CSR Communication for Advancing Corporate Reputation

A case study of Coca-Cola CSR Communication

Master Thesis

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ABSTRACT

The concept of Corporate Social Responsibility (CSR) has emerged as an important topic for both corporations and researchers as public expectations of the proper role of business in society continue to grow. This thesis focuses on what constitutes effective CSR communication that establishes consumer perceptions of higher corporate reputation and legitimacy. In particular, the study analyzes the CSR report as a communication tool utilized by companies to advance their reputation. The analysis adopts a case study of one of the most prominent companies in the world, the Coca-Cola Company in order to determine the most prominent CSR themes communicated by companies to educate their consumers about corporate CSR initiatives. Further, it seeks to find out which CSR issues resonate the most with consumer perceptions. In order to assess stakeholder reactions and sentiment towards Coca-Cola's CSR communication strategy, the study utilizes the social networking platform Twitter. The results are obtained through a mixed method approach of thematic qualitative content analysis and digital methods, including topic modeling, semantic network analysis and sentiment analysis. The thematic analysis of the corporate CSR report revealed that the most prominent themes within Coca-Cola's CSR communication are the *Stakeholder*, *Environmental*, *Ethical*, *Philanthropic*, *Legal* and *Economic.* The semantic network analysis proved that the CSR themes are non-mutually exclusive. The *Ethical* and *Stakeholder* themes and the *Philanthropic* and *Economic* themes are the most interconnected pairs, while the *Environmental* and *Legal* themes are the least related. Finally, the top seven topics discussed by consumers regarding Coca-Cola and CSR are Women, Economy/Business, Environment, Sustainable Packaging, Consumer Health and Safety, Labeling and Corruption Scandals. Overall, the predominant sentiment towards Coca-Cola's CSR was neutral. The *Ethical* and the *Legal* themes sparked the most negative conversations, while the *Philanthropic* and *Stakeholder* themes were the most positively discussed. The findings of the research could assist companies' efforts to tailor effective CSR communication and serve as a basis for future research investigating successful CSR strategies.

KEYWORDS: *CSR, CSR Communication, Corporate Reputation, Consumer Perceptions, Social Media, Twitter*

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1. Introduction

1.1 The Value of CSR

Over the last few decades, corporate social responsibility (CSR) has emerged as both an important topic in the academic field and a pressing corporate agenda item (Marin & Ruiz, 2007; Okoye, 2009; Sen & Bhattacharya, 2001; Waddock & Smith, 2000). In today's global business environment, companies face growing ethical expectations and are asked to fulfill a contingent of social responsibilities by the various stakeholder groups in society (Colleoni, 2013; Moreno & Capriotti, 2009). These new societal expectations are reflected in companies' increasing investment in CSR activities as a way to generate favorable stakeholder attitudes (Du, Bhattacharya, & Sen, 2010). At the same time, CSR engagement is associated not only with positive opinions, but also with the overall increase in a company's reputation (Carroll & Shabana, 2010; Coombs & Holladay, 2012; Lantos, 2001). Gardberg and Fombrun (2002) define reputation as 'a collective representation of a firm's past actions and results that describes the firm's ability to deliver valued outcomes to multiple stakeholders' (p. 304). Research has found that CSR also has a positive effect on stakeholder behaviors such as purchase seeking, employment and investment in the company (Du et al., 2010; Maden, Arıkan, Telci, & Kantur, 2012). Additionally, engaging in CSR activities is linked to a higher economic performance, according to the well-known 'doing well by doing good' (Colleoni, 2013, p. 229) argument (Bhattacharya & Sen, 2004; Carroll & Shabana, 2010; Colleoni, 2013).

When discussing CSR activities, it is important to shed light into what the concept constitutes. CSR has been deemed by academics as an 'essentially contested concept' (Okoye, 2009, p. 613) and has been subjected to a myriad of interpretations. This thesis draws on Carroll's (1991) classic conceptual framework of the CSR pyramid, which is the basis for the following CSR definition: 'The social responsibility of business encompasses the economic, legal, ethical and discretionary (philanthropic) expectations that society has of organizations at a given point in time' (Carroll, 1979, p. 500, 1999, p.283).

As the prominence of CSR in global corporate agenda is growing, so is the need for companies to communicate their CSR initiatives effectively. Indeed, in recent years the academic world has started to actively investigate the components of successful CSR communication (Bortree, 2014). Most research has analyzed the concept of corporate social reporting in the context of the perception of corporate reputation and legitimacy (Chaudhri & Wang, 2007; Colleoni, 2013; Coombs & Holladay, 2012; Morsing & Schultz, 2006). Corporate legitimacy, defined by Suchman (1995) as 'a generalized perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs, and definitions' (p. 574), can be

achieved by aligning corporate behavior with stakeholder expectations (Colleoni, 2013). In order for organizations' CSR agenda to align with what society deems legitimate, it is paramount to communicate effectively how they are meeting the broader expectations for corporate behavior (Dawkins, 2004; Du & Vieira, 2012). Consumers are increasingly interested to know more about the social responsibility of companies and to use this information to judge for themselves which companies are 'good' and which are 'bad' (Lewis, 2001). At the same time, matching stakeholders' perceptions for what constitutes being a 'good' company is not an easy task as often times the credibility and intentions of corporate CSR messages are met with skepticism from the public (Dawkins, 2004; Du et al., 2010).

1.2 Research Questions

Considering the increased stakeholder scrutiny, as well as the aforementioned implications of effectively communicating the CSR corporate agenda, it is not surprising that many researchers turn to surveys to track corporate and public perceptions of CSR (Feldner & Berg, 2014). For example, Harris Interactive conducts an annual poll, measuring the reputations of the most visible companies in the US as perceived by the general public with the Reputation Quotient (RQ) metric. The RQ is based on six dimensions of corporate reputation one of which is social responsibility ("Regional grocer Wegmans unseats Amazon," 2015). The 2015 Harris Poll results reveal interesting trends regarding industry corporate reputation, with the largest declines in the past five years pertaining to the automotive and beverage industry. This is not unexpected as in recent years, issues such as health and wellness, environmental responsibility and food labeling have become primary societal concerns ("Regional grocer Wegmans unseats Amazon," 2015). The most prominent decline in poll results belongs to the soft drinks and beverage market leader Coca-Cola, which fell from second place in 2014 to 34th place in 2015 and experienced a 6.8 point RQ drop ("Regional grocer Wegmans unseats Amazon," 2015).

Reputation polls provide a way to measure public perceptions of CSR efforts, however they do not examine the content of the communication strategies through which companies advance their CSR agendas. Given the increased stakeholders' concerns about social and environmental issues as well as the importance of organizations' delivering CSR information in a strategic way, this study aims to find out how companies report on their CSR initiatives to strengthen their reputation. Additionally, this study investigates the alignment between public perceptions and corporate CSR communication agenda.

As an example of recent reputation trends, the Coca-Cola Company represents a valuable case study for examining how businesses communicate their CSR activities to advance their reputation when society is becoming more aware and skeptical of firms' marketing strategies. Despite being one

of the most visible companies in the world, Coca-Cola has experienced a decline in sales for the last two decades (O'Reilly, 2015), which is consistent with overall trends of decreasing sugar-sweetened beverage consumption (Kit et al., 2013). As more research claims that sugary drinks are a major contributing factor to health issues such as obesity and diabetes ("Sugary drinks and obesity fact sheet," 2012), soda drinkers have become increasingly health conscious. Coca-Cola has acknowledged public health concerns by committing to participate in fighting obesity ("Coca-Cola announces global commitments," 2013). Furthermore, the company's Mission, Vision & Values statement includes social responsibility goals as central to its long-term vision for the future ("Mission, Vision & Values," n.d.). Since corporations seek reputational enhancements through their CSR efforts, creating awareness and believability by effective communication is crucial for reaching the desired reputational boosts (Coombs & Holladay, 2013). Therefore, this study of Coca-Cola will investigate the company's communication strategies for its CSR by focusing on their thematic content. In particular, the study will analyze the CSR report as a communication channel. Furthermore, the project will frame the themes of Coca-Cola's communication based on the four different CSR domains of Carroll's (1991) model of the CSR pyramid: economic, legal, ethical and philanthropic, to uncover which CSR themes resonate most with the public and align best with consumer attitudes. Therefore, this thesis endeavors to answer the following research questions:

RQ1: How does Coca-Cola seek to advance its corporate reputation through its CSR communication?

Building on Carroll's four-part construct, the findings from the research question will be applied to re-create the layers of the CSR pyramid and compare the ordering of their importance from a communication perspective. After answering the first research question, the analysis will explore whether Coca-Cola's corporate reputation in terms of CSR resonates positively with consumers. The analysis will be guided by the second research question of the thesis:

RQ2: What is the alignment between Coca-Cola's CSR agenda and stakeholders' perceptions of it on social media?

This study adopts an outlook of CSR from the point of view of the consumer by adopting the organizational identification theory which has linked CSR activities to higher organizational identification and thus positive company associations and favorable corporate reputation. (Coombs & Holladay, 2012; Marin & Ruiz, 2007).

To answer the posed research questions, this study employs a mixed method approach. First, the most recent sustainability report of the Coca-Cola Company is analyzed by adopting thematic qualitative content analysis. Next, digital methods that include topic modeling, sentiment analysis and semantic network analysis are chosen to analyze public opinions on Coca-Cola's CSR on the social

media platform Twitter. The methods complement each other by allowing to qualitatively identify CSR themes within an organization's communication strategy, while quantitatively examining the relationships between them through network analysis. Next to that, topic modeling and sentiment analysis allow for the examination of massive data produced on social media sites which gives insights into the opinions of online stakeholder voices.

1.3 Relevance

Answering the research questions of this study would extend the existing academic literature on CSR communication practices. Furthermore, it will add a valuable perspective regarding the effectiveness of the CSR report for successful CSR communication. Studies have shown that there is a gap in literature concerning the utilization of the CSR report as a vehicle used by corporations to legitimate their behaviors (Feldner & Berg, 2014). So far, most CSR research has investigated public opinions on CSR activities through surveys or interviews, but few studies have utilized a combination of qualitative content analysis and digital methods, allowing to interpret the measurements of this study both qualitatively and quantitatively.

The findings of this thesis will benefit both the academic world and practitioners by providing insights into which CSR domains provide the greatest fit with consumers' perceptions and generate the most positive sentiment. As corporate reputation becomes more and more the result of subjective judgments shared by social media users (Aula, 2010), there is a need for research that exploits the large-scale sources of information about people's views, feelings and expectations available on social media platforms. By adopting digital methods, this thesis will employ new data mining techniques which allow for the analysis of large amounts of data available online which would be nearly impossible to investigate otherwise (Colleoni, 2013).

Furthermore, when discussing a topic such as CSR, it is important to evaluate the effectiveness of corporations' CSR efforts, not only from the perspective of the business world, but from a societal perspective as well. According to Coombs and Holladay (2012), an effective CSR initiative is one that benefits both stakeholders and the corporation implementing it. As it is believed that companies could attempt to leverage the benefits of CSR, without committing to actually improve society, CSR communication is crucial to establishing trust in stakeholders. This study gives a useful perspective on the publics' views on different CSR domains, aiding companies to create and communicate successful CSR initiatives that can impact both businesses and society in a positive and meaningful way.

This thesis is organized as follows. It will start with an overview of the relevant theories on CSR, corporate reputation, stakeholder theory and organizational identification theory and their implications for this research. Next, CSR communication will be conceptualized and the two

communication tools utilized in the thesis, the CSR report and Twitter will be discussed. This will be followed by a detailed description of the methods selected for the study. The method selection will be rationalized, and a comprehensive research design and operalization will be provided. The next section will elaborate on the results of the study, detailing their relation to the posed research question and the discussed theories. The Discussion section will delve further into the results and the theoretical and practical implications of the study. The thesis is finalized by concluding remarks, discussing the limitations of the study as well as providing recommendations for future research.

2. Theoretical Framework

The Theoretical Framework chapter presents a critical overview of the theories and concepts this study is based on. It provides an analysis of prior research findings, while tying it to the line of argumentation adopted in the thesis. The discussed topics include conceptualization of CSR, an explanation of the relation between CSR and corporate reputation, stakeholder theory and organizational identification theory, and CSR communication.

2.1 CSR Conceptualization

Concerned about the changing expectations of the role of corporations in society, companies globally are incorporating CSR activities in their business agendas (Coombs & Holladay, 2013). However, CSR has been subjected to an abundance of interpretations, and formulating an unbiased definition has been challenging (Dahlsrud, 2006). Dahlsrud (2006) views CSR as a 'social construction' (p. 2) which makes it impossible to develop a robust and unbiased definition. Okoye (2009) argues that CSR is an essentially contested concept (ECC) by examining the criteria for ECCs outlined by Gallie (1955). Gallie (1955) defines ECCs as concepts that by their nature are subjected to perpetual disputes. Okoye (2009) concludes that, because CSR is an ECC and given the diversity of issues addressed under CSR, it is unfeasible to converge on a singular definition. However, she acknowledges the need for 'a common reference point or exemplar' (p. 623), which could be found in the various attempts to address issues arising from the dynamic relationship between corporations and society over time. Thus, it is important that the CSR concept is revisited to reflect the specific social context and the constantly changing public expectations of the proper function of businesses in the public sphere for a given time frame. Van Marrewijk (2003) also attests to the difficulty of defining CSR, claiming that a 'one solution fits all' (p. 95) CSR definition should be abandoned.

At the same time, many scholars have attempted to present a better understanding of CSR and resolve the 'definitional confusion' (Dahlsrud, 2006, p. 1) using different methodological approaches. For example, Lee (2008) examines CSR concepts since the first time CSR theories emerged. He concludes that during the last 30 years researchers have focused on the link between CSR and corporate financial performance, while also noting that future research needs to focus on 'theoretical mechanisms that explain changing organizational behavior from a broader societal perspective' (Lee, 2008, p. 53).

