from TweetDeck.”
- The Home Depot (HomeDepot): “@julies2u Just saw your tweet, if your still in the market for vanity, I would like to offer my help. Please DM ^Michael13:30 PM Nov 25th, 2009 from API in reply to julies2u.”

Table 13.**Grunig's Four Models by Twitter ID**

Twitter ID (Company Name)	Press Agency	Public Information	Two-way Asymmetrical	Two-way Symmetrical	One-way Communication	Two-way Communication	Total
92YTribeca (92Y)	41 (51.9%)	26 (32.9%)	8 (10.1%)	4 (5.1%)	67 (84.8%)	12 (15.2%)	79
AdamDenison (Chevrolet)	2 (28.6%)	2 (28.6%)	0 (0.0%)	3 (42.9%)	4 (57.1%)	3 (42.9%)	7
Alicia_at_Honda (Honda)	5 (33.3%)	4 (26.7%)	3 (20.0%)	3 (20.0%)	9 (60.0%)	6 (40.0%)	15
americanapparel (American Apparel)	7 (87.5%)	1 (12.5%)	0 (0.0%)	0 (0.0%)	8 (100%)	0 (0.0%)	8
Ask_WellsFargo (Wells Fargo)	0 (0.0%)	6 (15.4%)	11 (28.2%)	22 (56.4%)	6 (15.4%)	33 (84.6%)	39
BestBuyRemix (Best Buy)	7 (29.2%)	7 (29.2%)	4 (16.7%)	6 (25.0%)	14 (58.3%)	10 (41.7%)	24
CarnivalCruise (Carnival Cruise Lines)	5 (71.4%)	0 (0.0%)	2 (28.6%)	0 (0.0%)	5 (71.4%)	2 (28.6%)	7
chargers (San Diego Chargers)	17 (27.4%)	13 (21.0%)	7 (11.3%)	25 (40.3%)	30 (48.4%)	32 (51.6%)	62
Chevron (Chevron)	7 (100%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	7 (100.0%)	0 (0.0%)	7
chicagobulls (Chicago Bulls)	17 (32.7%)	22 (42.3%)	8 (15.4%)	5 (9.6%)	39 (75.0%)	13 (25.0%)	52
comcastcares (Comcast)	7 (3.2%)	10 (4.6%)	7 (3.2%)	194 (88.6%)	17 (7.8%)	202 (92.2%)	219
ConnectByHertz (Hertz)	9 (42.9%)	4 (19.0%)	1 (4.8%)	7 (33.3%)	13 (61.9%)	8 (38.1%)	21
DETPistons (Detroit Pistons)	32 (59.3%)	19 (35.2%)	2 (3.7%)	0 (0.0%)	51 (94.4%)	3 (5.6%)	54

(Table 13 Continued)

Twitter ID (Company Name)	Press Agency	Public Information	Two-way Asymmetrical	Two-way Symmetrical	One-way Communication	Two-way Communication	Total
DIRECTV (DIRECTV)	3 (6.0%)	0 (0.0%)	1 (2.0%)	46 (92.0%)	3 (6.0%)	47 (94.0%)	50
DunkinDonuts (Dunkin' Donuts)	10 (16.9%)	2 (3.4%)	2 (3.4%)	45 (76.3%)	12 (20.3%)	47 (79.7%)	59
emccorp (EMC)	1 (100.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (100.0%)	0 (0.0%)	1
GE_Reports (General Electric)	7 (87.5%)	1 (12.5%)	0 (0.0%)	0 (0.0%)	8 (100.0%)	0 (0.0%)	8
GMblogs (General Motors)	10 (52.6%)	3 (15.8%)	0 (0.0%)	6 (31.6%)	13 (68.4%)	6 (31.6%)	19
HomeDepot (The Home Depot)	8 (18.6%)	2 (4.7%)	1 (2.3%)	30 (69.8%)	10 (23.3%)	33 (76.7%)	43
HRBlock (H&R Block)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0
Intuit (Intuit)	7 (46.7%)	8 (53.3%)	0 (0.0%)	0 (0.0%)	15 (100.0%)	0 (0.0%)	15
JetBlue (JetBlue Airways)	8 (72.7%)	2 (18.2%)	1 (9.1%)	0 (0.0%)	10 (90.9%)	1 (9.1%)	11
LuxorLV (Luxor Las Vegas)	8 (34.8%)	5 (21.7%)	4 (17.4%)	6 (26.1%)	13 (56.5%)	10 (43.5%)	23
MarriottIntl (Marriott International Hotels and Resorts)	4 (36.4%)	0 (0.0%)	1 (9.1%)	6 (54.5%)	4 (36.4%)	7 (63.6%)	11
Marvel (Marvel Entertainment)	52 (63.4%)	0 (0.0%)	6 (7.3%)	24 (29.3%)	52 (63.4%)	30 (36.6%)	82
McKesson_HIT (McKesson Health IT)	11 (78.6%)	2 (14.3%)	1 (7.1%)	0 (0.0%)	13 (92.9%)	1 (7.1%)	14
Microsoft (Microsoft)	21 (80.8%)	5 (19.2%)	0 (0.0%)	0 (0.0%)	26 (100.0%)	0 (0.0%)	26

(Table 13 Continued)

Twitter ID (Company Name)	Press Agency	Public Information	Two-way Asymmetrical	Two-way Symmetrical	One-way Communication	Two-way Communication	Total
Pdxtrailblazers (Portland Trail Blazers)	42 (49.4%)	13 (15.3%)	2 (2.4%)	28 (32.9%)	55 (64.7%)	30 (35.3%)	85
pfizer_news (Pfizer News)	5 (100.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	5 (100.0%)	0 (0.0%)	5
popcap_games (PopCap)	5 (25.0%)	0 (0.0%)	0 (0.0%)	15 (75.0%)	5 (25.0%)	15 (75.0%)	20
PopeyesChicken (Popeyes Chicken)	3 (12.5%)	3 (12.5%)	1 (4.2%)	17 (70.8%)	6 (25.0%)	18 (75.0%)	24
RichardatDELL (DELL)	2 (11.8%)	8 (47.1%)	0 (0.0%)	7 (41.2%)	10 (58.8%)	7 (41.2%)	17
rubbermaid (Rubbermaid)	2 (40.0%)	2 (40.0%)	1 (20.0%)	0 (0.0%)	4 (80.0%)	1 (20.0%)	5
ScottMonty (Ford)	5 (8.5%)	8 (13.6%)	2 (3.4%)	43 (72.9%)	13 (22.0%)	46 (78.0%)	59
SearsHoldings (Sears Holdings)	6 (100.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	6 (100.0%)	0 (0.0%)	6
SouthwestAir (Southwest Airlines)	8 (38.1%)	4 (19.0%)	1 (4.8%)	8 (38.1%)	12 (57.1%)	9 (42.9%)	21
Starbucks (Starbucks)	12 (25.5%)	0 (0.0%)	3 (6.4%)	32 (68.1%)	12 (25.5%)	35 (74.5%)	47
StateFarm (State Farm)	18 (51.4%)	5 (14.3%)	4 (11.4%)	8 (22.9%)	23 (65.7%)	12 (34.3%)	35
tastidlite (Tastidlite)	11 (14.5%)	18 (23.7%)	6 (7.9%)	41 (53.9%)	29 (38.2%)	47 (61.8%)	76
theBKlounge (Burger King)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0
travelchannel (The Travel Channel)	5 (33.3%)	1 (6.7%)	2 (13.3%)	7 (46.7%)	6 (40.0%)	9 (60.0%)	15

(Table 13 Continued)

Twitter ID (Company Name)	Press Agency	Public Information	Two-way Asymmetrical	Two-way Symmetrical	One-way Communication	Two-way Communication	Total
TVGuide (TV Guide)	66 (95.7%)	1 (1.4%)	2 (2.9%)	0 (0.0%)	67 (97.1%)	2 (2.9%)	69
VZWOffer (Verizon Wireless)	19 (22.9%)	0 (0.0%)	12 (14.5%)	52 (62.7%)	19 (22.9%)	64 (77.1%)	83
Wachovia (Wachovia)	1 (5.6%)	5 (27.8%)	3 (16.7%)	9 (50.0%)	6 (3.3%)	12 (66.7%)	18
Walgreens (Walgreens)	8 (100.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	8 (100.0%)	0 (0.0%)	8
WholeFoods (Whole Foods Market)	9 (47.4%)	7 (36.8%)	2 (10.5%)	1 (5.3%)	16 (84.2%)	3 (15.8%)	19
zappos (Zappos.com)	0 (0.0%)	9 (100.0%)	0 (0.0%)	0 (0.0%)	9 (100.0%)	0 (0.0%)	9
Total	533 (33.8%)	228 (14.5%)	111 (7.0%)	700 (44.4%)	761 (48.3%)	813 (51.6%)	1,577

Since previous research suggests that two-way symmetrical communication is crucial to forming relationships with publics (Grunig, 1990; Grunig & Grunig, 2000), I will now analyze whether those companies that used two-way symmetrical communication in their tweets retained or expanded their follower base.

H1: Those Companies that Implement Two-way Symmetrical Communication on Twitter Will Retain or Expand their Number of Followers.

Hypothesis 1 was supported. Out of the 29 companies that posted two-way symmetrical tweets, all 29 increased the number of followers from November 18, 2009, at 8 p.m. to November 25, 2009, at 8 p.m. Thirteen companies used the two-way symmetrical model in 50.0% or more of their tweets. Of those 13 companies, 100.0% increased their follower base

between 0.5% and 5.1%. While hypothesis one was supported, it should be said, however, that all companies, regardless of the four models, increased the number of followers.

RQ3: According to Hon and Grunig's (1999) Relationship Indicators, How Effectively are Corporations Building Relationships with Publics on Twitter?

Hon and Grunig's (1999) relationship indicators include control mutuality, commitment, satisfaction, trust, and communal versus exchange relationship. Hon and Grunig said that companies should strive to form communal relationships with publics. Public relations practitioners can form communal relationships by using two-way symmetrical communication to engage in conversation with publics. Previous literature states that healthy OPRs result from those companies that attempt to demonstrate and practice control mutuality, commitment, satisfaction, and trust. The following results will identify how many tweets encompassed the relationship indicators. The two companies that posted no tweets during the one-week sampling timeframe (H&R Block and Burger King) were not included in the analysis of the following section.

First, I conducted a one-sample chi-square test to assess the relationship between the industry of the corporations in the sample (entertainment, retail, food and beverage, travel, car, sports team, big brand finance, and other) and the type of relationship (communal versus exchange) presented in the corporate tweets. The results of the test were significant, $\chi^2(8, N = 1577) = 62.794, p < .001$. The food and beverage industry with 168 tweets (81.6%) posted the highest percentage of tweets representing an attempt at forming a communal relationship, followed by the finance industry with 58 tweets (80.6%), and the car industry with 85 tweets (70.2%). The travel industry was the only industry that posted the majority of their tweets that represented an attempt at forming an exchange relationship with 40 tweets (53.3%). See Table 14 for a complete list of types of relationships by industry.