Other definitions characterize the concept of CSR as not only creating financial outcomes, but also as strongly impacting stakeholders (Coombs & Holladay, 2012; Werther & Chandler, 2011). According to Werther and Chandler (2011), CSR 'is a way of maintaining the legitimacy of a firm's

actions in the larger society by bringing stakeholder concerns to the foreground' (p. 8). Additionally, Coombs and Holladay (2012) assert that CSR can contribute best to the societal good when it 'acknowledges and incorporates the concerns of the wider society' (p. 7). Maignan and Ferrell (2004) also depict CSR as undertaken to conform to both organizational and stakeholder norms. By conceptualizing CSR from the perspective of the marketing discipline, the authors emphasize that organizations act in a socially responsible manner in order to align their behaviors with the expectations and perceptions of their main stakeholders (Maignan & Ferrell, 2004). In other words, 'CSR designates the duty (motivated by both instrumental and moral arguments) to meet or exceed stakeholder norms dictating desirable organizational behaviors' (Maignan & Ferrell, 2004, p. 5).

In another attempt to define CSR, Dahlsrud (2006) employs content analysis to analyze 37 CSR definitions, originating from 27 authors and covering a time span from 1980 to 2003. His analysis leads to the development of five CSR dimensions as the most frequent among the definitions: the stakeholder dimension, the social dimension, the economic dimension, the voluntariness dimension and the environmental dimension (Dahlsrud, 2006). Among these dimensions, the environmental dimension is mentioned less frequently than the rest, perhaps because of its exclusion from early definitions (Dahlsrud, 2006).

This research employs the classic conceptual framework of the four-part categorization of CSR, known as the CSR pyramid (Carroll, 1979, 1991, 1999; Schwartz & Carroll, 2003). As this thesis concentrates on the relationship between businesses and society, Carroll's theory is deemed as most appropriate as it analyzes CSR initiatives with a focus on stakeholders' expectations of the role of a firm in society (Carroll, 1979, 1991; Garriga & Melé, 2004). This perspective aligns with the study's objective to examine the communication of CSR activities from the consumer's point of view. Additionally, aligning stakeholder interests and corporate interests builds support from stakeholders, thus bringing positive outcomes for both business and society (Coombs & Holladay, 2012).

Carroll's model divides CSR into four distinct components: economic, ethical, legal and philanthropic (Carroll, 1979, 1991, 1999; Schwartz & Carroll, 2003), as shown in Figure 1.
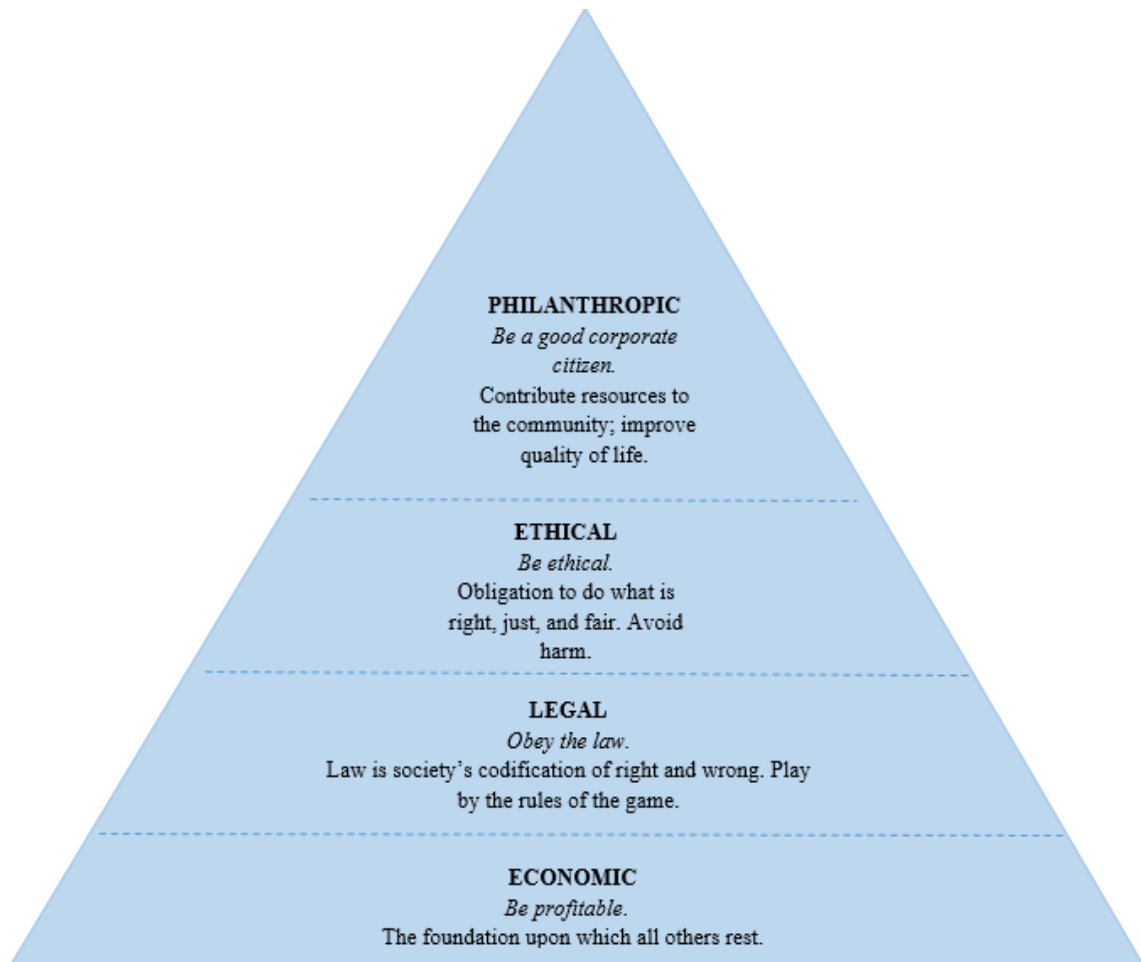
Figure 1: Carroll's Pyramid of Corporate Social Responsibility (Carroll, 1991, p. 42; Carroll & Schwartz, 2003, p. 504).

Carroll's model displays the dimensions in a hierarchical manner, with the economic responsibilities presented as the base, as the organization primarily acts as an economical unit in society (Carroll, 1991). The second layer of the pyramid entails legal obligations as every business is expected to comply with federal, state, and local regulations. The ethical component embraces standards, norms and expectations of 'what consumers, employees, shareholders, and the community regard as fair, just, or in keeping with the respect or protection of stakeholders' moral rights' (Carroll, 1991, p. 41). Finally, the philanthropic dimension refers to voluntary and charitable activities, such as assisting private and public educational institutions, local communities and contributing to humanitarian programs and purposes (Carroll, 1991). Carroll (1991) notes that the biggest difference between ethical and philanthropic CSR activities is that philanthropy is desired, but not expected from firms, while firms are expected to behave ethically.

Some of the limitations of Carroll's (1991) model are taken into consideration by Carroll and Schwartz (2003) who propose an alternative, three-domain approach in an attempt to improve the

initial framework. The biggest issue outlined by Carroll and Schwartz (2003) is the use of the pyramid to depict relationships between the four components of the model. First, the rankings implied by a pyramid construction could be misleading, as some might deem the top as the most advanced component, instead of the base as intended by Carroll (Carroll & Schwartz, 2003). Another essential problem could arise from the overlapping nature of the CSR domains. Carroll and Schwartz (2003) propose the use of dotted lines separating the layers of the pyramid as an indication of their non-mutually exclusive nature (as shown in Figure 1).

Indeed, a fundamental part of the model emphasizes that even though the components are treated as separate concepts, they cannot be singled out as mutually-exclusive (Carroll, 1979, 1991). Carroll and Schwartz (2003) note that there are two critical tension points among them: the tension between the economic and ethical and the economic and philanthropic domains. However, none of the CSR activities could be identified as 'purely economic,' 'purely legal,' 'purely ethical,' or 'purely philanthropic' (p. 520). In order to overcome some of these limitations, Carroll and Schwartz (2003) propose a three-domain model which excludes the philanthropic dimension as it falls within the ethical and economic dimensions. The three domain model is presented as a Venn diagram to better represent the overlapping nature of the concepts (Carroll & Schwartz, 2003). Carroll and Schwartz (2003) outline several limitations of the three-domain model as well, stating that the model assumes the three domains as distinct dimensions, while some might argue that they are 'interwoven and inseparable' (p. 520). As there are high correlations among the components, especially between the economic and legal and the legal and ethical components, the conceptual and practical application of some of the segments of the model are still limited (Carroll & Schwartz, 2003).

2.2 CSR and Corporate Reputation

As previously discussed, CSR activities have been associated with an overall increase in corporate reputation. The positive link between conducting CSR practices and higher corporate reputation has been proven empirically in academics (Lewis, 2001; Lewis, 2003; Schwaiger, 2004; Wang & Berens, 2014). At the same time, studies on corporate reputation have emphasized that a favorable reputation leads to an increase in buying behavior, profit, competitive advantage, favorable media coverage and brand image (Ameer & Othman, 2012; Dowling, 2002; Fombrun, 2001; Fombrun & Van Riel, 2004; Lewis, 2001; Sen & Bhattacharya, 2001). Therefore, it is understandable that corporations have an interest in creating and maintaining a strong reputation.

In recent decades, CSR has been moving to the foreground of reputation discussions. Similarly, scholars have started to argue that CSR has turned into 'the driver of reputation' (Coombs & Holladay, 2012, p. 36; Fombrun, 2005). In order to assess how the Coca-Cola Company utilizes its CSR communication as a way to build a strong corporate reputation, this research adopts Coombs and

Holladay's (2012) point of view that corporate reputation is a form of stakeholder evaluation that can range from favorable to unfavorable. Bhattacharya and Sen (2004) have also determined the importance of consumers as one of the stakeholder groups most susceptible to a company's CSR initiatives. Thus, this study focuses on consumers as stakeholders, utilizing the 'consumer-generated content' (Coombs & Holladay, 2012, p. 118) of electronic word-of mouth found on the social media platform Twitter.

In order for consumers to favorably view organizations' CSR efforts, it is important that they do not question the motivations for an organization's engaging in CSR. Coombs and Holladay (2012) define motives as attributions that stakeholders make about CSR activities and present a matrix of four CSR motives-(1) strategic, or helping with traditional business objectives, (2) value-driven, or caring about the cause, (3) stakeholder driven, or responding to expectations and (4) egoistic, or being obviously self-centered. Even though consumers can see multiple motives for CSR efforts, the model suggests that a composite of strategic and value-driven motives will be perceived relatively positively, while stakeholder-driven and egoistic motives will be perceived negatively (Coombs & Holladay, 2012; Ellen, Webb, & Mohr, 2006). Skarmeas and Leonidou (2013) support the model, as their investigation of what triggers consumer skepticism concludes that value-driven CSR attributions inhibit skepticism, while egoistic and stakeholder-driven motives elicit skepticism towards CSR. Forehand and Grier (2003) also argue that by acknowledging both strategic and value-driven motives, a firm can enhance the credibility of its CSR messages and generate goodwill among consumers.

Furthermore, it is important to note that, according to Coombs and Holladay (2012), CSR could be perceived as a win-win for both corporation and society, and this occurs when there is a fit between the corporation and its CSR action. The fit occurs when consumers believe that the corporation cares about the causes it supports. Consumers realize that CSR is business-driven, but in order for them to believe that the corporation also cares about the issue, the strategic element cannot dominate the CSR process. The key challenge of balancing strategic and value-driven CSR perceptions lies mostly in the way corporations communicate their CSR agenda (Coombs & Holladay, 2012). Du et al. (2010) also emphasize that the way consumers perceive corporate CSR motives is largely dependent on companies' CSR communication. The authors have a similar view of perceiving CSR motivations as already discussed, but outline them as 'extrinsic,' in which the company is seen as attempting to increase its profits; or 'intrinsic,' in which it is viewed as acting out of a genuine concern for the focal issue (Du et al., 2010, p. 9). Similarly, predominantly extrinsic motives lead to less favorable stakeholder attitudes, while intrinsic lead stakeholders to view the company in a positive light.

2.3 Stakeholder Theory and Organizational Identification Theory

Considering that the main driver for the rising popularity of CSR has been the changing stakeholders' expectations of what constitutes business' contribution to society, it is crucial that corporate CSR activities reflect stakeholders' values and desires. Thus, how firms communicate their CSR agenda is essential to developing relationships with stakeholders. When tailoring CSR communication strategies, management should be aware of the specific stakeholder groups that view corporate responsibility messaging (Crane & Glozer, 2016; Dawkins, 2005; Öberseder, Schlegelmilch, & Murphy, 2013). This study looks at how consumers perceive firms' CSR related activities, focusing on what content resonates the most with consumer views. There is an extensive amount of research that emphasizes the importance of consumers as stakeholders in terms of CSR (Bhattacharya & Sen, 2004; Bhattacharya, Korschun, & Sen, 2009; Crane & Glozer, 2016; Dawkins, 2004; Du et al., 2010; Marin & Ruiz, 2006). According to Öberseder et al. (2013), CSR has an impact on consumers' attitudes, purchase intentions, consumer-company identification, loyalty and satisfaction.

Another important aspect of the consumer-business relationship is the extent to which consumers identify with a company, which is dependent on the attractiveness of its organizational identity (Marin & Ruiz, 2006). Ashforth and Mael (1989) conceptualize the person-organization relationship as organizational identification, or the notion of belonging to an organization. Bhattacharya and Sen (2004) define identification as 'the sense of attachment or connection consumers feel with companies engaging in CSR activities they care about' (p. 15). The authors argue that such consumer-company identification creates a loyal following among a segment of customers who believe that they are making a difference by purchasing a product from a company that engages in CSR. Additionally, Bhattacharya and Sen (2003) note that companies that are well-known to consumers are likely to benefit most from consumer identification as they are better known to the general public and provide opportunities for direct consumption.