Table 14.**Relationship by Industry**

Industry	Communal Relationship	Exchange Relationship	Total
Entertainment	326 (61.3%)	206 (38.7%)	532
Retail	70 (57.4%)	52 (42.6%)	122
Food and Beverage	168 (81.6%)	38 (18.4%)	206
Travel	35 (46.7%)	40 (53.3%)	75
Car	85 (70.2%)	36 (29.8%)	121
Sports Team	153 (60.5%)	100 (39.5%)	253
Big Brand	86 (53.4%)	75 (46.6%)	161
Finance	58 (80.6%)	14 (19.4%)	72
Other	18 (51.4%)	17 (48.6%)	35
Total	999 (63.3%)	578 (36.7%)	1577

Note: $\chi^2(8, N = 1577) = 62.794, p < .001$

Second, I analyzed the corporate tweets by Twitter ID as they related to the type of relationships. Out of the 1,577 tweets, 999 (63.3%) demonstrated a desire for communal OPRs and 578 (36.7%) demonstrated a desire for exchange OPRs (See Table 15). The majority (50.0% or more) of 28 companies' tweets demonstrated a desire to form a communal relationship with publics on Twitter. Of those 28 companies, three companies posted 100.0% tweets demonstrating a desire for communal relationships, which included EMC Corporation (emccorp) with one tweet, Wachovia (Wachovia) with 18 tweets, and Zappos.com (zappos) with nine tweets. The majority (50.0% or more) of 17 companies' tweets demonstrated a desire to form an exchange relationship with publics. Of those 17 companies, four companies posted 100.0% tweets demonstrating a desire for exchange relationships, which included Pfizer (pfizer_news)

with five tweets, Sears Holdings (SearsHoldings) with six tweets, TV Guide (TVGuide) with 69 tweets, and Walgreens (Walgreens) with eight tweets.

Table 15.

Relationship by Twitter ID

Twitter ID (Company Name)	Communal Relationship	Exchange Relationship	Total
92YTribeca (92Y)	14 (17.7%)	65 (82.3%)	79
AdamDenison (Chevrolet)	4 (57.1%)	3 (42.9%)	7
Alicia_at_Honda (Honda)	5 (33.3%)	10 (66.7%)	15
americanapparel (American Apparel)	1 (12.5%)	7 (87.5%)	8
Ask_WellsFargo (Wells Fargo)	31 (79.5%)	8 (20.5%)	39
BestBuyRemix (Best Buy)	14 (58.3%)	10 (41.7%)	24
CarnivalCruise (Carnival Cruise Lines)	1 (14.3%)	6 (85.7%)	7
chargers (San Diego Chargers)	43 (69.4%)	19 (30.6%)	62
Chevron (Chevron)	1 (14.3%)	6 (85.7%)	7
chicagobulls (Chicago Bulls)	39 (75.0%)	13 (25.0%)	52
comcastcares (Comcast)	209 (95.4%)	10 (4.6%)	219
ConnectByHertz (Hertz)	13 (61.9%)	8 (38.1%)	21
DETPistons (Detroit Pistons)	18 (33.3%)	36 (66.7%)	54

(Table 15 Continued)

Twitter ID (Company Name)	Communal Relationship	Exchange Relationship	Total
DIRECTV (DIRECTV)	48 (96.0%)	2 (4.0%)	50
DunkinDonuts (Dunkin' Donuts)	48 (81.4%)	11 (18.6%)	59
emccorp (EMC)	1 (100.0%)	0 (0.0%)	1
GE_Reports (General Electric)	1 (12.5%)	7 (87.5%)	8
GMblogs (General Motors)	9 (47.4%)	10 (52.6%)	19
HomeDepot (The Home Depot)	34 (79.1%)	9 (20.9%)	43
HRBlock (H&R Block)	0 (0.0%)	0 (0.0%)	0
Intuit (Intuit)	9 (60.0%)	6 (40.0%)	15
JetBlue (JetBlue Airways)	2 (18.2%)	9 (81.8%)	11
LuxorLV (Luxor Las Vegas)	12 (52.2%)	11 (47.8%)	23
MarriottIntl (Marriott International Hotels and Resorts)	6 (54.5%)	5 (45.5%)	11
Marvel (Marvel Entertainment)	31 (37.8%)	51 (62.2%)	82
McKesson_HIT (McKesson Health IT)	2 (14.3%)	12 (85.7%)	14
Microsoft (Microsoft)	8 (30.8%)	18 (69.2%)	26
Pdxtailblazers (Portland Trail Blazers)	53 (62.4%)	32 (37.6%)	85

(Table 15 Continued)

Twitter ID (Company Name)	Communal Relationship	Exchange Relationship	Total
pfizer_news (Pfizer News)	0 (0.0%)	5 (100.0%)	5
popcap_games (PopCap)	16 (80.0%)	4 (20.0%)	20
PopeyesChicken (Popeyes Chicken)	21 (87.5%)	3 (12.5%)	24
RichardatDELL (DELL)	15 (88.2%)	2 (11.8%)	17
rubbermaid (Rubbermaid)	2 (40.0%)	3 (60.0%)	5
ScottMonty (Ford)	54 (91.5%)	5 (8.5%)	59
SearsHoldings (Sears Holdings)	0 (0.0%)	6 (100.0%)	6
SouthwestAir (Southwest Airlines)	13 (61.9%)	8 (38.1%)	21
Starbucks (Starbucks)	36 (76.6%)	11 (23.4%)	47
StateFarm (State Farm)	18 (51.4%)	17 (48.6%)	35
tastidlite (Tastidlite)	63 (82.9%)	13 (17.1%)	76
theBKlounge (Burger King)	0 (0.0%)	0 (0.0%)	0
travelchannel (The Travel Channel)	9 (60.0%)	6 (40.0%)	15
TVGuide (TV Guide)	0 (0.0%)	69 (100.0%)	69
VZWOffers (Verizon Wireless)	58 (69.9%)	25 (30.1%)	83

(Table 15 Continued)

Twitter ID (Company Name)	Communal Relationship	Exchange Relationship	Total
Wachovia (Wachovia)	18 (100.0%)	0 (0.0%)	18
Walgreens (Walgreens)	0 (0.0%)	8 (100.0%)	8
WholeFoods (Whole Foods Market)	10 (52.6%)	9 (47.4%)	19
zappos (Zappos.com)	9 (100.0%)	0 (0.0%)	9
Total	999 (63.3%)	578 (36.7%)	1577

Trust was the most common relationship indicator found in the tweets, representing 1,114 (70.6%) of the tweets. Following trust, control mutuality was the second most common relationship indicator represented by 811 (51.4%) of the tweets. The third most common relationship indicator was commitment, represented by 386 (24.5%) of the tweets. Finally, satisfaction was the least common relationship indicator found in 254 (16.1%) of the tweets. Researchers also coded for signs of dissatisfaction, which appeared in 14 (0.9%) of the tweets. Researchers coded dissatisfaction when there was clear evidence that the user was unhappy with the company and there was no clear attempt to solve this situation. See Table 16 for a complete list of the relationship indicators by Twitter ID.

Trust was the most common relationship indicator found in the tweets, representing 1,114 (70.6%) of the tweets. Of the 45 companies that posted tweets during the week timeframe, 43 companies' tweets demonstrated some desire for customer trust, while two companies' tweets did not show any desire (0.0%) for customer trust, which included TV Guide (TVGuide) and Walgreens (Walgreens). Thirty-eight companies demonstrated a desire for customer trust 50.0%

of the time or more. Out of the 38 companies, four companies demonstrated a desire for customer trust in 100.0% of their tweets, which included Wells Fargo (Ask_WellsFargo) with 39 tweets, EMC Corporation (emccorp) with one tweet, Wachovia (Wachovia) with 18 tweets, and Zappos.com (zappos) with nine tweets. Some examples of tweets demonstrating the desire for trust included the following:

- Wachovia (Wachovia), “Good morning from @Wachovia. What banking questions can I help with today? Keep yr financial info private as u tweet to us & others. ^JR6:00 AM Nov 23rd, 2009 from CoTweet”
- Tastidlite (tastidlite), “What's your flavor Aimee? RT @aimeehustle Yummm @tastidlitegooodnesssss!!! <http://twitpic.com/q960211>:46 AM Nov 20th, 2009 from TwitterBerry”
- State Farm (StateFarm), “@sjcNKOTB Here are some fast facts about State Farm. Please let me know if there's anything I can do to help further.<http://tr.im/FLWS8>:49 AM Nov 25th, 2009 from web in reply to sjcNKOTB.”

Control mutuality was the second most common relationship indicator represented by 811 (51.4%) of the tweets. Of the 45 companies that posted tweets during the sampling timeframe, 42 companies showed some desire for control mutuality, while three showed no (0.0%) desire for control mutuality, which included Pfizer (pfizer_news), Walgreens (Walgreens), and Zappos.com (Zappos). Of those 42 companies, 19 companies demonstrated a desire for control mutuality in 50.0% or more of their tweets. The companies that showed the most desire for control mutuality included Comcast (comcastcares) in 166 tweets (75.8%), DIRECTV (DIRECTV) in 49 tweets (98.0%), EMC Corporation (emccorp) in one tweet (100.0%), Marriott International Hotels and Resorts (MarriottIntl) in eight tweets (72.7%), PopCap (popcap_games) in 15 tweets (75.0%), and Popeyes Chicken (PopeyesChicken) in 17

tweets (70.8%). Some examples of tweets demonstrating the desire for control mutuality included the following:

- Comcast (comcastcares), “@jasonmotylinski There are parts of MN that are serviced by MI. I agree it is ridiculous. I am working to change that. Can I help?6:09 AM Nov 22nd, 2009 from web in reply to jasonmotylinski”
- DIRECTV (DIRECTV), “@keithprivette Sorry that your previous question wasn't answered. Let us know what we can do to help.6:33 PM Nov 24th, 2009 from web in reply to keithprivette”
- Popeyes Chicken (PopeyesChicken), “About 40-something others do too....but NoLa is where it all started! RT @baileysmiles IS LOUISIANA THE ONLY STATE WITH A POPEYES?7:47 PM Nov 25th, 2009 from web.”

The third most common relationship indicator was commitment, represented by 386 (24.5%) of the tweets. Of the 45 companies that posted tweets during the week timeframe, 38 companies demonstrated some desire for commitment, while seven companies showed no desire (0.0%) for commitment in their tweets, which included EMC Corporation (emccorp), General Electric (GE_Reports), Pfizer (pfizer_news), Rubbermaid (rubbermaid), TV Guide (TVGuide), Walgreens (Walgreens), and Zappos.com (zappos). Of those 38 companies, eight demonstrated a desire for commitment in 50.0% or more of their tweets, which included Honda (Alicia_at_Honda) in 11 tweets (73.3%), American Apparel (americanapparel) in four tweets (50.0%), Wells Fargo (Ask_WellsFargo) in 35 tweets (89.7%), Chevron (Chevron) in five tweets (71.4%), Hertz (ConnectByHertz) in 13 tweets (61.9%), The Home Depot (HomeDepot) in 25 tweets (58.1%), Wachovia (Wachovia) in nine tweets (50.0%), and Whole Foods Market (WholeFoods) in 10 tweets (52.6%). Some examples of tweets demonstrating the desire for commitment included the following:

- Honda (Alicia_at_Honda), “Nice meeting you @CoachDeb at #scasn. Saw ur last tweet & thought you might enjoy this video along the same lines -<http://bit.ly/d2SMz1>:50 PM Nov 19th, 2009 from web”
- Wells Fargo (Ask_WellsFargo), “@BigToys We'd hate to lose you as a customer. If we can help follow and DM us. ^RB4:18 PM Nov 24th, 2009 from CoTweet in reply to BigToys”
- Wachovia (Wachovia), “@MikeTarver Thanks for the kind words, glad we were able to keep you as customer! ^SS1:16 PM Nov 20th, 2009 from CoTweet in reply to MikeTarver.”