Marin and Ruiz (2006) examine the drivers for a company's identity attractiveness, finding that CSR's contribution to the identity attractiveness of a firm is much stronger than that of other corporate activities. Crane and Glozer (2016) state that CSR communication can be used to influence consumers to behave in a positive way towards the company, for example by spreading the word about the organization's involvement in CSR initiatives. This study examines consumer perceptions on social media. Thus, it is considered that consumers behave positively towards the company if their tweets express positive sentiment towards the company in connection to CSR related topics.

Coombs and Holladay (2012) also highlight the importance of organizational identification, stating that communication with stakeholders generates awareness of shared social concerns, thus facilitating identification with the company. It is further noted that CSR identification results in increased stakeholder support for the corporation, such as positive word of mouth, while a failure to

identify with the company could lead to engaging in negative word of mouth and even organized boycotts (Coombs & Holladay, 2012; Maignan & Ferrel, 2004).

Given the importance of organizational identification for generating positive perceptions, what naturally follows is to determine the kinds of CSR communication strategies and types of specific messaging prompt consumers to identify with companies. According to Coombs and Holladay (2012), stakeholders are more inclined to identify with a company if they perceive company motives for CSR as value-driven, as previously discussed. Forehand and Grier (2003) argue that consumers tend to respond negatively to CSR communication that seems manipulative or deceptive. Furthermore, stakeholder skepticism is triggered if there are discrepancies between stakeholders' perceived CSR motives and a company's publicly stated motives.

Besides CSR motivations, consumers deem important to find a connection between the corporation's image, mission and values and the specific CSR initiatives they have decided to engage with (Coombs & Holladay, 2012). If the CSR initiative narrative appears to be consistent with the corporation's strategic plans and culture, stakeholders are more likely to find CSR motivations believable and express their positive sentiments online. Du et al. (2010) also discuss the perceived alignment between the CSR issue and the company's business, as consumers expect companies to sponsor social issues that have a 'logical association with their core corporate activities' (Du et al., 2010, p. 12). In order to communicate a clear fit between a specific CSR concern and a corporation, communication practitioners need to assess the CSR concern's consistency with the corporation's strategic plan, the nature of the industry and make sure that the corporation engages in CSR activities that have the greatest positive impact on stakeholders and society (Coombs & Holladay, 2012). Simmons and Becker-Olsen (2006) also discuss the importance of the CSR fit, which is stronger if there is a logical connection between the promoted social issue and the company's business. Du et al. (2010) clarify that a CSR fit could result from common associations that a brand shares with the cause, such as product dimensions (e.g. herbal products brand sponsoring the protection of rain forests), affinity with specific target segments (e.g. cosmetics brand sponsoring breast cancer initiatives), or corporate image associations created by a brand's past conduct in a specific social domain.

Öberseder et al. (2013) investigate CSR corporate practices and consumers' perceptions of CSR by interviewing managers and consumers. The authors develop a grounded theory of CSR domains that explain how consumers and companies view CSR strategies relating it to the stakeholder theory. The most important CSR domains that emerged from the analysis include the employee, customer, environmental and supplier domains.

In terms of customers, corporations addressed the need for basic product responsibility, in other words offering high-quality products and a wide product range that are beneficial to consumers.

On their side, consumers believed that socially responsible companies must label their products clearly and honestly. The environmental domain differed between corporations and customers as consumers wanted more environmental laws and regulations as well as monitoring and compliance. Companies, on the other hand were committed to reducing energy consumption, pollution, emissions and waste and raising awareness of environmental issues, but did not desire more environmental regulation. Furthermore, consumers deem corporations' environmental engagement as 'critical' (Öberseder et al., 2013, p. 1847), since ecological damage is likely to affect future generations. Some of the key initiatives identified as most important include reducing pollution, minimizing wastewater and investing in research and development. Consumers believed that companies should invest in research and development in areas such as alternative sources, green products and environmentally-friendly production technology. Finally, concerning suppliers, companies imposed higher standards than consumers demanded, with consumers focusing on the selection and fair treatment of suppliers (Öberseder et al., 2013).

In an extensive research outlining a conceptual framework of best CSR communication practices, Du et al. (2010) discuss the challenges of overcoming stakeholder skepticism and thus generating positive CSR attributions. In terms of message content, a company's CSR message can pertain largely to a social cause itself or to a company's specific involvement in a social issue. It is stated that consumers are more likely to be suspicious if the CSR message is predominantly about a social issue, rather than the company's involvement in the issue. Thus, the authors note that messages should focus on the company's involvement in the social causes. Some ways to communicate involvement include emphasizing the firm's commitment to a cause, the impact it has on the cause, why it engages in a particular social activity (CSR motives) and the alignment between the cause and the company's business (Du et al., 2010).

As the CSR motives and the congruity between CSR issues and corporate image have been touched upon in this study, it is important to shed light onto CSR commitment and CSR impact. A company can choose to focus on several aspects of commitment such as the amount of input dedicated to the cause as well as the durability of the association and the consistency of the input (Du et al., 2010). CSR impact highlights the output side of the CSR initiative, or the actual benefits that have accrued to the target audience of the cause (Du et al., 2010). Coombs and Holladay (2012) also note that it is crucial that a firm communicates more about the effects of its CSR actions (outcomes), rather than what exactly has been done (process). Even though stakeholders need to know what actions have been taken, a more effective CSR strategy includes evaluating the effectiveness of the efforts, thus assessing the outcomes of the CSR actions. The outcomes have to be measurable, and specific data about how the CSR initiative has affected society needs to be provided (Coombs & Holladay, 2012).

Research by Kim and Ferguson (2014) also investigates what consumer-publics expect from firms' CSR communication through surveying a representative sample of the general public. The results of the study identify factors regarding what the public wants to know from CSR messages. The respondents wanted the CSR content to communicate who is benefitting from the company's CSR, information about specific social causes that the company supports as well as previous CSR achievement and results from campaigns.

2.4 CSR Communication

2.4.1 CSR Communication Conceptualization

As communication is the focus of this research, it is taken into consideration throughout the literature review. However, it is important to conceptualize CSR communication as well as shed light into the specificity of the CSR communication tools utilized in the study: the CSR report and the online micro-blogging platform Twitter.

CSR's contribution to reputational benefits, stakeholder identification, profit and corporate legitimacy has become increasingly clear. Therefore, the academic and professional world have attempted to uncover what comprises effective CSR communication (Bortree, 2014). So far, empirical CSR communication research has mainly focused on utilizing it as a tool to achieve reputational enhancements by constructing a consistent and credible organizational image (Aras & Crowther, 2011; Crane & Glozer, 2016). In order for the communication to be effective, practitioners must understand that communication is not simply the transmission of CSR information, rather a challenging process requiring the understanding of what the informational needs of consumers are as well as the proper communication channels.

Coombs and Holladay (2012) outline one of the central concerns for CSR communication: the CSR promotional communication dilemma. Stakeholders report that they want to know more about CSR efforts, while at the same time are skeptical of corporations that commit too much time and effort to CSR communication, deeming it as excessive self-promotion. The challenge of CSR communicators is to effectively communicate corporate CSR agenda, without creating consumer backlash (Coombs & Holladay, 2012).

Du et al. (2010) point out that stakeholders' low awareness of CSR practices constitute 'a key stumbling block' (p. 9) in companies' quest to maximize business benefits from their CSR initiatives. Other research also proves that stakeholders have a low awareness of corporate CSR activities (Bhattacharya & Sen, 2004; Pomering & Dolnicar, 2009). Bhattacharya and Sen (2004) note that '[C]onsumers' awareness of a corporation's CSR activities is a key prerequisite to their positive reactions to such activities' (p. 14). Additionally, corporations should acknowledge that the impact of

CSR communication on outcomes 'internal to the consumer, such as awareness and attitudes,' is significantly greater than on 'external or visible outcomes' such as purchase behavior (Bhattacharya & Sen, 2004; Crane & Glozer, 2016).

Dawkins (2005) also emphasizes that there is an increased public interest in receiving information about corporate CSR activities. Thus, companies should focus on communicating publicly their engagement with social causes (Dawkins, 2005). It is obvious that corporations must raise awareness of their CSR activities, however consumers dislike 'a hard sell' (Coombs & Holladay, 2012, p.111), and too much CSR promotion can cause negative attributions about CSR initiatives (Bhattacharya & Sen, 2004; Coombs & Holladay, 2012). The notion of the challenge of communicating CSR is supported by Maignan and Ferrell's (2004) call for more research into CSR communication, because businesses need to intelligently communicate about their initiatives if they want to reap the benefits from CSR.

Coombs and Holladay (2012) suggest a way to refine the idea of too much CSR promotion by focusing on message tone and message costs. Message tone refers to the idea that the messages appear too prominently and too often. The authors suggest that the company should integrate CSR information into various communication channels, but the message should focus on facts, rather than over promotion and self-configuration. CSR communication will be more effective if the tone of the message is low-key and the content focuses on the presentation of facts rather than the promotion of the company's involvement in the social cause (Coombs & Holladay, 2012). Another problem that accompanies the notion of too much promotion is the perception of the cost of promotion. In order for consumers to view CSR communication favorably, they should not perceive that the company has spent excessive amounts of money on advertising its involvement on the issue. Thus, consumers might assume that the corporation is more interested in generating publicity for itself, rather than supporting the CSR concern (Coombs & Holladay, 2012). Taking the aforementioned arguments into consideration, the CSR report provides an opportunity for organizations to promote their initiatives in a credible, low-cost and non-intrusive way.

Another angle that has dominated the examination of CSR communication is the legitimacy theory (Crane & Glozer, 2016; Lanis & Richardson, 2012). Crane and Glozer (2016) note that across business and society scholarship, corporate legitimacy has been conceptualized as the 'idealized end-state of CSR communication' (p. 13) which is described as the alignment between organizational activities and societal expectations.

Legitimacy theory regarding CSR communication has also been applied in analyzing how CSR in annual or sustainability reports has been used as a driver for legitimacy (Castelló & Lozano, 2011; Hahn & Kühnen, 2013; O'Donovan, 2002). O'Donovan (2002) defines legitimacy theory as the

idea that if companies want to operate successfully, they must act within the bounds of what society identifies as socially acceptable behavior. The author investigates the role of CSR communication, more specifically annual report disclosures, in pursuing legitimacy goals such as gaining, maintaining or repairing legitimacy. The findings of the study continue to support legitimacy theory as an explanation for the decision to disclose sustainability information in the annual report. It is pointed out that as a corporation's legitimacy is based on social perceptions and values that change over time, the content companies focus on in their reporting reflects current pressing issues. By focusing on significant issues, the firm attempts to present itself in a positive light.

Castello and Lozano (2011) argue that through communicating about CSR activities corporations seek to advance their legitimacy as stakeholders have started to pressure organizations to conform to high social responsibility expectations. Additionally, a tradition of engaging actively in CSR could facilitate perceptions of legitimacy in the long run (Castello & Lozano, 2011; Coombs & Holladay, 2012). Similarly, according to Birth et al. (2008), 'CSR communication aims to provide information that legitimizes an organization's behavior by trying to influence stakeholders' and society's image of the company' (p.183).

2.4.2 CSR Communication Tools

After highlighting several key issues related to the CSR communication concept, including the importance of stakeholder awareness, message content and stakeholder-specific factors, this section elaborates on the message channels where CSR is communicated. Channel selection is critical to exposing the right stakeholders to the right message (Coombs & Holladay, 2012). Therefore, this section provides an overview of the selected communication channels for analysis in this thesis: the CSR report and Twitter. The CSR report is chosen as a document through which companies communicate to stakeholders about their CSR initiatives that has significant influence on the way the general public perceives and reacts to a company (O'Donovan, 2002). Twitter is selected as a medium to analyze public perceptions as it is a rapidly evolving area of research, containing large amounts of consumer conversations about brands.

The CSR Report

The CSR report is an important medium, functioning as a means by which corporations communicate the breadth of their philanthropic engagements (Feldner & Berg, 2014). According to the KPMG International Survey of Corporate Social Responsibility Reporting 2013, 76% of American companies issue a specialized corporate responsibility report ("The KPMG survey of corporate responsibility reporting 2013," 2013). Furthermore, CSR reports provide a consistent picture of a firm's CSR message strategy and are used by a large range of stakeholders as a unified source of acquiring information regarding social responsibility activities (Deegan & Rankin, 1997; Gill &

Broderick, 2014). Castelló and Lozano (2011) argue that the corporate discourse utilized in sustainability reports provides a clear understanding of how companies make sense of their values and practices. It is also noted that the report is an outlet through which the company presents the way it perceives itself and its societal contributions. Furthermore, according to Neu, Warsame, and Pedwell (1998) textually-mediated discourses, including annual reports have been used by legitimation researchers as a means to analyze public perceptions about organizations, because such discourses are 'echoing, enlisting and amplifying dominant societal themes and values' (Neu, Warsame, & Pedwell, 1998, p. 268). Thus, it is an ideal medium that showcases CSR corporate agenda as a means to advance corporate reputation and establish legitimacy by managing societal expectations.

  With the growing importance of CSR, more companies are accepting standardized reporting guidelines, particularly those developed by the Global Reporting Initiative (GRI) which is associated with the United Nations (UN) (Feldner & Berg, 2010). GRI is the dominant framework for CSR and sustainability reports globally (Coombs & Holladay, 2012) and it is the framework utilized by the Coca-Cola Company ("Global Reporting Initiative," n.d.). However, despite the widespread adoption of the GRI guidelines, their voluntary nature gives room for interpretation, and CSR performance remains 'an elusive concept' (Chiu, 2010, p. 371). Thus, companies have different strategies on the quantitative and qualitative reporting in their sustainability reports; these strategies are based on factors such as stakeholder pressures, the size of the business and their particular needs to manage public perceptions (Chiu, 2010). At the same time, as the Coca-Cola Company follows the GRI guidelines, it is useful to look at the broad areas identified by the GRI framework: (1) economic, (2) environmental and (3) social. Companies are encouraged to report the measured effects of their initiatives within the three areas (Coombs & Holladay, 2012). The economic dimension is defined as 'concerning the organization's impacts on the economic conditions of its stakeholders and on economic systems at local, national, and global levels' ("G4 sustainability reporting guidelines," 2015, p. 43). The environmental category 'concerns the organization's impact on living and non-living natural systems, including land, air, water and ecosystems' ("G4 sustainability reporting guidelines," 2015, p. 52). The social indicator is further divided into labor practices and decent work, human rights, society, and product responsibility and focuses on 'the impacts the organization has on the social systems within which it operates' ("G4 sustainability reporting guidelines," 2015, p. 64).

  The voluntary nature of the guidelines suggests that they offer guidance to companies as to what to communicate to their stakeholders. However, management has to decide which of the suggested areas are relevant to their organization and have the best fit within their larger communication efforts. As the CSR report has been established as a strategic communication channel to manage stakeholders' expectations about corporate behavior (Feldner & Berg, 2014), this thesis examines it as an important tool for framing corporate CSR agenda.

Social Media and Twitter

The CSR report is the focal point for CSR information dissemination. In order to evaluate whether CSR communication has reached its objectives to advance corporate reputation and legitimacy, it is crucial to evaluate stakeholder reactions and sentiments to the communicated CSR initiatives. This thesis utilizes the social networking platform Twitter which allows for the analysis of large-scale social data of consumer opinions on corporations (Chamlertwat, Bhattarakosol, Rungkasiri, & Haruechaiyasak, 2012).

The advent of new media has significantly changed not only the ways people communicate with one another, but also the ways they communicate with businesses. According to Argenti (2011), digital communication platforms have empowered consumers, causing a complete 'overhaul of the business environment especially in the context of communications' (p.61). The highly interactive Web 2.0 world has transformed company-consumer contact, giving power to consumers to dictate the nature, extent and context of conversations (Hanna, Rohm, & Crittenden, 2011). At the same time, the increased stakeholder awareness empowered by technology has resulted in the creation of a new participatory public sphere online, which has turned online communication into a crucial tool for strategic corporate communication. Stakeholders and publics are no longer 'passive receivers of organizations' CSR communication' (Austin & Gaither, 2016, p. 4), but are able to create content and evaluate content in a way that is public for other users to see. Austin and Gaither (2016) further argue that despite increasing evidence that consumers who voice opinions on social media online are 'relevant gatekeepers' (p. 4), research on public comments on social media towards companies remains largely lacking. According to Coombs and Holladay (2012), social media are very suitable for CSR communication research as social media engagement gives insights into stakeholder perceptions, values and attitudes towards the company and the CSR issues it chooses to promote. Coombs and Holladay (2012) further state that social media provide 'a viable way to solicit information about specific CSR concerns' (p. 67).

Additionally, it has been found that with the rise of social media, practicing social responsibility has become more practical for businesses (Lee et al., 2013). Social media could be utilized to scan for expectations gaps, which occur when stakeholders perceive that the corporation has failed to meet their expectations. When such gaps occur, stakeholders could potentially generate a negative word of mouth as a way to change what they view as negative behaviors. On the other hand, if consumers are pleased with the company's CSR efforts, they can praise the corporation, generating positive word of mouth which leads to supportive consumer behavior such as purchasing, investing, and favorable reputation (Coombs & Holladay, 2012). Du et al. (2010) support this notion, arguing that social media outlets have greatly magnified the power of consumer word-of-mouth. Prior studies argue that social media provide an opportunity to build relationships with customers, who will then

represent the organization favorably to their social media communities (Kilgour, Sasser, & Larke, 2015; De Vries, Gensler, & Leeflang, 2012).

This thesis focuses on CSR dialogue on the online micro-blogging and social media platform Twitter. As a social media platform, Twitter has become a crucial medium for social networking, content sharing and represents a large-scale of information about consumers' feelings and opinions about organizations (Colleoni et al.,2011). Twitter provides horizontal communication through which corporations can only share their agenda, and thus the emergence of similarity of topics between company and audience can be used to measure convergence between companies' CSR agenda and stakeholders' opinions (Colleoni, 2013).

3. Research Design and Argumentation

This chapter contains a clarification and description of the methods employed in this research, giving a rationale for why the methods were selected. It presents in detail the design of the research, including units of analysis that were analyzed, the type of collected data and how it was collected. Further, it explains how the concepts included in the research questions were operationalized. It also gives explanations about the specific tools used to analyze the data, the type of analysis and visualizations.

3.1 Methods

This thesis aims to answer the following research questions:

RQ1: How does Coca-Cola seek to advance its corporate reputation through its CSR communication?

RQ2: What is the alignment between Coca-Cola's CSR agenda and stakeholders' perceptions of it on social media?

The posed research questions are going to be answered by employing a mixed method approach, combining qualitative content analysis with digital methods that include topic modeling, sentiment analysis and semantic network analysis. Such an approach allows for an in-depth analysis of the data, while also examining its quantitative characteristics. Thus, the results are more robust, and the analysis is well-balanced.

Thematic Qualitative Content Analysis

To answer the first research question, the most recent CSR report of the Coca-Cola Company ("Coca Cola 2014/2015 Sustainability Report," 2015) is analyzed, by adopting thematic qualitative content analysis. The thematic content analysis is employed as a method that allows identifying, analyzing and reporting patterns (themes) within data (Braun & Clarke, 2006). Qualitative research describes social phenomena 'in terms of the meaning people bring to them,' while the data is analyzed through the 'identification and coding of themes and categories leading to findings that can contribute to theoretical knowledge and practical use' (Boeije, 2010, p. 11). The qualitative analysis of the CSR report allows for in-depth analysis and deeper understanding of the contextual meaning of topics and patterns used by Coca-Cola to communicate its CSR initiatives (Hsieh & Shannon, 2005). It is important to note that the thematic approach is selected, as the focus of the study is on the semantics of topics, rather than the role of language and grammatical features in meaning creation (Machin & Mayr, 2012). Furthermore, it allows for supporting or non-supporting themes based on theory as well as extending supported concepts by creating new categories or subcategories (Hsieh & Shannon, 2005).

The analysis adopts a directed approach, as the initial coding of themes is based on an established theoretical framework (Hsieh & Shannon, 2005). The thematic directed approach gives guidance on how to ascribe themes, while giving the researcher flexibility to ascribe additional unexpected topics (Braun & Clarke, 2006). The thematic analysis requires a clarification regarding what counts as a theme. The theme, defined by Boeije (2010) as 'the matter with which the data are mainly concerned' (p.95) captures something important within the analyzed data in relation to the chosen research question, and represents 'some level of patterned response or meaning within the data set'(Braun & Clarke, 2006, p.82). Each theme represents a theoretical variable; theoretical variables are constructed by 'reducing' individual codes through combination and aggregation (Atteveldt, 2008, p. 23). This thesis relies on several predefined theoretical variables which have been explicitly looked for in the data at the outset of the coding process. These kind of codes are commonly known as 'theoretical concepts' or 'constructed codes' (Boeije, 2010, p.101).

Semantic Network Analysis

In order to visualize the results that answer the first research question, the study uses semantic network analysis to re-create the classic conceptual framework of the CSR pyramid from a communications perspective (Carroll, 1979, 1991, 1999; Schwartz & Carroll, 2003). The pyramid is visualized as a semantic network given the overlapping nature of the CSR themes. A semantic network representation of the coded results from the thematic content analysis is selected as it visualizes the relationships between themes, sub-themes and codes. The method reveals interesting patterns and interactions between the coded concepts, which would not be possible within a linear coding scheme (Atteveldt, 2008).

Semantic network analysis is a visual analytic approach for text data and allows the researcher to combine automated data analysis with interactive visualizations to support analytic processes (Drieger, 2013). A network visualization of CSR communication themes reveals how Coca-Cola seeks to advance its reputation, demonstrating the semantic link between the discovered dimensions and categories based on co-occurrence. This means that the network is extracted by linking entities based on their adjacency (Diesner, 2013).

Semantic networks allow to model semantic relationships found among key concepts in the text. These concepts are depicted as a graph with labeled nodes (i.e. the concepts) and edges (i.e. the semantic relation). Nodes that are linked are placed close to one another, additionally nodes linked to the same others are also linked to one another (Drieger, 2013). In order to create a semantic network from the coded data, the researcher needs to make decisions about the selection of parameterization of methods and sub-routines, including data pre-processing, node identification and edge identification (Diesner, 2013).

The main themes within the data are revealed as 'frequently referred core issues' (Drieger, 2013, p. 10) and are depicted by central nodes which have the most connections to other nodes with a lower degree. The core issues form 'global hubs' (Drieger, 2013, p. 10), also referred to as communities, representing overlapping groups of nodes which are densely connected internally (Lee, 2015b). Thus, such a graph provides a visual perspective of the quantitative and qualitative relationships between the analyzed topics (Drieger, 2013).

As a semantic network represents 'folding linear text into a network of interconnected words' (Drieger, 2013, p. 5), it provides an alternative view of the main themes, sub-themes and codes revealed from the thematic qualitative content analysis of the most recent CSR report of the Coca-Cola Company. A network representation of CSR communication themes addresses the need to revisit the CSR definition, testing whether the theory based dimensions are consistent with the findings of the study. Semantic networks depict collocation between concepts and their ordering (Lee, 2015a). Thus, the network visualization uncovers the most prominent themes (connected to the most nodes) and the strongest connections (edges). The information communicated by the network visualization is enhanced by adjustments to the size and color of nodes and the thickness, color and type of line of the edges. The depiction further contributes to academic debate examining the CSR concept by outlining arguments for further discussion of what CSR entails from a communications perspective. It demonstrates what type of CSR content is most prominent when advancing corporate reputation with implications for marketing and PR professionals on managing reputation through CSR.

Topic Modeling

The second research question, *RQ2: What is the alignment between Coca-Cola's CSR agenda and stakeholders' perceptions on social media?* will be answered by examining Twitter conversations referring to the Coca-Cola Company in relation to its CSR. Perception metrics measure the impact of exposure to brand content (Lee, 2015c). The micro-blogging platform Twitter allows users to broadcast real-time messages of 140 characters or less (Lovejoy, Waters, & Saxton, 2012). The analysis of public perceptions through an examination of virtual conversations is suitable for this research as Twitter contains a large amount of information about feelings, opinions and sentiments of people which could be used to measure the online reputation of a company (Colleoni et al., 2011). Unlike surveys or interviews, Twitter conversations provide an opportunity for analyzing perceptions without impacting the respondents. It is a unique way of examining opinions without people being aware that they are being examined. Finally, analyzing data from microblogging allows for an automated coding of large amounts of data containing people's opinions about brands which would not be available otherwise (Jansen, Zhang, Sobel, & Chowdury, 2009).

The first method employed to analyze the perceptions of the public about Coca-Cola's CSR communication is topic modeling. Topic modeling is a method of visual text analysis that identifies

the main themes represented in a text corpus (Diesner, Franco, Jiang, & Chin, 2015). Topic models are 'algorithms for discovering the main themes that pervade a large and otherwise unstructured collection of documents' (Blei, 2012). Analyzing consumers' tweets mentioning Coca-Cola and CSR terms through topic modeling, identifies CSR themes represented in the text corpus using a probabilistic technique. Topic modeling allows for the analysis of large document collections leading to semantically meaningful decompositions of topics (Chang, Gerrish, Wang, Boyd-Graber, & Blei, 2009). Topic modeling is used in this research as it allows to compare whether the CSR themes marketed by Coca-Cola align with the CSR topics most discussed in the textual Twitter data. Thus, it is a way to measure to what extent consumers communicate about what Coca-Cola stands for in terms of CSR.

There are different approaches for topic modeling; this research uses the tool ConText (Version 1.2.0; 2015) which assigns topics based on Latent Dirichlet Allocation (LDA) leveraging Mallet (Diesner et al., 2015). Each theme within the analyzed dataset is represented by a vector of words, sorted on their strength association with a topic; as results are probabilistic, they differ slightly from run to run (Diesner et al., 2015). Topics are inferred based on the text for each document; each document is an individual tweet (Diesner et al., 2015). LDA is a widely used topic model and is based on the assumption that the documents comprising the analyzed data 'share the same set of topics, but each document exhibits those topics in a different proportion' (Blei, 2012). Topic modeling requires minimal pre-defined coding, meaning that the researcher does not need to interpret a coding scheme or reduce the textual corpus to single variables (Blei, 2012; Bogdanov & Mohr, 2013). Instead of starting with pre-defined codes or categories of meaning, the researcher needs to assign the number of topics for the algorithm to find. However, it needs to be taken into consideration that the researcher needs to make decisions on the type and amount of data cleaning needed that best fits the specific research goals. First, this approach allows for the analysis of very large corpora, which fits the goals of this research to examine consumer conversations on Twitter. Next to that, the method allows for a more explorative and inductive nature of discovering public perceptions than other approaches to text analysis in the social sciences (Bogdanov & Mohr, 2013). This approach provides a unique opportunity to examine to what extent the themes discovered through the in-depth and theory-based analysis of Coca-Cola's CSR marketing agenda align with the topics concerning Coca-Cola's CSR discussed by Twitter users.