Satisfaction was the least common relationship indicator found in 254 (16.1%) of the tweets. Of the 45 companies that posted tweets during the week timeframe, 32 companies’ tweets demonstrated some desire for customer satisfaction, while 13 companies’ tweets did not show any desire (0.0%) for customer satisfaction, which included Chevrolet (AdamDenison), Chevron (Chevron), EMC Corporation (emccorp), General Electric (GE_Reports), Intuit (intuit), JetBlue Airways (JetBlue), McKesson Health IT (McKesson_HIT), Microsoft (Microsoft), Pfizer (pfizer_news), Sears Holdings (SearsHoldings), TV Guide (TVGuide), Walgreens (Walgreens), and Zappos.com (zappos). Two companies demonstrated a desire for customer satisfaction in over 50.0% of their tweets, which included The Home Depot (HomeDepot) with 22 tweets (51.2%) and Marriott International Hotels and Resorts (MarriottIntl) with seven tweets (63.6%). Some examples of tweets demonstrating the desire for satisfaction included the following:

- Marriott International Hotels and Resorts (MarriottIntl), “@jkagan1983 we are rolling out a new lobby design for Residence Inn, glad u enjoyed your stay.10:32 AM Nov 19th, 2009 from TwitterBerry in reply to jkagan1983”

- The Home Depot (HomeDepot), “@lilkatiekate glad to hear Tom & Tommy took care of you! I informed the store mngmt. Thnx for feedback. ^Stephanie8:23 AM Nov 20th, 2009 from web in reply to lilkatiekate”
- Popeyes Chicken (PopeyesChicken), “@alaajallad very sorry to hear that...pls DM your e-mail & phone, will make sure you receive a response.1:13 PM Nov 22nd, 2009 from web in reply to alaajallad” in response to:
 - “@PopeyesChicken I have a very very bad experience at your store in Jordan. I sent an email - no response.1:44 PM Nov 21st, 2009 from Tweetie in reply to PopeyesChicken.”

As previously mentioned, researchers coded for dissatisfaction when customer dissatisfaction was clearly identified, and the company made no attempt to satisfy the customer. Dissatisfaction appeared in 14 (0.9%) of the tweets. Only four companies posted tweets that were clearly identified as customer dissatisfaction, which included Wells Fargo (Ask_WellsFargo) with one tweet (2.6%), San Diego Chargers (chargers) with one tweet (1.6%), Comcast (comcastcares) with 11 tweets (5.0%), and Marriott International Hotels and Resorts (MarriottIntl) with one tweet (9.1%). Some examples of tweets demonstrating dissatisfaction included the following:

- San Diego Chargers (chargers), “Then unfollow! The beauty of twitter. RT @andrewwp: dude. @chargers. 9 RT's in the last 20 minutes? necessary? I think not.4:22 PM Nov 23rd, 2009 from TweetDeck”
- Comcast (comcastcares), “@jamesbaltazar already answered. You should select provider that is right for you. I have no plans to discuss further3:07 PM Nov 21st, 2009 from SimplyTweet in reply to jamesbaltazar” in response to:

- “Answer my ?: @comcastcares If CB Digital HD is progress then why would I be pleased with fewer HD channels+higher bill than with DirecTV?4:04 PM Nov 21st, 2009 from web”
- Marriott International Hotels and Resorts (MarriottIntl), “@Matt_Siltala Sorry about that...and appreciate the feedback.8:53 AM Nov 23rd, 2009 from Seesmic in reply to Matt_Siltala” in response to:
 - “@MarriottIntl how come you are always sending me promos and codes that never work with where I am staying ... just bad business IMO9:40 PM Nov 19th, 2009 from web.”

Table 16.

Relationship Indicators by Twitter ID

Twitter ID (Company Name)	Control Mutuality	Commitment	Satisfaction	Dissatisfaction	Trust	Total
92YTribeca (92Y)	31 (39.2%)	6 (7.6%)	4 (5.1%)	0 (0.0%)	53 (67.1%)	79
AdamDenison (Chevrolet)	4 (57.1%)	2 (28.6%)	0 (0.0%)	0 (0.0%)	6 (85.7%)	7
Alicia_at_Honda (Honda)	6 (40.0%)	11 (73.3%)	3 (20.0%)	0 (0.0%)	13 (86.7%)	15
americanapparel (American Apparel)	2 (25.0%)	4 (50.0%)	1 (12.5%)	0 (0.0%)	6 (75.0%)	8
Ask_WellsFargo (Wells Fargo)	26 (66.7%)	35 (89.7%)	18 (46.2%)	1 (2.6%)	39 (100.0%)	39
BestBuyRemix (Best Buy)	8 (33.3%)	3 (12.5%)	1 (4.2%)	0 (0.0%)	14 (58.3%)	24
CarnivalCruise (Carnival Cruise Lines)	2 (28.6%)	1 (14.3%)	1 (14.3%)	0 (0.0%)	3 (42.9%)	7
chargers (San Diego Chargers)	38 (61.3%)	24 (38.7%)	12 (19.4%)	1 (1.6%)	45 (72.6%)	62

(Table 16 Continued)

Twitter ID (Company Name)	Control Mutuality	Commitment	Satisfaction	Dissatisfaction	Trust	Total
Chevron (Chevron)	1 (14.3%)	5 (71.4%)	0 (0.0%)	0 (0.0%)	4 (57.1%)	7
chicagobulls (Chicago Bulls)	21 (40.4%)	10 (19.2%)	5 (9.6%)	0 (0.0%)	42 (80.8%)	52
comcastcares (Comcast)	166 (75.8%)	62 (28.3%)	52 (23.7%)	11 (5.0%)	193 (88.1%)	219
ConnectByHertz (Hertz)	13 (61.9%)	13 (61.9%)	4 (19.0%)	0 (0.0%)	12 (57.1%)	21
DETPistons (Detroit Pistons)	15 (27.8%)	14 (25.9%)	3 (5.6%)	0 (0.0%)	25 (46.3%)	54
DIRECTV (DIRECTV)	49 (98.0%)	6 (12.0%)	11 (22.0%)	0 (0.0%)	47 (94.0%)	50
DunkinDonuts (Dunkin' Donuts)	37 (62.7%)	23 (39.0%)	27 (45.8%)	0 (0.0%)	50 (84.7%)	59
emccorp (EMC)	1 (100.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (100.0%)	1
GE_Reports (General Electric)	1 (12.5%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	3 (37.5%)	8
GMblogs (General Motors)	6 (31.6%)	4 (21.1%)	3 (15.8%)	0 (0.0%)	10 (52.6%)	19
HomeDepot (The Home Depot)	28 (65.1%)	25 (58.1%)	22 (51.2%)	0 (0.0%)	34 (79.1%)	43
HRBlock (H&R Block)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0
Intuit (Intuit)	7 (46.7%)	4 (26.7%)	0 (0.0%)	0 (0.0%)	10 (66.7%)	15
JetBlue (JetBlue Airways)	3 (27.3%)	5 (45.5%)	0 (0.0%)	0 (0.0%)	7 (63.6%)	11
LuxorLV (Luxor Las Vegas)	8 (34.8%)	3 (13.0%)	1 (4.3%)	0 (0.0%)	14 (60.9%)	23

(Table 16 Continued)

Twitter ID (Company Name)	Control Mutuality	Commitment	Satisfaction	Dissatisfaction	Trust	Total
MarriottIntl (Marriott International Hotels and Resorts)	8 (72.7%)	5 (45.5%)	7 (63.6%)	1 (9.1%)	8 (72.7%)	11
Marvel (Marvel Entertainment)	32 (39.0%)	4 (4.9%)	4 (4.9%)	0 (0.0%)	31 (37.8%)	82
McKesson_HIT (McKesson Health IT)	1 (7.1%)	1 (7.1%)	0 (0.0%)	0 (0.0%)	8 (57.1%)	14
Microsoft (Microsoft)	1 (3.8%)	6 (23.1%)	0 (0.0%)	0 (0.0%)	13 (50.0%)	26
Pdxtrailblazers (Portland Trail Blazers)	44 (51.8%)	8 (9.4%)	3 (3.5%)	0 (0.0%)	62 (72.9%)	85
pfizer_news (Pfizer News)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (20.0%)	5
popcap_games (PopCap)	15 (75.0%)	1 (5.0%)	2 (10.0%)	0 (0.0%)	15 (75.0%)	20
PopeyesChicken (Popeyes Chicken)	17 (70.8%)	10 (41.7%)	7 (29.2%)	0 (0.0%)	21 (87.5%)	24
RichardatDELL (DELL)	7 (41.2%)	4 (23.5%)	2 (11.8%)	0 (0.0%)	16 (94.1%)	17
rubbermaid (Rubbermaid)	2 (40.0%)	0 (0.0%)	1 (20.0%)	0 (0.0%)	3 (60.0%)	5
ScottMonty (Ford)	29 (49.2%)	5 (8.5%)	4 (6.8%)	0 (0.0%)	51 (86.4%)	59
SearsHoldings (Sears Holdings)	1 (16.7%)	2 (33.3%)	0 (0.0%)	0 (0.0%)	3 (50.0%)	6
SouthwestAir (Southwest Airlines)	11 (52.4%)	8 (38.1%)	1 (4.8%)	0 (0.0%)	17 (81.0%)	21
Starbucks (Starbucks)	31 (66.0%)	4 (0.7%)	7 (14.9%)	0 (0.0%)	37 (78.7%)	47

(Table 16 Continued)

Twitter ID (Company Name)	Control Mutuality	Commitment	Satisfaction	Dissatisfaction	Trust	Total
StateFarm (State Farm)	20 (57.1%)	13 (37.1%)	6 (17.1%)	0 (0.0%)	23 (65.7%)	35
tastidlite (Tastidlite)	37 (48.7%)	24 (31.6%)	16 (21.1%)	0 (0.0%)	64 (84.2%)	76
theBKlounge (Burger King)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0
travelchannel (The Travel Channel)	7 (46.7%)	4 (26.7%)	4 (26.7%)	0 (0.0%)	8 (53.3%)	15
TVGuide (TV Guide)	4 (5.8%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	69
VZWOffer (Verizon Wireless)	52 (62.7%)	8 (9.6%)	15 (18.1%)	0 (0.0%)	62 (74.7%)	83
Wachovia (Wachovia)	9 (50.0%)	9 (50.0%)	4 (22.2%)	0 (0.0%)	18 (100.0%)	18
Walgreens (Walgreens)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	8
WholeFoods (Whole Foods Market)	10 (52.6%)	10 (52.6%)	3 (15.8%)	0 (0.0%)	13 (68.4%)	19
zappos (Zappos.com)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	9 (100.0%)	9
Total	811 (51.4%)	386 (24.5%)	254 (16.1%)	14 (0.9%)	1114 (70.6%)	1577

RQ4: How Interactive are Corporate Posts on Twitter?

Many scholars insist on analyzing interactivity when studying any new medium (Rafaeli, 1988; Sundar, Kalyanaraman, & Brown, 2003). Twitter's platform originally called for users to post 140 characters answering the question, "What are you doing?" Now, it has transitioned from a "simple," low interactive platform into one where users can interact with one another on a

higher level. The following section measures how interactive the corporations' tweets are by assigning a grade of low, medium, or high to each tweet. Researchers coded for low interactivity when tweets did not include anything other than the original message (e.g. no links, @replies, RT's, or any extra features). Posts, with medium interactivity, included tweets with links to pictures, videos, websites, or any other further information to accompany the original message. Retweets of other messages that did not include a response to the other user's original message also fit under the medium category. In addition, mentions (not actual replies), using the at symbol ("@") fit under medium interactivity. Researchers coded for high interactivity when tweets were at replies to other users and when companies retweeted other posts with comments before the RT. Out of the 1,577 tweets posted on Twitter by the 45 companies, 782 tweets (49.6%) demonstrated characteristics of high interactivity, 620 tweets (39.3%) demonstrated characteristics of medium interactivity, and 175 tweets (11.1%) demonstrated characteristics of low interactivity. See Table 17 for a complete list of interactivity by industry, and see Table 18 for a complete list of tweets by levels of interactivity. Links appeared in 670 of the tweets (42.5%), compared to the 907 tweets (42.5%) that did not have links.

I first conducted a one-sample chi-square test to assess the relationship between the industry of the corporations in the sample (entertainment, retail, food and beverage, travel, car, sports team, big brand finance, and other) and the level of interactivity (low, medium, and high) presented in the corporate tweets. The results of the test were significant, $\chi^2(16, N = 1577) = 276.75, p < .001$. Industries used mostly high interactive tweets, with the food and beverage industry utilizing high interactivity the most with 143 tweets (69.4%). Other industries that posted more than 50.0% of their tweets with high interactivity included the following: the entertainment industry with 313 tweets (58.8%), the car industry with 69 tweets (57.0%), and the finance industry with 39 tweets (54.2%). Medium interactivity was the second most common

level of interactivity found in the corporate tweets, with the travel industry with 38 tweets (50.7%) and the big brand industry with 85 tweets (52.8%) posted the majority of their tweets with medium interactivity. Low interactivity was used the least by all industries, which all reported percentages below 40.0% and as low as 1.9%.

Table 17.

Interactivity of Posts by Industry

Industry	Interactivity of Post			Total
	Low	Medium	High	
Entertainment	10 (1.9%)	200 (39.3%)	313 (58.8%)	532
Retail	20 (16.4%)	59 (48.4%)	43 (35.2%)	122
Food and Beverage	11 (5.3%)	52 (25.2%)	143 (69.4%)	206
Travel	10 (13.3%)	38 (50.7%)	27 (36.0%)	75
Car	11 (9.1%)	41 (33.9%)	69 (57.0%)	121
Sports Team	85 (33.6%)	101 (39.9%)	67 (26.5%)	253
Big Brand	6 (3.7%)	85 (52.8%)	70 (43.5%)	161
Finance	15 (20.8%)	18 (25.0%)	39 (54.2%)	72
Other	7 (20.0%)	17 (46.8%)	11 (31.4%)	35
Total	175 (11.1%)	620 (39.3%)	782 (49.6%)	1577

Note: $\chi^2(16, N = 1577) = 276.75, p < .001$

High interactivity was present in the majority of the tweets, representing 782 tweets (49.6%). Out of the 45 companies that posted tweets, 14 had no tweets (0.0%) with high interactivity, while 31 companies posted some tweets with high interactivity. Of those 31 companies, 14 posted the majority of their tweets (50.0% or more) with high interactivity. The companies that used high interactivity the most included the following: Wells Fargo (Ask_WellsFargo) with 29 tweets (74.4%), Comcast (comcastcares) with 203 tweets (92.7%),

DIRECTV (DIRECTV) with 48 tweets (96.0%), Dunkin' Donuts (DunkinDonuts) with 46 tweets (78.0%), The Home Depot (HomeDepot) with 32 tweets (74.4%), PopCap (popcap_games) with 15 tweets (75.0%), Popeyes Chicken (PopeyesChicken) with 19 tweets (79.2%), Ford (ScottMonty) with 45 tweets (76.3%), Starbucks (Starbucks) with 34 tweets (72.3%), and Verizon Wireless (VZWOffers) with 64 tweets (77.1%). Some examples of high interactivity tweets included the following:

- Comcast (comcastcares), “@EmilyAsqueri What is the error you are receiving? 7:09 PM Nov 25th, 2009 from web in reply to EmilyAsqueri”
- Dunkin' Donuts (DunkinDonuts), “@PRguy312 Your wish is our commanDD! I may be going a little too crazy with the DD's, btw... Thanks for yr follow!7:29 AM Nov 25th, 2009 from TweetDeck in reply to PRguy312”
- Ford (ScottMonty), “@delwilliams I'll be at the Fiesta event <http://bit.ly/FiestaParty> & media days of the L.A. Auto Show. Media creds are supplied by the show.9:31 PM Nov 24th, 2009 from web in reply to delwilliams”

Medium interactivity was the second most common level of interactivity, representing 620 tweets (39.3%). Out of the 45 companies that posted tweets, only one company, DIRECTV (DIRECTV), posted no tweets (0.0%) with medium interactivity, while the 44 remaining companies posted medium interactive tweets. From those 44 companies, 22 posted the majority of their tweets (50.0% or more) with medium interactivity. Nine companies posted only medium interactive tweets (100.0%), which included Chevron (Chevron) with seven tweets, EMC Corporation (emccorp) with one tweet, General Electric (GE_Reports) with eight tweets, JetBlue Airways (JetBlue) with 11 tweets, McKesson Health IT (McKesson_HIT) with 14 tweets, Pfizer (pfizer_news) with five tweets, Sears Holdings (SearsHoldings) with six tweets, TV Guide (TVGuide) with 69 tweets, and Walgreens (Walgreens) with eight tweets. Some examples of

medium interactivity tweets included the following:

- Chevron (Chevron), “RT @renzo97- Chevron Donates Over \$26K To Local Food Bank:<http://p.gs/huf2r4>:12 PM Nov 21st, 2009 from web”
- JetBlue Airways (JetBlue), “Thanksgiving travelers through JFK T5: Watch The Crowd as you head out - and we mean this crowd<http://myspace.com/thecrowd> #LivefromT5 about 4 hours ago from CoTweet”
- McKesson Health IT (McKesson_HIT), “Thanks for the RTs this week @H4QInSight and @HealthInFocus!12:49 PM Nov 20th, 2009 from TweetDeck.”

Low interactivity was the least used level of interactivity by the 45 companies that posted tweets. The total number of low interactive posts from the 45 companies came to 175 tweets (11.1%). Out of the 45 companies, 30 companies posted one or more tweets utilizing low interactivity. From those 30 companies, only two posted the majority of their tweets (50.0% or more) with low interactivity, which included Chicago Bulls (chicagobulls) with 32 tweets (61.5%) and Zappos.com (zappos) with seven tweets (77.8%). Fifteen companies posted no tweets with low interactivity. Some examples of tweets utilizing low interactivity included the following:

- Chicago Bulls (chicagobulls), “Bulls 3rd quarter comeback wasn't enough and they drop one in Portland 122-98. Next: @ Utah on Thanksgiving night, 9:30pm TNT9:29 PM Nov 23rd, 2009 from TweetDeck”
- Zappos.com (zappos), “"When the power of love overcomes the love of power, the world will know peace." -Jimi Hendrix2:19 PM Nov 25th, 2009 from web”
- General Motors (GM_blogs), “Disappointed w/Koenigsegg's decision re: Saab deal. Given this sudden change, we'll assess situation & advise on next steps next week8:30 AM Nov 24th, 2009 from TweetDeck”

Table 18.**Interactivity of Posts by Twitter ID**

Twitter ID (Company Name)	Interactivity of Post			Total
	Low	Medium	High	
92YTribeca (92Y)	3 (3.8%)	68 (86.1%)	8 (10.1%)	79
AdamDenison (Chevrolet)	1 (14.3%)	3 (42.9%)	3 (42.9%)	7
Alicia_at_Honda (Honda)	1 (6.7%)	8 (53.3%)	6 (40.0%)	15
americanapparel (American Apparel)	2 (25.0%)	6 (75.0%)	0 (0.0%)	8
Ask_WellsFargo (Wells Fargo)	8 (20.5%)	2 (5.1%)	29 (74.4%)	39
BestBuyRemix (Best Buy)	7 (29.2%)	9 (37.5%)	8 (33.3%)	24
CarnivalCruise (Carnival Cruise Lines)	2 (28.6%)	5 (71.4%)	0 (0.0%)	7
chargers (San Diego Chargers)	8 (12.9%)	21 (33.9%)	33 (53.2%)	62
Chevron (Chevron)	0 (0.0%)	7 (100.0%)	0 (0.0%)	7
chicagobulls (Chicago Bulls)	32 (61.5%)	13 (25.0%)	7 (13.5%)	52
comcastcares (Comcast)	5 (2.3%)	11 (5.0%)	203 (92.7%)	219
ConnectByHertz (Hertz)	5 (23.8%)	8 (38.1%)	8 (38.1%)	21
DETPistons (Detroit Pistons)	25 (46.3%)	28 (51.9%)	1 (1.85%)	54
DIRECTV (DIRECTV)	2 (4.0%)	0 (0.0%)	48 (96.0%)	50

(Table 18 Continued)

Twitter ID (Company Name)	Interactivity of Post			Total
	Low	Medium	High	
DIRECTV (DIRECTV)	2 (4.0%)	0 (0.0%)	48 (96.0%)	50
DunkinDonuts (Dunkin' Donuts)	5 (8.5%)	8 (13.6%)	46 (78.0%)	59
emccorp (EMC)	0 (0.0%)	1 (100.0%)	0 (0.0%)	1
GE_Reports (General Electric)	0 (0.0%)	8 (100.0%)	0 (0.0%)	8
GMblogs (General Motors)	2 (10.5%)	10 (52.6%)	7 (36.8%)	19
HomeDepot (The Home Depot)	0 (0.0%)	11 (25.6%)	32 (74.4%)	43
HRBlock (H&R Block)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0
Intuit (Intuit)	0 (0.0%)	14 (93.3%)	1 (6.7%)	15
JetBlue (JetBlue Airways)	0 (0.0%)	11 (100.0%)	0 (0.0%)	11
LuxorLV (Luxor Las Vegas)	6 (26.1%)	6 (26.1%)	11 (47.8%)	23
MarriottIntl (Marriott International Hotels and Resorts)	0 (0.0%)	4 (36.4%)	7 (63.6%)	11
Marvel (Marvel Entertainment)	0 (0.0%)	51 (62.2%)	31 (37.8%)	82
McKesson_HIT (McKesson Health IT)	0 (0.0%)	14 (100.0%)	0 (0.0%)	14
Microsoft (Microsoft)	3 (11.5%)	23 (88.5%)	0 (0.0%)	26

(Table 18 Continued)