Sentiment Analysis

As companies are realizing the influence of online stakeholder voices on reputation, researchers have started to analyze the large amount of data on social media sites deploying data mining techniques as a way to monitor and analyze consumers' insights and opinions (Colleoni, Arvidsson, Hansen, & Marchesini, 2011; Pang & Lee, 2008). Thus, in order to analyze stakeholders'

attitudes towards Coca-Cola's CSR communication, this study employs sentiment analysis. Sentiment analysis consists of the extraction of positive or negative opinions from (unstructured) text (Pang & Lee, 2008).

Companies are increasingly interested in taking advantage of the constant flow of information of opinions, feelings and sentiments of brands that Twitter users share. Thus, sentiment analysis has become a popular method of analysis in the business field (Kumar & Sebastian, 2012). Davis and O'Flaherty (2012) also point out that both researchers and marketers have realized the potential of applying sentiment analysis to gain market insights and track perceptions about how consumers view companies and their actions. The massive amount of data produced on social media sites could be employed to assess reputation perceptions by aggregating subjective opinions of Twitter users (Ogneva, 2010). This approach allows for an assessment of the congruence between Coca-Cola's intended CSR agenda and stakeholders' views on the company's CSR narrative.

3.2 Units of Analysis and Data Cleaning

This study utilizes the Coca Cola 2014/2015 Sustainability Report which consists of 69 pages (32213 words; the equivalent of 107 articles of 300 words) in order to analyze how the company advances its reputation through CSR messaging. As demonstrated by several studies, the CSR report of a company could be analyzed using content analysis in order to find out CSR framing agendas (Gill & Broderick, 2014; Feldner & Berg, 2010; Nielsen & Thomsen, 2007).

In order to analyze public perception of CSR, tweets were obtained through Twitter's own search engine (twitter.com/search-advanced), which allows for returning a collection of relevant tweets matching a specified query ("GET search/tweets,"n.d.). Unlike Facebook data, Twitter data could be considered 'open' (Chae, 2015, p. 2). Therefore, it provides an opportunity for researchers to access data in 'an unprecedented scale and size' (Chae, 2015, p. 2). The queries utilized to extract the tweets were designed by utilizing keywords from the qualitative content analysis of the Coca-Cola CSR report. An individual query was designed for each theme (see Appendix B). The researcher performed multiple trial searches with multiple keywords for each search string, testing out which keywords provided the most relevant tweets for each topic. The tweets for each theme were copied in a text file.

The final set of tweets were gathered on May 28th 2016 and before cleaning consisted of 13902 tweets. The search queries for each theme loaded large amounts of tweets across a period of several years. The scraping process of historical tweets was done manually through Twitter's website, making the process time consuming. However, it allowed for examining the data during the process and determining which of the search strings provided the most consistent results. After numerous trials, it was determined to load tweets for a one year period. Therefore, the sample of tweets is dated between May 2015 and May 2016.

Next, each semi-structured text output was converted into a structured table output, using the tool and following the steps provided by the Step-by-Step Guide for Digital Research Tools (Lee, 2016, p. 18). Then, the text files for each theme were combined in one CSV file. The tweets were further cleaned including removing trailing URLs and duplicate tweets. The final amount of tweets utilized in the study is 10874.

3.3 Operalization and Analysis

3.3.1 Measurements for Advancing Coca-Cola's Corporate Reputation

Thematic Qualitative Content Analysis

The content analysis of the Coca Cola 2014/2015 Sustainability Report follows the steps of doing thematic qualitative analysis as outlined by Boeije (2010) and Braun and Clarke (2006). As the research employs a directed approach, the initial CSR dimensions are predetermined codes, assigned according to Carroll (1991) as economic, legal, ethical and philanthropic. Additionally, two more dimensions based on Dahlsrud (2006) are added, namely the stakeholder and the environmental dimension. The six outlined dimensions are used as the main themes of the analysis, while the performance indicators suggested by the GRI guidelines are considered as sub-themes as per Coombs and Holladay (2012).

The first step in the analysis consisted of familiarization with the data and noting initial ideas, taking into consideration the theory-based themes and sub-themes. After that, initial codes were generated as subcategories for each theme, new sub-themes were added as they emerged. As per by (Boeije, 2010), the researcher utilized open and axial coding as a means to segment the data into smaller parts, which was followed by selective coding as a means to reassemble the data and assign codes to the pre-determined themes. Codes which referred to the same dimension were grouped together; one code could refer to different dimensions, reflecting the overlapping nature of the dimensions (Carroll, 1991). After that, the themes were reviewed for consistency with the coded extracts. As advised by Braun and Clarke (2006), the researcher retained flexibility and relied on their judgment, while being consistent with determining the themes throughout the analysis.

Semantic Network Analysis

The results of the qualitative content analysis are visualized by portraying the themes, sub-themes and codes as a semantic network, given their overlapping nature. The visualization serves as an alternative to Carroll's (1991) model of the four-construct pyramid and Carroll and Schwartz' (2003) Venn diagram, as it depicts CSR dimensions from a communications perspective. Semantic analysis extracts and analyzes links among words to model an author's mental map as a network of links. In this thesis, it identifies the connections between themes, sub-themes and codes, based on co-

occurrence; in other words, codes appearing in the same themes or sub-themes will be linked. If they span different themes, they will be shown to bridge the themes.

Text pre-processing condenses data into concepts, which capture the features of the texts relevant to the user. Statement formation rules determine how to link concepts into statements (Carley, Columbus, & Landwehr, 2013). The data visualization tool Gephi (Version 0.8.2. beta; Bastian, Heymann, & Jacomy, 2009) was employed to visualize the semantic network. Gephi is an open-source software for visualizing and analyzing large networks graphs giving researchers the opportunity to interact with the representation, manipulate the structures, shapes and colors to reveal hidden patterns in datasets (Bastian, et al., 2009). It also allows 'data analysts to make hypotheses, intuitively discover patterns, isolate structure singularities or faults during data sourcing' ("Features,"n.d.).

Before the data from the qualitative content analysis is converted in a semantic network, several steps should be taken. It is important to note that the depicted network is a whole network, which means that it contains every entity from the qualitative code list. The researcher followed the steps of visualizing a qualitative code list as a semantic network as per the Step-by-Step Guide for Digital Research Tools (Lee, 2016). First, the code list was cleaned. It was made sure that all codes appeared the same way in all of their occurrences, and each theme was presented in a separate text document. The codes were assigned a tag based on their level in the coding hierarchy which consisted of four levels. Next, a co-occurrence semantic network was created using the digital tool ConText. Finally, the generated network was imported in Gephi, where the level tags were given values, so that they could be adjusted by color and size.

The network was visualized by first applying the highly configurable layout algorithms which are run in real time on the graph window of Gephi (Bastian, et al., 2009). First, the OpenOrd layout was applied. It is designed to better distinguish node clusters in large-scale undirected graphs. At each level vertices are grouped using force-directed layout and average-link clustering. The process is repeated until a suitable graph is obtained (Martin, Brown, Klavans, & Boyack, 2011). Then, the force-directed algorithm Force Atlas was used (Repulsion Strength 200); it spatializes in Small-World / Scale-free networks and is focused on quality (meaning 'being useful to explore real data') to allow a rigorous interpretation of the graph with the fewest biases possible (Bastian, et al., 2009). The generated network consists of 731 nodes and 98146 edges.

Next, the Modularity of the network was calculated in order to measure the extent to which the network can be divided into groups (communities), so that groups are defined by many ties within the group and fewer ties to nodes outside the group. The Modularity characterizes the community structure in a network, meaning that networks naturally fall into groups of nodes, with sparser connections (edges) between nodes of different groups (Newman, 2006). Gephi also allows for coloring, sizing and labeling the nodes and controlling for the color, thickness and types of line for the

edges so that the communities detected in the network can be easily distinguished (Bastian, et al., 2009).

Other measures offered by Gephi in order to understand the key characteristic of the network that were analyzed include *network density*, *betweenness centrality* and *degree centrality*.

3.3.2 Measurements for Coca-Cola's CSR Agenda and Stakeholders' Perceptions Alignment

Topic Modeling

The topic modeling analysis was performed by the tool ConText (Version 1.2.0; 2015). The tool is developed by The University of Illinois and supports the construction of semantic network data from natural language text data, a process also known as relation extraction as well as the joint analysis of text data and network data ("Welcome to ConText," n.d.). First, the single text file of Twitter data was split into separate files, each containing a single tweet by ConText's Parse CSV files function. Next, additional cleaning of the text was performed, using the functions provided by ConText. Stemming, which entails converting every word into its morpheme, was performed first. Then, Remove Stop Words was applied; it refers to eliminating functional (noise/stop) words like 'the' and 'a' from the text data (Diesner et al., 2015). ConText offers Mallet's stop word list, which was enhanced with the inclusion of several words such as 'news,' 'make,' and 'company.' 'Coca-Cola' and 'Coke' were also added to the stop list as at least one of those words is present in each of the tweets.

After the text pre-processing procedures, the topic modeling function was performed. Topic modeling is sensitive to the number of assigned topics, the number of iterations, the sum of alpha and the number of optimize interval (Lee, 2016). The topic modeling procedure was repeated numerous times, with different adjustments of the number of topics and the number of iterations in order to produce the most coherent list of topics. The different tests proved that a smaller number of topics created a better fit; thus the final topic model consists of seven topics. Next to that, the number of iterations was adjusted; increasing the number of iterations results in a superior model (Lee, 2016) as indicated by the log-likelihood per token statistic. In the end, 1000 iterations were sufficient to provide the best fit.

Sentiment Analysis

The sentiment analysis, also known as opinion mining was performed with the tool SentiStrength (Version 2.2; 2014), which extracts a pair of positive and negative scores per tweet, revealing the role of emotion in informal communication (Thelwall, Buckley, Paltoglou, Cai, & Kappas, 2010). The tool is suitable for extracting sentiment from short texts, which makes it a relevant tool for analyzing sentiment from tweets ("SentiStrength,"n.d.).

Opinion mining typically deals with only positive and negative sentiment rather than discrete emotions (e.g. happiness, surprise), does not detect sentiment strength and does not simultaneously identify both positive and negative emotions (Thelwall, et al., 2010). The algorithm provided by SentiStrength allows for overcoming some of these shortcomings by analyzing sentiment by both arousal (low to high) and valence (positive to negative) (Thelwall, et al., 2010). It reports two sentiment strength values in a line of text: -1 (not negative) to -5 (extremely negative) and 1 (not positive) to 5 (extremely positive). The 5 and -5 indicate the maximum positive or negative sentiment, while values of 1 and -1 both indicate neutrality. The sentiment scores are based off dictionary lookup as well as grammar, punctuation, emoticons, and slang ("SentiStrength,"n.d.).

First, a text file containing all public tweets is analyzed (N=10874), to check the overall public sentiment of Coca-Cola's CSR. Next, tweets per topic are analyzed; each topic consists of the tweets which were extracted from each Twitter topic search string (see Appendix B). It should be taken into consideration that the topics are not comprehensive. Thematically, tweets could be assigned to different topics, which is a weakness of the sentiment analysis per topic approach.

The results are analyzed and visualized in the software tool Tableau (Version 9.3; 2015). In order to create a clear visualization, the number of positive and negative tweets is presented as a percentage of all the tweets analyzed per Twitter topic search string.

4. Results

4.1 Coca-Cola CSR Communication (The CSR Report)

The first findings of the research answer the first research question *RQ1: How does Coca-Cola seek to advance its corporate reputation through its CSR communication?* Thematic qualitative content analysis is employed to analyze the most recent CSR report of the Coca-Cola Company ("Coca Cola 2014/2015 Sustainability Report," 2015). This section begins with a broad analysis of the findings covering the text corpus as a whole, which is followed by an in-depth analysis of each theme.

As discussed, the initial codes guiding the researcher are pre-determined, therefore at the start of the coding process the themes are assigned as *Economic*, *Legal*, *Ethical* and *Philanthropic*. From the beginning of the analysis process it became clear that while some codes clearly belong to one of the assigned main topics, the majority of the codes could be assigned to several topics. At the same time, each of the themes based on theory is clearly identifiable in Coca-Cola's CSR report. The emerging sub-themes are also interlinked, supporting the notion that as the concept of CSR covers a wide range of social issues which fall into different, non-mutually exclusive CSR categories, communicating CSR to consumers entails addressing similar issues under different thematic categories. Finally, even though some topics were easier to identify and were more widely discussed than others, there is not a single theme that emerged as the most visible and important. This means that the analysis does not reveal a 'core category' (Boeije, 2010, p. 115). A core category is a central concept which accounts for a large portion of the variation in the behavior of the data (Boeije, 2010).

All of the six theory-based themes are represented in Coca-Cola's CSR report, while there are not any additional themes discovered during the coding. Therefore, it could be concluded that Carroll's (1991) model of what issues are the most relevant within the CSR concept is still relevant and could be applied to CSR communication. Further, the two dimensions based on Dahlsrud (2006) are also identified in the data. Throughout the report, the different Coca-Cola's CSR priorities within each topic are clearly stated; each topic contains a 'Goal' and 'Progress' section. The 'Progress' section reveals whether Coca-Cola is on track with its goals, and lists specific measurable outcomes of each initiative. Several times it is stated that the goal is off track, and it is made explicit what needs to be done to achieve it. It could be inferred that as a part of its CSR strategy, Coca-Cola seeks to establish legitimacy by providing concrete information regarding the effect of its CSR efforts. The finding is in line with research highlighting the importance of communicating CSR impact and CSR commitment (Coombs & Holladay, 2012; Kim & Ferguson, 2014).

Next, each theme is analyzed and supported with examples. Table 1 illustrates all themes and sub-themes as well as selected example codes for some of the sub-themes (p. 41). For the full coding

table refer to Appendix A. The topics are discussed in a hierarchical manner, starting from the relatively most prominent topic; the prominence is based on the number of codes per topic.