Twitter ID (Company Name)	Interactivity of Post			Total
	Low	Medium	High	
Pdtrailblazers (Portland Trail Blazers)	20 (23.5%)	39 (45.9%)	26 (30.6%)	85
pfizer_news (Pfizer News)	0 (0.0%)	5 (100.0%)	0 (0.0%)	5
popcap_games (PopCap)	0 (0.0%)	5 (25.0%)	15 (75.0%)	20
PopeyesChicken (Popeyes Chicken)	1 (4.2%)	4 (16.7%)	19 (79.2%)	24
RichardatDELL (DELL)	0 (0.0%)	11 (64.7%)	6 (35.3%)	17
rubbermaid (Rubbermaid)	1 (20.0%)	4 (80.0%)	0 (0.0%)	5
ScottMonty (Ford)	2 (3.4%)	12 (20.3%)	45 (76.3%)	59
SearsHoldings (Sears Holdings)	0 (0.0%)	6 (100.0%)	0 (0.0%)	6
SouthwestAir (Southwest Airlines)	1 (4.8%)	11 (52.4%)	9 (42.9%)	21
Starbucks (Starbucks)	2 (4.3%)	11 (23.4%)	34 (72.3%)	47
StateFarm (State Farm)	7 (20.0%)	17 (48.6%)	11 (31.4%)	35
tastidlite (Tastidlite)	3 (3.9%)	29 (38.2%)	44 (57.9%)	76
theBKlounge (Burger King)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0
travelchannel (The Travel Channel)	1 (6.7%)	6 (40.0%)	8 (53.3%)	15
TVGuide (TV Guide)	0 (0.0%)	69 (100.0%)	0 (0.0%)	69

(Table 18 Continued)

Twitter ID (Company Name)	Interactivity of Post			Total
	Low	Medium	High	
VZWOffer (Verizon Wireless)	3 (3.6%)	16 (19.3%)	64 (77.1%)	83
Wachovia (Wachovia)	7 (38.9%)	2 (11.1%)	9 (50.0%)	18
Walgreens (Walgreens)	0 (0.0%)	8 (100.0%)	0 (0.0%)	8
WholeFoods (Whole Foods Market)	3 (15.8%)	13 (68.4%)	3 (15.8%)	19
zappos (Zappos.com)	7 (77.8%)	2 (22.2%)	0 (0.0%)	9
Total	175 (11.1%)	620 (39.3%)	782 (49.6%)	1,577

Summary

The results of this section helped identify common trends in how corporations use Twitter to communicate to and with their publics. Over the one-week sampling timeframe, 94 company twitter homepages and 1,577 corporate tweets for 47 companies were analyzed. The results also highlight the different ways in which corporations followed the four models of public relations. In addition, the data examines the different types of relationships and relationship indicators present in corporate tweets. Finally, this thesis looked at the level of interactivity present in corporate tweets on Twitter.

From the 47 companies, 94 Twitter homepages were examined. The Twitter homepages helped identify visual elements, as well as quantitative aspects of each company. Each company had different ways in which they projected the company's personality onto the background of the Twitter pages. All companies identified the logo somewhere on the homepage, as to clearly

identify the source of information. The number of followers for each company increased, regardless of the number and type of tweet. Some companies, however, showed a negative percent change in the number of users they followed. This could be due to the company deleting users or users denying companies access to their tweets. How many users listed the company showed a dramatic positive percent change compared to the number of followers and following.

Overall, 1,577 tweets originated from 45 out of the 47 companies. Two companies, during the week sampling timeframe, did not post any tweets. Of those posts, 695 (44.1%) were original posts, 667 (42.3%) were at replies, and 215 (13.6%) were retweets. With this in mind, 761 (48.3%) of the tweets were one-way in nature, while 813 (51.6%) were two-way in nature, supporting the idea that companies use Twitter as a conversation tool. Of the one-way communication tweets, 533 (33.8%) fit under the press agency model and 228 (14.5%) fit under the public information model. Of the two-way communication tweets, 700 (44.4%) fit under the two-way symmetrical model, while 111(7.0%) fit under the two-way asymmetrical model. Regardless of the model used, all companies increased the number of follower numbers.

The types of relationships companies tried to form on Twitter were also analyzed, as well as the use of the different relationship indicators as identified by Hon and Grunig. As a social medium, it was not surprising that 999 (63.3%) of the tweets demonstrated a desire to form a communal relationship, while 578 (36.7%) of the tweets demonstrated a desire for an exchange relationship. When analyzing the relationship indicators, 1,114 (70.6%) showed a desire for trust, 811 (51.4%) showed a desire for control mutuality, 386 (254) showed a desire for commitment, and 254 (16.1%) showed a desire for satisfaction. Surprisingly, 14 (0.9%) tweets showed customer dissatisfaction with not attempt to resolve the issues between the company and the user. Finally, the interactivity of each tweet was analyzed. From the 1,577 tweets analyzed, 782 (49.6%) demonstrated characteristics of high interactivity, 620 (39.3%) demonstrated

characteristics of medium interactivity, and 175 (11.1%) demonstrated characteristics of low interactivity.

CHAPTER 6. DISCUSSION

Imagine a world where everything you say is 140 characters or less. Impossible, some people might argue, but that is exactly what the microblogging/social networking site Twitter forces its users to do. Since its launch in 2006, Twitter has exploded into one of the top social networking sites on the Internet. Twitterers send around 50 million tweets each day (Schonfeld, 2010). That is a staggering 1.5 billion tweets per month. Twitter has evolved from a platform in which people merely update the Twitterverse about their daily activities to a communication channel where interpersonal conversations between users thrive. It is constantly morphing into a community of users with similar interests, connecting people all over the world. Most important to this study is the conversations between individual users and the corporations that interact with those individuals. While some naysayers think Twitter is simply a fad that will soon burn out, one cannot ignore its popularity and its significance as a communication tool for companies of all shapes and sizes.

This study was designed to follow a group of corporations on Twitter to explore how corporations were using Twitter as a public relations communication tool. The newness of this medium allowed this study to take on a descriptive and exploratory aspect about Twitter as a communication tool, but it also goes further into the public relations practices on the microblogging, social networking site. The results from this content analysis are not intended to be generalized to the entire Twitterverse. The following section will further identify common trends on Twitter and some best practices according to previous research and findings from this study.

Discussion of Findings

Companies in this study employed Twitter for different reasons. Based on the findings of this study, I believe that some companies, such as TV Guide, used Twitter as a means to

publicize and direct users to articles on their websites. This was evident in 66 (95.7%) of TV Guide's (TVGuide) tweets, which fell under the press agency/publicity model of public relations. Data also showed that companies used Twitter as an avenue of customer service. For example, Comcast (Comcastcares) reached out to many of its publics through Twitter to answer questions, fix customer complaints, and direct users to further resources in case the author, Frank Eliason, could not assist. Quite often, it was apparent in the data that these companies sought out customer conversations through searches, which showed an effort towards research on Twitter, the first step in the four-step public relations process (Swann, 2008). For example, The Home Depot (HomeDepot) posted this tweet, "@madeherebaby Bruce, just saw your tweet about the shades. I would like to help. Please DM complete order#. Will return Friday. ^Michael4:20 PM Nov 25th, 2009..." in response to the user's original tweet, "After a month and a half 'process,' Home Depot totally screwed up our cellular shade order. I am steamed.5:05 PM Nov 25th, 2009..." Clearly seen in this tweet, companies use Twitter to search and address customer service issues to ensure customer trust and satisfaction.

The data also showed that many companies used a mixed strategy on Twitter. These companies used Twitter to announce news, promote products, answer questions, converse with users, gather customer feedback, and engage in the conversation around their company. The personality of the company and/or the personality of the author tweeting on behalf of the company were fundamental to many Twitter accounts. Dunkin' Donuts (DunkinDonuts) was one such example. With its quirky posts and "DD" references, Dunkin' Donuts used Twitter to express a fun-loving personality while engaging in conversations with customers and promoting select items every so often.

Because Twitter is the melding of a mass medium and interpersonal communication, companies can disseminate information to a wide variety of publics, as well as target certain

messages to individuals with instantaneous speed. As public relations practitioners, Twitter should be used to cultivate relationships with those publics. Cutlip, Center, and Broom (1985) defined public relations as “the management function that builds and maintains mutually beneficial relationships between an organization and the publics on whom its success or failure depends” (p. 6). By investigating Grunig’s four models of public relations and Hon and Grunig’s (1999) relationship indicators, this study analyzed how 47 companies attempt in forming those relationships on Twitter.

Hon and Grunig (1999) argued that two-way symmetrical or mutually beneficial relationships are vital to measuring the effectiveness of relationships between organizations and their publics. Twitter gives practitioners an avenue of communication that allows them to bypass the traditional media and speak directly with their publics, which provides them opportunities to utilize two-way symmetrical communication. It is apparent that most of the 47 companies studied on Twitter are attempting to form some dialogue around their companies with users. Out of those companies that posted tweets, 13.6% were retweets and 42.3% were at replies. Both types of posts demonstrate a desire to communicate with publics on Twitter, instead of merely pushing out information. Most importantly, the data show that 44.4% of the tweets followed the two-way symmetrical model of public relations. This finding demonstrates some companies’ desire to build relationships with their publics on Twitter, utilizing two-way symmetrical communication. Eighteen companies, however, posted no tweets that represented the two-way symmetrical model, which represented 38.3% of the total companies analyzed in this study. Using Grunig’s principles, this would not be sufficient in building mutually beneficial relationships. Companies should strive harder to utilize Twitter as a two-way symmetrical communication tool by using its at reply and direct messaging features. These features allow companies to interact with users to find out more about what the user likes or dislikes about the

brand, product, or service. This is important because companies can instantaneously gather feedback that will help them tailor products and services to better accommodate the needs of their customers. These features also enable users to see the personality behind the brand, further engaging users with the company, as well as maintaining and building relationships with publics online.

In addition to analyzing the four models by Twitter ID, this study investigated how different industries utilized the four models. The entertainment, food and beverage, car, and finance industries utilized the two-way symmetrical model the most, while the travel, sports team, and big brand industries utilized the press agency model the most. The majority of the retail industry tweets followed both the press agency and two-way symmetrical models. I should note, however, that some companies may have influenced how some industries' tweets fell into one or more of the models. In the entertainment industry, Comcast and Direct TV utilized the two-way symmetrical model in the majority of their tweets, which represented almost half of the total entertainment industry tweets combined. Other companies in the entertainment industry, such as 92Y and Marvel, tended to use the press agency model when posting on Twitter. In addition, while further analyzing the car industry and its use of the two-way symmetrical model, I found that Scott Monty from Ford utilized mostly two-way symmetrical tweets, which represented 35.5% of the total tweets for that industry. The other car companies, such as Honda, Chevron, Hertz, and General Motors, posted more tweets that fell under the press agency model. The differences found in the use of models when comparing the industries as a whole to the individual companies further suggests that companies are still trying to figure out the best way to use Twitter. I believe that many companies in these industries are still trying to figure out a model for using Twitter to communicate with their online publics, but it is crucial for those

industries to remember the social aspect of Twitter, which gives users a perfect opportunity to engage in two-way discussions to figure out how online parties can help one another.

Other research argues against Grunig's four models of public relations. Some state the two-way symmetrical model is more of a utopian ideal than a realistic one (Laskin, 2009). Previous literature illustrates although some communication seems symmetrical in nature, it may actually be asymmetrical in that it helps the company more in the end (Stauber & Rampton, 1995). In addition, Cancel, Cameron, Sallot, and Mitrook (1997) said, "The practice of public relations is too complex, too fluid, and impinged by far too many variables for the academy to force it into the four boxes known as the four models of public relations" (p. 32). These authors proclaim using two-way communication as sufficient in communicating with publics. In addition, the two-way asymmetrical model was the only model that the intercoder reliability was not acceptable. This could be due to the subjective nature of analyzing the two-way asymmetrical and two-way symmetrical models. The difference between these two models is subjective because it is difficult to infer whether one party benefits more over the other party when only analyzing 140 characters of that conversation.