Stakeholder

The *Stakeholder* dimension was strongly represented, but was hard to distinguish. Many of the CSR issues could be linked to stakeholder well-being, making it hard to determine the ones with the most focus on the topic. The main sub-topics in the stakeholder dimension include Society, Product Responsibility and Economic Performance. In the Society sub-theme, the most prominent issue is Women with key terms including 'empower women' and '5by20 initiative.' This is not surprising as a whole section in the report is devoted to women's economic empowerment, and Women is one of Coca-Cola's top three sustainability priorities. The Women sub-theme strongly overlaps with the *Philanthropic* dimension, as Coca-Cola's 5by20 initiative aims 'to enable the economic empowerment of 5 million women entrepreneurs by 2020' ("Coca Cola 2014/2015 Sustainability Report,"2015, p. 17) through partnerships with international organizations such as UN Women, International Finance Corporation and the Inter-American Development Bank as well as philanthropic initiatives to equip women with business skills in developing countries. It is asserted that through its 5by20 programs, Coca-Cola aims to 'achieve effective "win-win" solutions that also make our business more sustainable' ("Coca Cola 2014/2015 Sustainability Report," 2015, p. 19). Thus, Coca-Cola promotes the idea that through its CSR initiatives it aims not only to help others, but also to remain successful and competitive.

The *Stakeholder* dimension is also communicated together with the *Ethical* theme. As the *Ethical* dimension entails what 'consumers, employees, shareholders, and the community regard as fair or just' (Carroll, 1991, p. 41), it is not surprising that it shares CSR issues with the dimension referring to how organizations interact with their stakeholders. For example, both themes share the sub-themes Community, Customer Health and Safety, and Marketing and Communications.

A very prominent sub-theme discovered only within the *Stakeholder* dimension is Active Healthy Living, which is a part of Coca-Cola's commitment to support well-being. The commitment is focused on helping the people live happier, healthier lives by offering reduced-, low- and no-calorie beverages, providing transparent nutrition information, supporting physical activity and marketing its products responsibly. It is interesting that the report does not explicitly communicate that Coca-Cola is fighting obesity; the focus is on supporting well-being, rather than tackling a specific problem. As far as measurable outcomes of the company's commitments, it is stated that during 2014 it has supported 330 active, healthy living programs in 112 markets. Additionally, it is pointed out that Coca-Cola has committed to not developing marketing designed to appeal to children under 12.

Environmental

The *Environmental* dimension is also very prominent, but easily identifiable as it concerns particular initiatives aimed at protecting the environment. Some of the key sub-themes include Sustainable Packaging, Climate Protection, Water Stewardship and Sustainable Agriculture. Water Stewardship is the most prominent sub-theme, as 'water' is one of Coca-Cola's three sustainability priorities, together with 'women' and 'well-being. 'The importance of 'water' for Coca-Cola is not surprising as 'it is the primary ingredient in our products, it enables our manufacturing processes, and it is fundamental to the cultivation of the diverse crops we depend upon for our beverage ingredients and, in some areas, even our packaging' ("Coca Cola 2014/2015 Sustainability Report,"2015, p. 32). The company communicates its particular goals regarding Water Stewardship, such as returning to communities and nature an amount of water equivalent to what is used in its finished beverages by 2020 and improving water efficiency in manufacturing operations by 25 percent by 2020.

Additionally, it is clear that Coca-Cola aspires to be a leader and innovator in the area of Sustainable Packaging. The CSR report clearly states that the company is 'leading the way' ("Coca Cola 2014/2015 Sustainability Report," 2015, p. 41) in recycling and renewable technology, pointing out several of its achievements in the area. It is mentioned that in June 2014, Coca-Cola's PlantBottle technology was recognized on Capitol Hill as one of the innovations helping to fuel the bio-based manufacturing boom. Another highlighted innovation is that the company produced the world's first PET plastic bottle made entirely from plant-based materials, showcased at the 2015 World Expo in Milan. In the words of Coca-Cola's Chairman and CEO, Muhtar Kent, 'As an industry leader, we often choose to set demanding targets that drive fundamental change, even while understanding that attainting such goals is not guaranteed' ("Coca Cola 2014/2015 Sustainability Report," 2015, p.3).

The *Environmental* dimension is most often mentioned together with the *Philanthropic* dimension as often Coca-Cola's initiatives concern collaborations with non-profit organizations and government agencies or direct donations.

The prominence of the dimension is supported by research (Öberseder et al., 2013) claiming that companies are committed to raising awareness about environmental issues, reducing energy consumption, emissions and waste. Coca-Cola's dedication to demonstrate leadership in sustainability research and development is also a strategic way to emphasize the firm's commitment and impact to the cause, seeking to achieve alignment with stakeholder expectations (Du et al., 2010).

Ethical

The *Ethical* theme consists of the sub-themes Human Rights, Non-Discrimination, Workplace Rights, Product Responsibility, Customer Health and Safety, Marketing and Communications, Community and Public/NGO/Private Partnerships.

The core sub-theme is Workplace Rights, which focuses on the humane treatment of Coca-Cola's employees, suppliers, customers, and the communities in which it operates. Other highlights of this topic include ensuring the safety of migrant workers, the implementation of regular audits throughout the company's facilities in various countries, promoting seat belt usage and ensuring the general wellbeing of employees. Finally, it is highlighted that Coca-Cola supports a zero tolerance policy regarding 'land grabs.'

As already mentioned, the theme is closely related to the *Stakeholder* theme, as the two themes deal largely with the ethical treatment of the company's stakeholders. It is made clear that Coca-Cola's commitment to be ethical and respect human rights 'is foundational to the success of our Company' ("Coca Cola 2014/2015 Sustainability Report,"2015, p. 41). Again, the company promotes the notion that CSR commitments create an opportunity to benefit the corporation, while helping stakeholders.

Product Responsibility and Customer Health and Safety are the other sub-themes that dominate the *Ethical* dimension. They focus on ensuring consumers that Coca-Cola is offering 'safe, refreshing and high-quality beverages,' while following 'stringent product and ingredient standards designed to ensure the safety and quality of each of our products' ("Coca Cola 2014/2015 Sustainability Report,"2015, p. 13). Some of the codes from the theme include 'transparent nutrition information,' 'front of pack labeling,' 'global policy,' and 'food safety.' The only specific ingredient that is mentioned is brominated vegetable oil (BVO), as the company is slowly replacing the ingredient from its production.

Philanthropic

The *Philanthropic* dimension focuses on Disaster Relief, Sustainability, Access to Medicine, Women, Training and Education, Public/NGO/Private Partnerships and The Coca-Cola Foundation. The codes consist primarily of specific philanthropic initiatives and partnerships with various non-governmental organizations, government agencies, and other businesses. It is emphasized that 'partnerships are at the center of our work to build coalitions that effect change across a host of topics' ("Coca Cola 2014/2015 Sustainability Report,"2015, p. 11). The company also emphasizes that it implements the Golden Triangle approach to its partnership across business, civil society and government as it maximizes the impact of its programs. The most frequent partners of Coca-Cola which are mentioned several times throughout the report include the World Wildlife Fund (WWF), The United Nations (UN), The International Finance Corporation (IFC), The Inter-American Development Bank (IADB) and Kiva.

Further, philanthropic initiatives are also communicated within the *Environmental*, *Stakeholder* and *Ethical* dimensions. Specific initiatives include the 5by20 initiative, EKOCENTER, Project Last Mile and New World: Inclusive Sustainable Human Development Initiatives.

Another sub-theme emerging from the *Philanthropic* theme is the Coca-Cola Foundation. The Foundation is a project of Coca-Cola that has given together with the company $126 million, or 1.3% of Coca-Cola's operating income in 2014 to support sustainable communities worldwide.

Legal

Throughout the report it is communicated that Coca-Cola works hard to achieve compliance of its principles throughout its value-chain; such messages belong to the *Legal* dimension. The most prominent sub-themes under the *Legal* dimension are Society, Corruption, Public Policy, Compliance, Human Rights, Workplace Rights, Land Rights, Product Responsibility and Product and Service Labeling. The *Legal* theme shares the most sub-themes with the *Ethical* and *Stakeholder* themes. When discussing various initiatives it is often pointed out that Coca-Cola implements regular audits to ensure full compliance with local laws and regulations as well as the company's internal regulations and principles. For example: 'In 2014, we continued to drive effective product safety and quality compliance through unannounced audits of our manufacturing facilities around the world' ("Coca Cola 2014/2015 Sustainability Report,"2015, p. 14). Those commitments display Coca-Cola's strategy to act within the bounds of what society deems acceptable behavior. Obeying the law is a base of committing to basic notions of ethics and fairness established by lawmakers and accepted by society as legitimate (Carroll & Schwartz, 2003).

Economic

The *Economic* theme is the least prominent and features the following sub-themes: Economic Performance, Market Presence, Indirect Economic Impacts and Preserving Profitability. The Indirect Economic Impacts sub-theme contains several codes also present in the *Philanthropic* theme such as 'Golden Triangle,' 'small businesses,' and 'economic empowerment.' The subtopic is connected to the company's indirect positive economic impacts. However, that is never explicitly expressed. Even though the *Economic* dimensions is set as the base, and thus the fundamental domain of CSR in Carroll's (1991) CSR model, it is not as relevant within Coca-Cola's CSR communication.

Table 1 summarizes the coding scheme of the thematic qualitative content analysis, with green indicating the six major CSR themes; red indicating the next sub-level themes; the boldfaced black represent the third level sub-themes; the non-boldfaced black signify the codes of the lowest level. The full coding table is featured in Appendix A.

Table 1: Coca-Cola CSR Report Qualitative Analysis Themes and Selected Example Codes

CSR Dimension	Descriptive Coding
Stakeholder	**Society** **Community** diverse diversity Golden Triangle public private partnerships **Women** empower women women entrepreneurs 5by20 initiative 2020 **NGO Government Agencies**

Employees Migrant Worker Recruitment and Employment Practices transparency workplace safety
Suppliers
Product Responsibility
Customer Health and Safety highest standards product safety product quality high quality transparent nutrition information calories in front of packages
Packaging Product and Service Labeling small packages transparent nutrition information
Active Healthy Living Active healthy living programs inspire happier healthier personal wellbeing
Marketing and Communications market responsibly no advertising to children under 12
Economic Performance
Shareholders shareowners sustainable agriculture agricultural transparency

Environmental	**Materials**
	Sustainable Packaging refillable PET bottles recycle recycling recycled PlantBottle PET plastic environmental footprint rPET EKOCYCLE 3D printer
	Climate Protection
	Energy economic sustainability solar thermal United Nations the UN
	Emissions Effluents Waste reduce reducing carbon footprint 2020 sustainable
	Water Stewardship water H2O replenishment 2020 WorldWildlifeFund WWF
	Sustainable Agriculture coffee corn sugar tea fruit shareowners farmers agriculture agricultural WorldWildlifeFund WWF farming
	Society
	Sustainable Communities sustainable business sustainability commitments
Ethical	**Human Rights**
	Nondiscrimination safe inclusive work environment diversity
	Workplace Rights Code Business ConductandWorkplace Rights
	Product Responsibility
	Customer Health and Safety calories on the front of packaging nutrition labeling global policy
	Marketing and Communications market responsibly no advertising to children under 12 responsible
	Community climate change climate energy efficiency
	Public NGO Private Partnerships
Philanthropic	**Society**
	Sustainability project Unnati EKOCENTER EKOCYCLE philanthropy public benefits SOLARKIOSK
	Disaster Relief The CocaCola Foundation give back
	Access to Medicine Project Last Mile healthy thriving communities RED
	Women 5by20 initiative Women in Leadership Economic Forum
	Training and Education
	Public NGO Private Partnerships
	WorldWildlifeFund WWF CEO Water Mandate Water Action Hub The Nature Conservancy United
	The Coca-Cola Foundation sustainable communities citizenship priorities
Legal	**Society**
	Corruption anticorruption ethical business bottling partners corruption risk
	Public Policy
	Compliance responsible reporting and transparency
	Human Rights
	Workplace Rights child labor forced labor
	Land Rights zero tolerance for land grabs land rights requisite policies
	Product Responsibility
	Product and Service Labeling product safety product quality high quality

	Compliance legal barriers for recycling beverage packaging
Economic	**Economic Performance** Economic profitability **Market Presence** **Indirect Economic Impacts** small businesses Golden Triangle economic development economic empowerment womens economic empowerment economic wellbeing **Preserving Profitability**

4.2 Coca-Cola CSR Communication Semantic Network Visualization

The semantic network visualization of the themes, sub-themes and codes resulting from the qualitative content analysis seeks to obtain insight into which themes have been the most prominent and given their overlapping nature, which themes emerge as the most linked. The generated network consists of 731 nodes and 98146 edges.

First, the Modularity network community detection algorithm was run. Modularity is a property of a network which indicates a specific proposed division of that network into communities. It measures when the division is significant, in the sense that there are many edges within communities and only a few between them (Clauset, Newman, & Moore, 2004). A higher modularity value indicates a good group separation, and goes between 0.0-1.0. The statistic is considered meaningful if it is 0.4 or higher. The Modularity of the generated semantic network has a value of 0.43, indicating a statistically meaningful division into distinct communities. This finding supports previous studies on CSR, which have defined CSR dimensions as 'interwoven and inseparable' (Carroll & Schwartz, 2003, p. 520). As the Modularity value of the network is relatively lower than 1.0, it could be inferred that despite that CSR is comprised of distinct domains, they are inter-related. Therefore, the semantic network addresses one of the main issues of Carroll's (1991) model of CSR that uses a pyramid to depict the relations between the components of the model. The semantic network displays the relationships between the domains. Thus, it avoids the hierarchical structure of the pyramid, captures the non-mutually exclusive nature of the domains and denotes which domains are related the most (Carroll & Schwartz, 2003).

Next, the Modularity statistic was used to color the nodes in terms of the different communities they have formed. The Modularity statistic has revealed four communities, colored in green, red, blue and purple as seen in Figure 2.
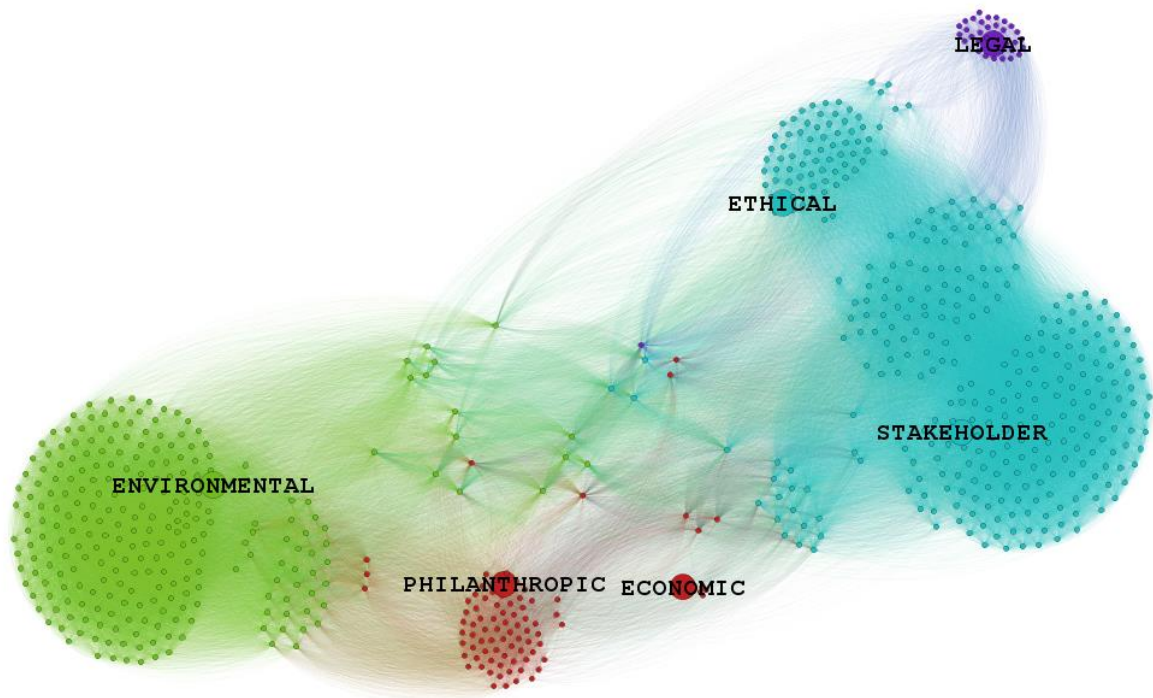
Figure 2: Semantic Network of Coca-Cola CSR Communication

   The codes were sized by the highest and the lowest level of nodes. The lowest level represents the most detailed codes (the small-sized nodes on the graph). The highest level of nodes are the six main CSR dimensions (the big-sized nodes on the graph). Additionally, the label names are displayed on the highest level nodes, representing the main CSR themes communicated by Coca-Cola.

   As seen in Figure 2, the biggest community (colored in blue) includes the *Ethical* and the *Stakeholder* CSR dimensions, suggesting that the two dimensions are strongly interconnected. The *Philanthropic* and *Economic* dimensions are the other two dimensions belonging in the same community (colored in red) while the *Environmental* (colored in green) and *Legal* (colored in purple) dimensions lie in the periphery of the network.

   It is not surprising that the *Economic* dimension is closely related to the *Philanthropic*, and is also relatively close to the *Ethical* dimension. Carroll and Schwartz (2003) argue that the most critical tension points within the domains lie between the economic and ethical and economic and philanthropic domains. The semantic network reveals these relations, demonstrating clearly that the vast majority of corporate activities related to CSR are economic in nature. The *Economic* dimension is situated in between the dimensions, reflecting this notion. Another interesting finding is that the *Environmental* and *Legal* dimensions are the farthest apart, indicating that they share the least amount of codes. This finding is in line with previous research (Öberseder et al., 2013), that has concluded that companies are dedicated to contribute to preserving the environment, but do not desire environmental regulation. On the other hand, consumers demand more environmental laws, as well as monitoring and

compliance (Öberseder et al., 2013). Thus, companies should consider communicating about their commitment not only to helping the environment, but also to promote more stringent environmental regulation.

The purple community containing the *Legal* dimension is closely situated to the blue community, containing the *Ethical* and *Stakeholder* dimensions. This indicates a close interrelation between the three themes. By communicating its CSR initiatives concerning *Ethical* and *Stakeholder* issues together with concerns about proper laws and regulations, Coca-Cola creates a notion of credibility for its CSR actions. The company indicates that it complies with the laws, thus acknowledging wider societal expectations. Such communication practices are in line with the legitimacy theory rationale for CSR communication (Crane & Glozer, 2016; Lanis & Richardson, 2012).

The green community, containing the *Environmental* dimension is closer to the *Philanthropic* and *Economic* communities, thus suggesting an overlap between those three dimensions. Again, it could be inferred that despite their voluntary nature, *Environmental* and *Philanthropic* efforts are also engaged with possible economic consequences for the firm. Coca-Cola recognizes the fact that consumers are aware that CSR motivations could be strategic in nature (Coombs & Holladay, 2012). Such clear indication is a strategy to present Coca-Cola's CSR as benefitting both the business and society, making it more believable.

It is interesting to point out that the graph does not reveal a clearly identifiable central dominant hub, defined as a 'core' community (Drieger, 2013, p. 13), instead the communities are situated in the periphery of the network. The center of the network contains individual nodes which are the codes that span groups that are placed distant from one another. Those nodes bridge the groups that are farther from each other. Some of the bridging nodes from the *Environmental* dimension include: Every Drop Matters, Economic Development, 2020, Public Private Partnerships (see Appendix C displaying a close up of the center of the network). For example, the Public Private Partnerships node belonging to the *Environmental* dimension bridges the green community with the red community, indicating that besides the environment, Public Private Partnerships were often mentioned in the context of philanthropy and business. This is understandable, as such partnerships fall under the *Environmental*, *Philanthropic* and *Ethical* dimensions. On the other hand, codes such as Accountability and Human Rights bridge the *Environmental* community with the *Stakeholder*, *Ethical* and *Legal* domains.

Then, other measurements characterizing the structure of the network were explored using the features provided by Gephi. The graph *density* shows the number of ties relative to the number of possible ties and is a value between 0.0 -1.0; higher *density* means that the nodes in the network are more interconnected. In semantic networks, relatively high density indicates that a large number of

important concepts are discussed in semantic proximity with each other ("Gephi Tutorial Quick Start,"n.d.). Networks which are dense indicate higher amounts of actualized word relations, and are therefore more coherent (Drieger, 2013). The network has a Density value of 0.37, meaning that all nodes are relatively connected to each other. It should be taken into consideration that a high density value is natural in this semantic network as the nodes represent codes from a pre-coded list and reside within a theme being connected with another.

Next, in order to examine each of the six CSR dimensions more closely measures of *centrality* are calculated. A node's characteristics depend in part on its position in the network structure (Borgatti, Mehra, Brass, & Labianca, 2009). At the node level of analysis, the analysis of *centrality* is the most widely studied concept. *Centrality* represents a family of node-level properties relating to the structural importance or prominence of a node in a network (Borgatti, et al., 2009). Next, each of the six main themes was selected and the *betweenness centrality* and *degree centrality* were calculated for each node. The results are summarized in Table 2.

Table 2: Semantic Network Characteristic per CSR dimension

CSR Dimension	Betweenness Centrality (extent of bridging)	Degree Centrality (edges)
Stakeholder	83232	288
Environmental	70490	265
Ethical	29070	170
Philanthropic	19182	138
Legal	5402	73
Economic	552	23

Betweenness centrality, roughly measures how often a node appears on shortest paths between nodes within the whole network, indicating how 'highly bridging' a node is in a network, an alternative measure of a node's importance (Drieger, 2013). Its precise definition is the sum of the proportions of shortest paths the node resides on for all pairs of nodes in the network. The measure is often interpreted in terms of the potential power of a node due to its 'ability to slow down flows or to distort what is passed along' (Borgatti, et al., 2009, p. 894). As seen in Table 1, the most 'powerful' theme is the *Stakeholder* theme, followed by the *Environmental*, *Ethical*, *Philanthropic*, *Legal* and *Economic* dimensions.

To analyze the *degree centrality* each node representing a CSR theme is analyzed as an ego network. An ego network constitutes an entity and its direct neighbors and the linkages between them (Hanneman & Riddle, 2005). The *degree centrality* counts the number of direct neighbors for each

thematic node and is defined as the number of ties incident upon a node (Freeman, 1979; Borgatti, 2005). Concepts with a high *degree centrality* imply a high differentiated relatedness, indicating local hubs or communities (Drieger, 2013). The *Stakeholder* node was connected to the most codes, emerging as the most prominent theme, which is in line with the thematic qualitative content analysis. The next highest connected dimension, *Environmental* comprises the second largest community (colored in green). The two dimensions with the highest *degree centrality* are the two dimensions based on Dahlsrud (2006). Unlike Carroll's (1991) model that considers the *Economic* and *Legal* domains as situated at the base of the CSR pyramid, in terms of CSR communication the two themes possess the least amount of nodes.

Figure 3 presents a folded network, which is a topic-by-topic network, with the edges representing the number of codes spanned pairs of themes (Lee, 2016). The folding is performed through matrix multiplication of the topic-by-word adjacency matrix (i.e. the network in matrix form) and the word-by-topic adjacency matrix. The cells (or edge weights) contain the values of shared concepts between each main topic. The graph visualizes better the interconnectedness between the main themes.
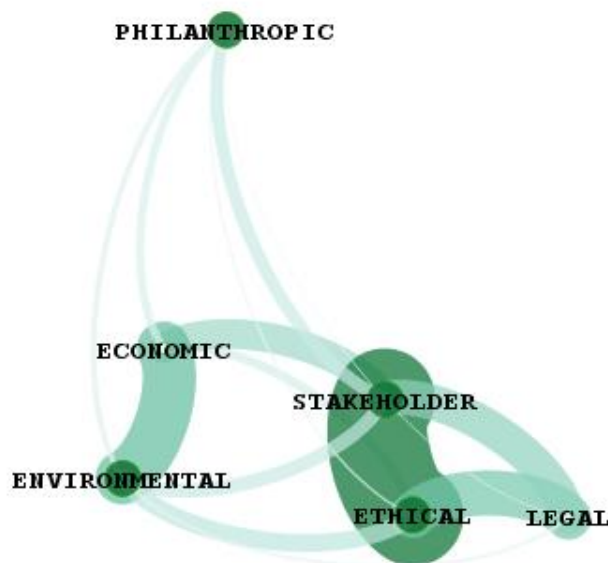
Figure 3: Coca-Cola CSR Communication Themes by Edge Thickness

The network visualizes the importance of each theme by adjusting the color and thickness of edges by their weight. The edges are sized and colored by their weight; the darker green and the thicker edges represent more nodes shared between themes. The thickest edge is between the *Stakeholder* and *Ethical* dimension, further establishing the strong overlap between the two themes.

The *Stakeholder* dimension is strongly interrelated with the most themes-*Ethica*l, *Legal*, *Economic* and *Environmental*. Another strong connection is between the *Philanthropic* and *Environmental* and *Philanthropic* and *Stakeholder* dimensions. Furthermore, the *Environmental*, *Ethical, Economic* and *Stakeholder* themes appear to have the most connections with one another, implying the formation of a group with the most shared codes. On the other hand, the *Philanthropic* and *Legal* dimensions are situated in the periphery of the folded network as a result of a combination of weaker links and less linkages with the rest of the themes. The *Philanthropic* theme appears to be connected the least indicating that the topic was more distinct compared to the rest.

The nodes were sized and colored by their degree centrality; the smaller and lighter the node is, the less codes belonged to the node. The *Economic* and *Legal* topics were the least represented, as seen by the barely visible nodes of the two topics. The *Stakeholder*, *Environmental*, *Philanthropic* and *Ethical* themes appear to have similar amount of nodes, as seen by the almost identical nodes of the four topics.

4.3 Coca-Cola CSR Communication Public Perceptions

4.3.1 Topic Modeling

Topic modeling uncovers a set of words that constitute distinct topics in a corpus; each word in the input text can be a part of each topic. Thus, the extent to which each word belongs to a topic is what is measured, regardless of other complexities of language such as syntax, semantics, or location within the text (Bogdanov & Mohr, 2013).

To explore the themes discovered in the text corpus, comprised of 10874 public tweets about Coca-Cola and its CSR activities, Table 3 displays the seven main topics within the dataset. The words per each topic are sorted from highest to lowest presence in the topic. Words containing a hashtag, defined as 'a new tagging format which associates a user created tag with an event or a context using a prefix symbol, #' (Chang, 2010, p.1) are not tagged. The topics are not automatically labeled, defining the label and interpreting the topic is up to the researcher (Diesner et al., 2015).