Because of the unacceptable intercoder reliability measure of the two-way asymmetrical model and the subjective nature of symmetry, this study also analyzed one-way versus two-way communication to further explore the flow of information on Twitter. The data showed that 51.6% of the tweets used two-way communication. This represented 7.2% more tweets compared to only looking at two-way symmetrical tweets. Twelve companies, however, still failed to utilize two-way communication in their tweets. In addition, the retail, travel, sports team, and big brand industries utilized one-way communication in the majority of their tweets, while the entertainment, food and beverage, and finance industries posted more tweets following two-way communication.

Corporations can better use Twitter as a conversational tool in which companies can form relationships with publics. Some mix of promotion is natural, as well as dissemination of public information (e.g. game scores, company news, etc.), but companies can take better advantage of how close they actually are to their publics online. Companies should engage in the conversation already happening on Twitter about their brands. These conversations are going on whether the company chimes in or not. If companies fail to respond to these conversations, they are missing opportunities for two-way communication. Not only can companies ostracize online publics by ignoring their complaints or praises, but they can also fail to realize potential problems in their company before they can stop them from progressing.

Many symmetrical relationships depend on interpersonal communication. Previous research on interpersonal relationships helped shape Hon and Grunig's (1999) relationship indicators. Hon and Grunig (1999) stated that companies should form communal relationships, which are mutually beneficial relationships. In a communal relationship, one party helps the other party regardless of past or future benefits produced by the other party. The study found that more often than not, the tweets exposed a desire to form communal relationships with publics on Twitter. While six companies showed no desire to form communal relationships, 28 companies demonstrated a desire to form communal relationships in the majority of their tweets. Through their tweets, these companies revealed a desire to help or inform their customers without using persuasive techniques or biased language. Companies also posted tweets that demonstrated a desire to form exchange relationships with publics. Similar to analysis of comparing the individual companies and their relationships, the majority of the industries' tweets, except for the travel industry, demonstrated an attempt at forming communal relationships with online publics. This was exceedingly apparent for the food and beverage, car, and finance industries, where more than 70.0% of their tweets aligned with communal relationships.

A combination of communal relationship and exchange relationship is natural, especially if analyzing it through the contingency theory where tactics and communication strategies depend on what the company is trying to accomplish. While public relations theory on relationship indicators (Hon & Grunig, 1999) advocate for communal relationships, Twitter is also an ideal mass medium to bring awareness to a new product or service. Communal relationships should remain the focus of communication, but exchange relationships are inevitable when promotion is involved. The data show that most companies, as well as the industries as a whole, are striving to form communal relationships.

In addition to communal versus exchange relationships, this study analyzed Hon and Grunig's (1999) four relationship indicators vital to all OPRs, control mutuality, commitment, satisfaction, and trust. Trust was the most common relationship indicator demonstrated in the tweets. A desire for trust was coded for tweets that showed genuine conversations between users; that responded quickly to customer complaints, questions, and comments; that demonstrated the company's desire to do good deeds in the community; and that showed a personality behind the brand. Twitter allows companies to put a face and personality to an otherwise stagnant brand. These companies are in a social space, so finding an attempt at consumer trust was not surprising. Social media sites (especially Twitter) provide companies with ideal avenues in which to engage publics and to further build trust by forming relationships online.

The second most common relationship indicator was control mutuality. When measuring control mutuality for online communication, practitioners should investigate whether publics have the ability to share in the conversation about the organization (Hallahan, 2008). Twitter is a unique way to engage in conversation about company brands and products. Control mutuality was found in tweets that solicited feedback from customers, that demonstrated a conversation with users around the brand or products/services of the brand, and that showed genuine interest

in what customers had to say about the brand or products/services of the brand. Like trust, control mutuality can easily thrive on Twitter. Companies should see what customers are saying about their company and respond to those customers, whether what they are saying is good or bad. Another way for companies to demonstrate their desire for control mutuality can be in the form of following the users that follow the company. This demonstrates a desire to hear what the customers have to say and can also help in researching what the users likes and interests are.

Commitment was the third most common relationship indicator found while analyzing corporate tweets. Commitment posts included, but were not limited to, attempts to make the experience with the company better; affirmations that the company enjoys conversing and doing business with the users; and answers to questions, customer support, tips, and other useful information that demonstrated a desire to build long-term relationships with users. Some tweets analyzed in this study illustrated the converse of wanting to form a long-term relationship with customers. An example of this came from the San Diego Chargers (chargers), “Then unfollow! The beauty of twitter. RT @andrewwp: dude. @chargers. 9 RT's in the last 20 minutes? necessary? I think not...” While these types of posts were rare, companies should avoid confrontation with users. Instead, they should listen to user feedback and try to respond appropriately without ostracizing publics. Communication on social media sites also takes commitment on behalf of the companies using these sites, because once they build a following online, they cannot abandon them as to not tear down relationships. Public relations practitioners can demonstrate commitment on Twitter by using stewardship as they would with offline communication techniques.

Finally, the data revealed that a desire for customer satisfaction was the least likely relationship indicator. This can be due to the subjective nature of satisfaction and because satisfaction is better measured through self-report methods such as surveys. However, this study

took into consideration how the companies tried to correct consumer problems on Twitter, so self-reporting by publics was not necessary. Companies demonstrated a desire for customer satisfaction in posts that retweeted testimonials from customers who voiced their good experiences with the companies and tweets that replied to customers expressing dissatisfaction in an attempt to correct the problem. While companies want to be careful in promoting other users' bad experiences, they should not ignore them. Twitter is a quick and easy way to reach customers and fix problems occurring with company brands. If a company has the funds, they can even hire a social media firm to analyze the conversation around brands, but this is not necessary. Simple search engines help identify those users who are talking about brands. In addition, telling users thank you or that the company is glad they can help further extends that desire for customer satisfaction as well as commitment.

For the function of public relations, studying relationships is important when analyzing any communication channel used by practitioners, but for new media, we must also discuss the interactivity of Twitter (Rafaeli, 1988; Sundar, Kalyanaraman, & Brown, 2003). While it began in 2006, Twitter is still an understudied new medium. Sundar et al. (2003) argue, "With the increasing convergence of media, interactivity often refers to users having the potential to be both sources and recipients of content and interaction" (p. 32). Twitter serves as a "simple" platform for users "to be both sources and recipients of content and interaction" (Sundar et al., 2003, p. 32). As previously mentioned, Twitter is a medium in which users can post daily updates about their lives, share links with other users, and reply publicly or privately to other users. It is a great way for companies to send out information to publics, receive feedback from publics, and converse with publics.

The data clearly illustrates how Twitter has evolved over the years. This medium transitioned from a site in which users merely answered the question, "What are you doing?" to a

platform in which users (and for the purposes of this study, corporations) converse with users about topics and share information via links. Companies used high interactivity in their posts the most, followed medium interactivity and low interactivity, respectfully. While looking at the industries as a whole, nearly half posted more high interactive tweets, while the other half posted mostly medium interactive tweets. The entertainment, food and beverage, car, and finance industries utilized high interactivity the most in their tweets. Other industries, such as the retail, travel, sports team, and big brand industries, mainly posted tweets with medium interactivity. The industries used low interactivity the least, but the sports team industry posted the highest percentage of low interactivity tweets compared to all other industries. This could be because many of the sports teams tweeted scores as they happened, which do not require links or at replies. The results for interactive show that corporations and industries as a whole use Twitter to engage in responsive discourse with other users. This is what corporations should be doing on Twitter. It is a social medium where millions of publics are easily accessible. Through research and listening mechanisms, corporations can contact publics for a variety of reasons, whether it is to fix customer complaints, obtain feedback about existing or potential products and services, or reaching out to publics just to say hello and thank you. While a healthy mix of low and high interactivity is desirable, public relations practitioners should strive for a higher amount of interactivity, which could help build credibility for their corporations implementing transparency in their communication.

Limitations and Future Research

This study is this first of its kind. Currently, no published research on Twitter and public relations exists. I used preexisting theories and methods and tailored them to this new medium.

Limitations. There are limitations to every study, and this one is no exception. Since the study consisted of a convenience sample of the 37 corporations and a random sample of 10

corporations, the study cannot be generalized to the entire Twitterverse. The simple design of Twitter makes it difficult to follow the discussion surrounding each company. To have a uniform way in which each company was studied, only those tweets that the companies posted were analyzed. Researchers checked at replies that linked to the original, public post to help determine the four models and relationship indicators, but they were not included in the total tweets (only if the link was provided, and the user who originated the message had a public profile). Due to a few technical glitches, some tweets from four companies did not make it into the final sampling pool (Whole Foods Market, WholeFoods; Southwest Airlines, SouthwestAir; TV Guide, TVGuide; and JetBlue Airways, JetBlue). I did not, however, exclude these companies from the sample because a large amount of tweets still made in into the final sample including the following: Whole Foods Market (WholeFoods) with 19 tweets, Southwest Airlines (SouthwestAir) with 21 tweets, TV Guide (TVGuide) with 69 tweets, and JetBlue Airways (JetBlue) with 11 tweets.

Future Research. Researchers should continue to monitor the use of Twitter among public relations practitioners. There are countless opportunities for research using Twitter, considering how understudied this medium is. In regards to relationships on Twitter, researchers have several avenues to take when studying Twitter. First, researchers should use the original survey, created by Hon and Grunig (1999), to send to corporations using Twitter. Researchers should develop these surveys for the communication individuals in charge of the corporate Twitter accounts to gauge how they feel about the relationships with their users and what they are trying to accomplish with using Twitter. Also using a survey, researchers can target a brand or a group of brands and send the surveys out to those brands' followers, to test the relationship with the company in the eyes of the users. Researchers can also use a triangulation method to examine relationships on Twitter. A study can take on the form of a case study on one

corporation, interviewing the corporation, sending surveys out to followers, and analyzing the posts on Twitter using a content analysis. This study would help identify the entire process of using Twitter from all sides (communication professionals, brand customers, and actual posts).

Researchers can also study public relations practitioners' use of Twitter. Using a database of public relations practitioners, researchers can send out surveys to analyze who uses Twitter, who does not, and why; what roles those practitioners see themselves in fulfilling (managers versus technicians); how the use of Twitter affects their views on empowerment; etc. Since previous research sees public relations practitioners as laggards when it comes to adopting new media, this would help further that research in regards to Twitter (Porter, Sallot, Cameron, & Shamp, 2001; Eyrich, Padman, & Sweetser, 2008)..

Implications and Conclusions

Four-step Public Relations Process for Twitter. Part of practicing public relations is going through a four-step process: research, generating objectives and an action plan, implementing the communication plan, and evaluation (Swann, 2008). "Practitioners must complete the public relations process and evaluate the results of their efforts so that management can clearly see a return on its investment in money, staffing, and time," says Swann (2008, p. 7). While evaluation is critical to demonstrating any public relations practitioner's ROI, it is only one-step of the four-step process. This four-step process in terms of Twitter is analyzed below.

The first step is research. Twitter, as well as different search engines and third-party applications, allows public searches about anything and everything internet users want to know. Practitioners can search mentions of their companies to see how the conversation about their companies is evolving on Twitter. This part of research is an invaluable, free tool in which practitioners should utilize when communicating on Twitter. Listening is the first step in any communication on social media sites. Users need to see how the conversation naturally flows

and engage in other conversations before expecting others to engage with them. Through research, practitioners will not only know what is being said about their company, they will also learn how to communicate with these users based on how other companies are successfully doing so. Free tools for research are available via Twitter and some third-party sites. Corporations can also pay research groups to listen for them and analyze the conversations, but this is not necessary for all companies.

Research can help identify how corporations are effectively using Twitter and how certain strategic publics communicate using this medium. Park and Reber (2008) found “the key to developing mutually beneficial relationships with multiple publics will be the extent to which the corporations utilize their Web sites effectively with an understanding of the dialogic capacity of Web sites to promote dialogue” (p. 411). This dialogic loop is a feedback loop between organizations and publics that allows for two-way symmetrical communication where the public gives feedback and the organization responds to that feedback (Kent & Taylor, 1998). By understanding the dialogic capacity of Twitter, practitioners can then move on to setting up a communication plan for their interaction with publics on Twitter.

Like any other communication tool, the communication on Twitter should be strategic. This is the objectives portion of the four-step process. Public relations practitioners need to think about what they want to accomplish on Twitter and plan a strategy around those objectives, which should focus on building relationships with users. The nature of social media is to help bridge online and offline relationships, as well as to form new relationships. Practitioners cannot ignore relationships in their objectives because it not only defies the very nature of public relations, but it also discounts the natural existence of Twitter. Objectives should be clear and measurable, whether practitioners are measuring the number of followers, interactions, types of interactions, sales, etc. These objectives should guide the communication plan and evaluation.

While planning objectives for communication on Twitter, corporations should consider what the culture of their company is and what type of personality they would like to portray on Twitter.

Implementing the communication plan is the third-step. This is when the authors on Twitter will actually post tweets on behalf of the corporations. These tweets should strive towards one or more of the objectives set forth in the communication plan. The research phase will also help in knowing how to communicate with users online. Practitioners should remember the culture of their company as well as the type of personality they want to portray on Twitter, as defined in step two. This should help guide how the authors communicate to and with publics on Twitter. The authors of the Twitter homepage should be properly assigned and trained. A timely response to questions and comments should always be a priority for practitioners. This can help develop credibility and trust with users. Since practitioners only have 140 characters to communicate, they should use careful consideration in how they respond to Twitter users. Sometimes tweets can come across differently than the original poster intended.

The final step in the four-step process is evaluation. Several different ways exist in which companies can evaluate their presence on Twitter. Reminiscent of evaluation methods for any communication plan, the evaluation for Twitter communication should reflect the objectives set forth by the practitioners. Depending on those objectives, practitioners can gauge the percent change in followers, lists, and retweets; the percent change in sales due to Twitter communication (coupon codes, surveys, etc.); the percent change in mentions on Twitter by other users (also the tone of these mentions); etc. Most importantly, the companies should evaluate their relationships with users on Twitter. The key here is to stick to the objectives and devise a plan to evaluate those objectives. One can even gauge their own performance on Twitter through a content analysis, just as the data from this study showed. A content analysis is important because so much can be lost in translation when posting online, especially semantics.

By using a content analysis, public relations practitioners can gauge whether their posts reflect the original intent of the company. Finally, the corporations can survey their publics and ask for feedback regarding their communication online and relationship-building strategies.

For corporations, it is always vital to listen to their publics. The data from this study showed that people are more than willing to discuss their experiences with companies on Twitter. Through research, planning, communication, and evaluation, companies can successfully use Twitter to help form OPRs.

Conclusion. Communication technology is constantly developing, but public relations practitioners are often seen as “laggards” when it comes to adopting new media (Porter et al., 2001). It is vital for public relations practitioners to understand social media and how to adequately use these sites for developing relationships with publics. While social media should not replace traditional means of communication, it can always compliment traditional forms of communication and help reach out to publics, once thought to be unreachable. Social media is also the future of communication and public relations, a fact that practitioners cannot ignore. Since its beginning in 2006, Twitter has become one of the top social networking sites on the Internet, and numerous companies have jumped on the bandwagon and joined the Twitterverse to communicate to and with their publics. While this study did not look at whether the authors of the corporate Twitter sites considered themselves public relations practitioners, it did, however, investigate their posts through the frames of public relations theories. The key theme in this study and in public relations in general is relationships.

The data showed that corporations are using Twitter to build relationships with publics. More often than not, the data demonstrated a desire on behalf of the corporations to form communal relationships with users. It also, however, revealed that many companies still need to make better efforts in engaging users and building relationships on Twitter. Trust and control

mutuality were the most prominent relationship indicators in the findings, and almost half of the tweets demonstrated two-way symmetrical communication. While this is true for the tweets as a whole, when analyzing individual companies, many are not following commonly accepted public relations relationship building strategies. Companies, such as Comcast (comcastcares) and Dunkin' Donuts (DunkinDonuts), posted the majority of two-way symmetrical tweets, while companies, such as TV Guide (TVGuide) and 92Y (92YTribeca), can better utilize Twitter as a relationship building tool rather than merely a channel of promotion.

Similar to any other medium, traditional or new, practitioners should develop a strategy when using Twitter as a communication tool. There needs to be guidelines on how employees use Twitter in regards to the company. Companies should also develop communication plans on what to say on Twitter, how the company should be portrayed, and who is in charge of posting. First, companies must listen, by researching what people are saying about the company, how other companies are successfully using the medium, and the manner in which users communicate in that medium. Then, they must add to the discussion, contributing helpful and interesting comments directed toward users or retweeting information by other users. Finally, the company needs to respond to users quickly and genuinely. This could help to build trust and credibility. While public relations practitioners are often seen as laggards, they should be weary of entering social media uneducated and without a plan. Even so, people are conversing about companies worldwide; it is up to the company to decide if joining in on the conversation on Twitter is a right move for them. In conclusion, public relations practitioners should always focus on building relationships on Twitter, because disregarding the relationships with their publics will only prove detrimental to the profession.

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APPENDIX A

CODEBOOK FOR CODE SHEET ONE: CORPORATE TWITTER HOMEPAGES

This codebook includes instructions for code sheet one, which will help researchers identify trends and answer questions regarding corporations' Twitter homepages.

Code Sheet One: Corporate Twitter Homepages

Researchers will use code sheet one twice: the first day of coding and the last day of coding. Code sheet one focuses on the corporations' Twitter homepages. The purpose of this code sheet is to demonstrate any changes in the corporations' Twitter homepages. Researchers will code each Twitter homepage at 8 p.m. on November 18, 2009 and 8 p.m. on November 25, 2009.

1. Time - Type in the date and time in the appropriate boxes.
 - Date
 - Time
2. Descriptive Aspects of the Twitter Homepage – Type in or identify the following:
 - Type of company
 - Car
 - Travel
 - Sports Team
 - Entertainment
 - Finance
 - Retail
 - Food and Beverage
 - Big Brand
 - Other
 - Name of company (ex: Whole Foods Market)
 - Name of author (if available; skip if not)
 - Twitter ID (ex: @WholeFoods)
 - Number of people company follows (type in number)
 - Number of followers the company has (type in number)
 - Listed (type in the number of lists)
3. Background and Picture – Researchers will use this space to describe the background of the Twitter page as well as the picture that appears in the picture display.
4. Bio –
 - Type location
 - Copy and paste web address
 - Copy and paste bio (Copy and paste the biography of the company as well as any links posted on the bio.)

APPENDIX B
CODE SHEET ONE: CORPORATE TWITTER HOMEPAGES

1. Time
 - Date
 - Time
2. Descriptive Aspects of the Twitter Homepage
 - Type of company
 - Name of company
 - Name of author
 - Twitter ID
 - Number of people company follows
 - Number of followers the company has
 - Listed
3. Background and Picture
4. Bio
 - Type location
 - Copy and paste web address
 - Copy and paste bio

APPENDIX C

CODEBOOK FOR CODE SHEET TWO: CORPORATE TWEETS

This codebook includes instructions for code sheet two, which will help researchers identify trends and answer questions regarding corporations' tweets.

Code Sheet Two: Corporate Tweets

Researchers will use this code sheet for each individual tweet from 8 p.m. on November 18, 2009, to 8 p.m. November 25, 2009.

1. Twitter ID – Type in the Twitter ID
2. Time – Type in the date and time in the appropriate boxes.
 - Date of post (MM.DD.YY)
 - Time of post (time followed by a.m. or p.m.) (8 a.m. or 8:21 p.m.)
3. Exact text of tweet – Copy and paste the tweet in this section
4. Type of Post – Type “original,” “RT,” “at reply,” or “other” in the appropriate box.
 - Original post
 - This identifies a post originated by the company’s author (not a retweet or “RT”) without @replying or “at replying” to other users.
 - Retweet “RT”
 - This identifies a post in which the company’s author did not originate. A retweet is identified by “RT” followed by @user and the user’s original post. Retweets can also be identified as “...message...(via @user).” Sometimes a short message with precede the RT. Still identify this post as a RT.
 - At reply
 - This identifies the company at replied to another user, “@user.” If available, click on the “in reply to...” link (located after the date, time, and location of post) to view the original message. If the original post is available (not from a private account), copy and paste the post by “@reply” in the next column. This will help to determine later categories.
5. Link – When a link appears in the post, click the link. Researchers should post the as well as identify what the link is (blog, news story, corporation website) in the column next to the link. If there is no link, type N/A.
 - Post the link here _____
 - What does it link to?
6. From where the user posted the tweet – Type either web or the third-party application the company used to publish the tweet. This is located by the date and time of the tweet “from...”
 - Web
 - Twitterberry

- TweetDeck
- Cotweet
- Seismic
- Other _____

7. Four Models of Public Relations –Researchers will identify whether the tweet fits in one of the four models (press agency/publicity, public information, two-way asymmetrical, and two-way symmetrical). Since the models can overlap, it is okay if more than one model fits each tweet. Try to narrow it down to one model, if possible. Answer yes if the tweet corresponds to the model and no if it does not. The press agency/publicity and public information models use one-way communication. One-way communication refers to communication moving directly from the organization to the public without evidence that the organization wants or uses feedback from the public. The two-way asymmetrical and two-way symmetrical models use two-way communication. Two-way communication refers to communication moving back and forth from an organization to its publics. Two-way communication shows that the organization solicits and uses feedback from its publics.

- Press Agency/Publicity – Type Yes or No
 - One-way communication, using persuasive language: A press agency/publicity post will usually try to persuade others to buy or use a product or service. This can include promotional offers “15% off.” It can also demonstrate obvious publicity of the company, using biased language such as “the best in town.” This type of post does not try to communicate with others using at replies.
 - Ex: HRBlock “Only 2 days left. Never put off until tomorrow, what you can forget about forever. Except for your taxes! File today <http://bit.ly/bkqwN>.”
- Public Information – Type Yes or No
 - One-way communication, using direct, objective language; just the facts: A public information post will extend information without using biased language. This can include scores from a game, directions to the airport, delayed flights, current events, etc. Even if the post is about the company posting the information, it can still fit under this model if it lacks biased language. For example, if the below example included a phrase such as “The amazing Blazers beat...” or “Blazers are the best team in town,” then the post would fit under press agency/publicity. If the post uses at replies, it should not fit under public information because at replies demonstrate two-way communication.
 - Ex: pdxtrailblazers “Blazers beat Thunder 113-83 for win No. 53. Roy plays 21 minutes, scores 20 points. Outlaw with 21, Oden with 16 and 9. DEN up next #uprise.”
- Two-way Asymmetrical– Type Yes or No
 - Two-way communication that advocates feedback or suggests a certain product to help the corporation (most of the time will include @replies): Two-way asymmetrical posts communicate with publics to focus on overall organizational goals, ignoring the needs of the public. The only instance in which a post will not include an at reply and still fit under this

category will be when the company generally asks all users for feedback about company products or services.

- Ex: tastidlite “@keintzb Can I ask how you heard about our Flavor Alerts? <http://bit.ly/WF2uS>.”

- Two-way Symmetrical– Type Yes or No

- Two-way communication that manages conflicts and promotes better understanding between the company and the public (most of the time will include @replies): Two-way symmetrical posts will demonstrate a desire to build long-term, mutually-beneficial relationships with the public. These posts can include a company’s desire to fix a problem a user may have with the company, give advice on how to use products, direct users to information, and having casual conversations.
- Ex: HomeDepot “@WarehouseMedia Justin - I saw your tweet. We've made changes/progress. Try us again & send me your feedback information@homedepot.com.”

8. Relationship Indicators – Researchers will identify whether the tweet demonstrates the following relationship indicators (control mutuality, commitment, satisfaction, and trust). Answer yes if the tweet corresponds to the indicator and no if it does not. Tweets can fit under zero, one, two, three, or four indicators. The indicators are not mutually exclusive and sometimes will fit under more than one category. Many of the at replies with available “in reply to...” posts will help in identifying the following categories.

- Demonstrates Control Mutuality– Type Yes or No

- Posts that demonstrate control mutuality will show a desire to create a conversation around the company or company products or services with the other Twitter users. Control mutuality includes timely, pertinent, and authentic responsive discourse. Most @replies will fall under “yes” for control mutuality. Posts that solicit ideas, information, or other feedback about the company or company products and services to users will also fit under this category because this gives the user an opportunity to make their experience with the company better. Only posts that relate to the company or company products and services will fit under control mutuality. The posts do not have to use the actual company or product name to constitute starting a conversation around the company. Random messages dealing with nothing that is remotely close to what the company is or provides will constitute a “no” answer under control mutuality.

1. Ex: Starbucks “@hi_its_michelle Yes, neither ground nor whole bean coffee should go in the fridge or freezer.”

- Demonstrates Commitment– Type Yes or No

- Posts that show commitment will demonstrate a desire to foster a *long-term* relationship with the public. Committed posts can also try to provide useful information to other Twitter users so that they will continue to build relationships with the company. Commitment posts can be answers to questions, tips, useful information, attempts to make the experience with the company better, affirmations that the company enjoys conversing with users, etc. Emotional responses expressing appreciation, connection, or care also fit under commitment.

1. Ex: SouthwestAir, “@dacort it's not pretend. I care about you! :)”
 - Evidence of Customer Satisfaction or Demonstrates Desire for Customer Satisfaction – Type Yes or No or in some cases Dissatisfaction
 - Researchers will code for satisfaction by looking at posts that reveal that Twitter users let the company know they are satisfied with the company. Posts that show satisfaction will be those where positive expectations about the relationship are reinforced. Retweets (RT), or posts that originated from other Twitter users reposted by the company, can demonstrate customer satisfaction and fall under the category of satisfaction. Attempts to correct company mistakes or pointing the user to the correct place for feedback will demonstrate a desire for customer satisfaction. Many customer service responses will fit under satisfaction. If posts are obvious remarks of customer dissatisfaction and the company did not try to help that user, then type dissatisfaction. Looking at the “in reply to...” messages will help with this section.
 1. Ex: Wachovia “@KyleHepp - We're glad you switched too! :-) If you ever need anything, we're here on Twitter ready to help.”
 2. Ex: ConnectbyHertz “@TDefren So sorry that we may not have been able to get you a car. Wish we had enough cars to satisfy all our demand.”
 - Attempts to Achieve Consumer Trust – Type Yes or No
 - Posts that show trust will demonstrate the company’s desire to extend useful information to other users (the information does not have to always associate with the company or products and services of that company). These posts will show the competence, dependability, and integrity of the company. Posts that also include positive, casual conversations with customers (can be unrelated to the company) demonstrate the company’s attempt at achieving consumer trust. Attempting to correct company mishaps or report a delay, infraction, recall, etc. will also demonstrate trust because this shows the company’s willingness to be transparent.
 1. Ex: JetBlue “ Weather and winds in the Northeast may be causing delays or cancellations. Go to <http://jetblue.com/flightst...> to check flight status.”
9. Communal vs. Exchange Relationship – Type communal or exchange in the appropriate box. This category piggybacks off the relationship indicators. It is in a separate section because, unlike the four indicators above, a company can only demonstrate an attempt to form a communal or an exchange relationship.
- Demonstrates a Communal Relationship –
 - Mutually beneficial relationship where both the organization and its publics give benefits to each other even when they receive nothing in return: Posts that identify communal relationships will show the company’s desire to do good deeds and include posts that demonstrate the company provides benefits to the public because they are concerned about the welfare of that public without the need for getting something in return. These posts can include helpful information, directing users to appropriate people to talk to about complaints, etc.

1. Ex: WholeFoods “@OffHerCork For those totes, it's best to wipe clean with a damp sponge or rag rather than machine washing, which could damage them.”
 - Demonstrates Exchange Relationship –
 - Tweets that exemplify exchange relationships will demonstrate obvious marketing techniques. These posts will also show the company helps the Twitter user out because they expect something in return. If the company gives information about products or services they sell, this will fall under exchange relationship because they are helping the user to buy ITS products/services (This doesn't include information on how to get help regarding an already purchased product/service. This includes information pre-purchase by the other users.). In addition, promotions will be considered exchange relationships.
 1. Ex: americanapparel “15% off swimwear on our online store! <http://bit.ly/swimwear4men> and <http://bit.ly/swimwear4women>.”
10. Interactivity – Type “low,” “medium,” or “high” under the appropriate box.
- Low – Tweets with no links, at replies, RT's, or any extra features other than the original posting.
 - Ex: Wachovia Have a great evening. I'll be back to help you in the morning. ^JR
 - Medium – Tweets with links to pictures, videos, websites, or any other further information to accompany the original message. Retweets of other messages that do not include a response to the other user's original message will also fit under the medium category. Mentions (not actual replies) using the at symbol (“@”) will also fit under medium interactivity.
 - Ex: Starbucks I'm drinking a cup of Verona through the Clover. #nomnom <http://yfrog.us/1122594891z>
 - Ex: tastidlite RT @MobileBehavior: Tasti D-Lite uses YouTube to explain their Foursquare check-in specials: <http://ow.ly/T5ms>
 - Ex: TVGuide No decisions made on @kathygriffin 's future with CNN:<http://bit.ly/7EIS0b>
 - High – Tweets that at reply to other users will fall under high interactivity. These tweets should be a response to other users responses. Do not confuse this with mentions (see medium section). When companies retweet other posts with comments before the RT, the tweet will fall under high interactivity.
 - Ex: comcastcares Always good to see @blankbaby RT Jack_Beitz A meeting of the minds !!! (@blankbaby and @comcastcares)
pic:<http://twitpic.com/wtqtq>
 - Ex: @EECE2 Always interested in hearing about experiences. My email is frank_eliason@comcast.com18 minutes ago from web in reply to EECE2
11. Open-ended Section – Researchers will use this section to post any additional comments they may have regarding the individual tweet. This section allows for more qualitative feedback. In addition, the coder should type what they feel the overall theme of the tweet is.

APPENDIX D
CODE SHEET TWO: CORPORATE TWEETS

1. Twitter ID
2. Time
 - Date of post
 - Time of post
3. Exact text of tweet (copy and paste)
4. Type of Post
 - Original post
 - Retweet “RT”
 - @reply
 - Post the original message here if available.
5. Link
 - Post the link here _____
 - What does it link to?
6. From where the user posted the tweet
 - Web
 - Twitterberry
 - TweetDeck
 - Cotweet
 - Seesmic
 - Other _____
7. Four Models of Public Relations
 - Press Agency/Publicity (one-way) –
 - Yes or No
 - Public Information (one-way) –
 - Yes or No
 - Two-way Asymmetrical (two-way)–
 - Yes or No
 - Two-way Symmetrical (two-way)–
 - Yes or No
8. Relationship Indicators
 - Demonstrates Control Mutuality–
 - Yes or No
 - Demonstrates Commitment–
 - Yes or No
 - Evidence of Customer Satisfaction or Demonstrates Desire for Customer Satisfaction –
 - Yes, No, or Dissatisfaction

- Attempts to Achieve Consumer Trust –
 - Yes or No

9. Communal vs. Exchange Relationship

- Communal Relationship
- Exchange Relationship

10. Interactivity

- Low
- Medium
- High

11. Open-ended Section

- Comments:

VITA

Haley Jane Edman is a native of Shreveport, Louisiana. She is the daughter of Jeff Edman and Karen Henderson, the stepdaughter of Bill Henderson, and the youngest sister to Heather White and Hillary Doyal. Haley's father was a radio personality in Shreveport for more than 20 years, and her sister, Hillary, followed his example, landing the number one morning show there. Surrounded by family in the mass communication field, it was only natural for Haley to pursue mass communication in her undergraduate studies. Haley attended Louisiana State University on a TOPS (Taylor Opportunity Program for Students) scholarship and was a recipient of the Robert Ewing Honor Scholarship. During her undergraduate years, Haley worked with nonprofits, such as Mary Bird Perkins Cancer Center and the Greater Baton Rouge Food Bank, developing public relations materials. Haley graduated *Summa Cum Laude* from LSU in 2007 with a Bachelor of Arts in mass communication: public relations, with minors in business administration and history.

Upon receiving her bachelor's degree, Haley applied to the Master of Mass Communication Degree Program at theanship School of Mass Communication. She was honored a full scholarship and assistantship position. During her graduate assistantship, Haley worked for Dr. Monica Ancu, conducting content analyses on different projects involving political communication, social media, and news coverage; Dr. Nicole Dahmen, assisting the visual communication undergraduate course with design programs; and Dr. Lisa Lundy, researching Food Network television shows and assisting with the graduate level Public Relations Strategies and Tactics Course. Haley worked with several organizations during her years in the master's program, such as the New Orleans Metropolitan Convention and Visitors Bureau, the Baton Rouge Downtown Development District, and the 2010 Baton Rouge Pro Tennis Classic, among others.

In addition to her academic career, Haley gained real world experience in the public relations field. She worked for the Recreation and Park Commission for the Parish of East Baton Rouge (BREC) as a communications intern, writing communication materials, updating the website, managing social media, designing collateral materials, and planning and executing special events. She was also employed with the LSU Foundation as a public relations assistant, aiding the communication, event, and stewardship responsibilities. Finally, Haley gained agency experience at Wright Feigley Communications as an account coordinator. There, she worked with clients such as Campus Federal Credit Union, Louisiana Workforce Commission, and Louisiana Health Care Review/eQHealth Solutions. At Wright Feigley Communications, Haley assisted the account executives by creating and editing communication materials, both internally and externally, and building relationships with clients and the media.

Haley will graduate in May 2010 with a master's in mass communication, focusing on public relations. Her research interests include public relations, with an emphasis on social media. After graduation, Haley plans to pursue a career in public relations. Later in life, Haley may return to school for her doctorate in communication and begin teaching.