Table 3: Coca-Cola CSR Public Tweets Top Seven Topics

Topic	Weight	10 Most Representative Topic Members
Women	0.35	woman - business - job - diversity - employee - women - empower - entrepreneur - atlanta - million
Economy/Business	0.26	business - financial - sale - ceo - profit - market - wire - report - chronicle - story
Environment	0.19	sustainability - business - water - sustainable - enterprises - year - emission - tax - environment - goal

Sustainable Packaging	0.18	business - bottle - plantbottle - marketing - plant - women - environment - society - world - packaging
Consumer Health and Safety	0.17	calorie - business - share - campaign - sugar - health - stop - obesity - source - drink
Labeling	0.15	climate - label - gmo - change - legal - product - walmart - law - support - pledge
Corruption Scandals	0.13	fifa - corruption - sponsor - visa - rights - human - world - mcdonalds - cup - blatter

The table shows the average fit (weight) of each topic, with topics sorted decreasingly by fit. The average fit is a value running from 0.0-1.0; each of the topics of the topic model displays a relatively significant fit to the data. The first topic is significantly more coherent than the rest of the topics (0.35 fit), the second topic is also better fitting than the rest (0.26 fit), while the next five topics are less differentiated in their fit.

ConText provides several other statistics about the topic model which appear in an output folder assigned by the researcher. The LL/token (log-likelihood of maximum likelihood estimation function per token) represents the overall fit of the model, and has a value of -8.62. The other topic modeling attempts displayed similar LL/token values. Additionally, topic modeling reports statistics on the extent to which each tweet is associated with each topic (through a tweet by topic matrix) using a score between 0.0 and 1.0. Individual tweets can be examined to see how they exemplify their most associated topics. When analyzing the topics individually, examples are drawn from these statistics.

Next, each topic is interpreted and assigned a label by the researcher. The topic modeling revealed fairly distinct topics and coherent topics, indicating clear patterns of thematic discussions of Twitter users regarding Coca-Cola's CSR. Even though topic modeling is quantitative, the interpretation of the topics is intuitive and subjective and consists of a qualitative exploration of the results.

Women

The most coherent topic displays a fit of 0.35 and contains the words: woman - business - job - diversity - employee - women - empower - entrepreneur - atlanta – million. It is not surprising that the Women theme was discussed extensively among Twitter users, as it is a prominent theme in Coca-Cola's overall CSR agenda. Additionally, Women appears as a sub-theme of Coca-Cola's CSR communication under the *Stakeholder* and *Philanthropic* themes. Thus, this topic reveals an alignment between stakeholders' CSR conversations and corporate messaging. The words 'empower,' 'entrepreneur,' 'job,' and 'diversity' are all connected to Coca-Cola's strategic communication about empowering women in the workplace and protecting their rights. A tweet with a high topic association

(0.9) illustrates the theme: 'Today I will learn about #5by20 - Coca-Cola's commitment to enable the economic empowerment of 5…://instagram.com/p/4RaBQ0okg9/.' Overall, many tweets belonging to the topic discussed the 5by20 initiative which is one of Coca-Cola's leading CSR projects. However, 5by20 did not appear as a term within the topic. A reason could be that consumers dislike 'a hard sell' (Coombs & Holladay, 2012, p. 111) of philanthropic activities, therefore companies need to find a balance of making their initiatives a topic of conversation, without appearing overly promotional.

The term 'diversity' illustrated by the following tweet: 'Great to hear Muhtar Kent citing #diversity and #gender as secret of Coca Cola's business success #WEOY,' was a code in several of Coca-Cola's CSR sub-themes such as Community and Women under the *Stakeholder* theme and *Nondiscrimination* under the Ethical theme. Clearly, Coca-Cola promotes the message that it is an advocate for diversity, which has resonated with Twitter users. The tweet further illustrates that the public recognizes and appreciates Coca-Cola's acknowledgement that promoting diversity is not only a means to create favorable attitudes among consumers, but also a way to achieve business success. The following tweet: 'Coca Cola: Sustainable Economic Opportunities That Empower Women & Benefit Business Needs #womenempowerment' is an example of bridging the Women and Environment and Economic topics, as it combines Coca-Cola's efforts to empower women and promote sustainability while at the same time achieving its business goals

The words 'atlanta' and 'million' are not explicitly related to the rest of the words in this topic. One of the tweets with a strong topic association (0.9) revealed that the word 'atlanta' refers to moving Coca-Cola employees from the Atlanta suburbs back to the city: 'Coca-Cola will move 500 employees from Cobb back to Atlanta://www.bizjournals.com/atlanta/real_talk/2015/06/coke-will-move-500-employees-from-suburbs-back-to.html?ana=twt …' Thus, the word probably appears because it is strongly related to the term 'employees.' Additionally, Atlanta is the place where the Coca-Cola Company's headquarters are located. An illustration of the term 'million' is the following tweet: 'Coca cola has a goal of empowering 5 million women by 2020. #5by20 #sustainability #ICASBA2016,' which discusses Coca-Cola's 5by20 initiative.

Economy/Business

The topic with the second best fit (0.26), Economy/Business is not strongly communicated by Coca-Cola within its CSR strategy. The topic contains the words: business - financial - sale - ceo - profit - market - wire - report - chronicle – story. Most of the terms are financial, making the topic easy to identify. One of the tweets with a high fit (0.9) illustrates the theme: 'Coca-Cola Enterprises Inc (CCE) Trades Higher on Sell-Side Upgrades and Merger Rumors.' The term 'chronicle' which is not immediately connected to the Economy/Business topic appears in tweets from the Atlanta Business Chronicle: 'Atl Business Chronicle: How much did Coca-Cola Enterprises' profit drop in 2015?' Another tweet from the topic informs about Coca-Cola's new sustainability report, pointing out that the company has committed to sustainability and creating value for society and its

shareowners:'New @CocaCola #sustainability report highlights corporate efforts to create value for share owners and communities'

The fact that the topic has appeared as a clear discussion theme in Twitter conversations indicates a discrepancy between Coca-Cola's CSR agenda and public perceptions on social media. The public discusses Coca-Cola's economic performance as suggested by the high coherence of the topic. Additionally, according to Carroll (1991), economic performance is the most fundamental CSR domain. Both the public and academics attest to the importance of the Economic theme, while Coca-Cola does perceive the topic as central to its CSR communication strategies.

Such a discrepancy leads to the conclusion that firms should communicate more explicitly their economic motivations to pursue CSR in order to advance their corporate reputations. As Carroll (1991) states, the overarching goal of businesses is to 'perform in a manner consistent with maximizing earnings per share, being as profitable as possible, maintaining a strong competitive position and high level of operating efficiency (p. 40). Other studies have also pointed out that an honest approach to disclosing motivations for CSR resonates positively with the public (Du et al., 2010).

Environment

The next topic containing the words: sustainability - business - water - sustainable - enterprises - year - emission - tax - environment – goal, was labeled Environment, as most terms indicate a connection to environmental issues. It is not unexpected that consumers discuss Coca-Cola's involvement in environmental initiatives, as Coca-Cola's CSR agenda focuses heavily on the environmental theme. Clearly, the company's promotion of its environmental commitments and its dedication to demonstrate leadership in the field has translated into online discussions and thus has resonated with the public.

The tweet with the highest fit for the topic (0.97): 'Coca-Cola Investing 56M: Vision for Sustainable Food & Drink Manufacturing Sustainable Brands www.sustainablebrands.com/news_and_views/business_models/...' informs about a Coca-Cola investment initiative in sustainable food and drink manufacturing. The term 'water' is expectedly one of the terms with the highest fits to the topic, as it is central to the company's sustainability agenda. The majority of the tweets concerning 'water' comment on Coca-Cola's water replenishment achievements: 'RT @ From Zero to 100% - Coca-Cola is on track to meet water replenishment goal - #sustainability …,' 'Coca-Cola takes water replenishment to new heights #water #recycle #sustainability ://bit.ly/1dXtiKf.' However, some view it as strategy, rather than philanthropy: '@CocaCola water replenishment "isn't philanthropic so much as a strategic business imperative" #cheerstohonesty,' '@gregjkoch1 - water is not a CSR exercise for us; it is fundamental to our

business strategy #FTWater @CocaCola.' The fact that Coca-Cola's water stewardship initiatives are discussed among consumers indicates a congruence between the company's CSR agenda, and consumers' vision. Literature discussing the importance of the 'CSR fit,' has concluded that stakeholders respond positively to CSR initiatives when there is a logical connection between the promoted social issue and the company's business (Du et al., 2010; Simmons & Becker- Olsen, 2010). Taking into consideration that water is the primary ingredient of Coca-Cola's products, the fact that people discuss Coca-Cola positively in connection to the term 'water' is expected. However, some of the debate regarding Coca-Cola and 'water,' revolves around the company's CSR being solely strategic. This indicates that companies need to be careful not to over-promote their CSR projects, as it could lead to skepticism among consumers.

As it is not immediately clear to which specific goals the term 'goal' refers to, the following tweets give an illustration: 'Coca-Cola Says It's Close to #Water Replenishment Goal://nyti.ms/1PwbdQQ #naturalcapital #green #business #csr #sustainability,' Coca Cola Inc. got serious about water issues and are now crushing their business water goals://3blmedia.com/News/Coca-Cola-Track-Meet-100-Water-Replenishment-Goal …,' 'Coca Cola's goal is to be 100% water neutral by 2020. Interesting presentation by @katerumbaugh at MN Chamber Women in Business event.' Previous studies on organizational identification theory have found that consumers prefer when companies communicate their CSR efforts along with measurable outcomes of their specific CSR goals (Coombs & Holladay, 2012; Du et al.,2010). The cited tweets demonstrate that as Coca-Cola has set specific measurable goals for its water replenishment commitments, consumers have reacted by praising the company for exceeding its goals. Therefore, an effective CSR strategy that meets consumers' expectations and leads to reputational boosts needs to focus on clear and transparent information and measureable data on the results of the CSR initiative.

Sustainable Packaging

The Sustainable Packaging topic is similar to the Environment topic, but it is more focused on terms related to packaging such as 'bottle,' 'plantbottle,' 'plant,' and 'packaging.' It is not immediately clear why the term 'business' has the strongest relation to the topic. It could be explained with the fact that many people cite publications that have a name with the term 'business.' The following tweets from the topic provide a rationale for the term's association with the topic: 'Coca-Cola introduces sweet new 'PlantBottle' made from sugarcane ://on.mash.to/1HZO5oR #news #business #tech,' 'Business #News Coca-Cola snubs petroleum-based plastic with 'PlantBottle' made entirely from... ://on.mash.to/1JCmDDs (From Mashable),' 'Coca-Cola displays first PlantBottle made from 100% plant materials #packaging #business #environment.'

Other tweets illustrating the topic, with a fit for the topic of (0.9) are: 'Coca-Cola debuted first fully recyclable PET plastic bottle made of 100% renewable materials @ World Expo Milan,' 'PlantBottle 2.0: Coca-Cola Unveils World's First PET Plastic Bottle Made Entirely from Plants ://CokeURL.com/up9l9.' Consumers' reactions to the Sustainable Packaging topic reflect theoretical discussions on the importance consumers put on investing in environmental research and development (Öberseder et al., 2013). Coca-Cola has adapted to stakeholders' expectations which in turn has resulted in online discussions about Coca-Cola's contribution to innovation within the environmental domain. Further, the positive reactions to Coca-Cola's involvement in sustainable innovation exemplify a clear alignment between the company's efforts to be perceived as a leader in the field of recycling and renewable technology and consumers' perceptions. The positive word of mouth linked to the topic demonstrates that Sustainable Packaging is a shared social concern between company and consumers. Coca-Cola's involvement in this particular cause has facilitated consumer-company identification and led to increased legitimacy for Coca-Cola (Coombs & Holladay, 2012; Marin & Ruiz, 2006).

Unlike the Consumer Health and Safety topic, the Sustainable Packaging topic did not reveal consumer skepticism of CSR over-promotion. Therefore, consumers did not perceive the CSR strategy as a 'hard sell' (Coombs & Holladay, 2012, p. 111; Bhattacharya & Sen, 2004) and did not question Coca-Cola's motivations for its CSR investments in Sustainable Packaging. A reason could be that the topic demonstrates an explicit CSR fit with Coca-Cola's business and production (Du et al., 2010; Simmons & Becker-Olsen, 2006).

Even though the term 'women' seems to not fit the rest of the words in the topic, it is not unexpected, as a considerable amount of Coca-Cola's sustainability initiatives are also linked to empowering women. An example is: 'Thank you @CocaCola for #5by20 Our mothers need the support! Let's work together to provide sustainability to moms! #helpherhelpherfamily.'

Consumer Health and Safety

Consumer Health and Safety includes the terms: calorie - business - share - campaign - sugar - health - stop - obesity - source – drink, and has a fit of 0.17. The following tweet contains the word with the highest fit to the topic 'calorie' and has an overall fit with the topic of 0.9: 'I got a free Coca-Cola Life to try from BzzAgent. 33% fewer calories with real cane sugar. #GotItFree #CocaColaLife @CocaColaLife.' It demonstrates a positive attitude towards Coca-Cola Life, one of Coca-Cola's products heavily promoted within its commitment to well-being and creating products that inspire happier, healthier lives. Another top tweet, containing the word 'calorie' celebrates Coca-Cola's taste: 'WEB at #BRK2016: I consume around 700 calories a day through coca cola - I elect to get my 2 700 calories a day from things that taste good.' Tweets also comment on Coca-Cola's commitment to

listen to its stakeholders: '@CocaCola listens to #stakeholder demands - lowers calories and works towards #sustainability: ://on.mktw.net/1JTIshL.' Coca-Cola's commitment to consumer health, safety and well-being falls under the *Stakeholder* and *Ethical* themes, and more specifically the Active Healthy Living sub-theme. The *Stakeholder* topic is the most prominently discussed theme within the company's CSR strategy. This is in line with findings that companies feel responsible to offer high-quality and wide-range of products that are beneficial to consumers (Öberseder et al., 2013). At the same time, words such as 'calorie,' 'obesity,' 'sugar,' and 'stop' are present in consumer debates about health concerns regarding Coca-Cola products: 'Coca-Cola; PepsiCo urged to stop marketing sugar drinks to children - International Business Times; India Edition ://dragplus.com/post/id/34747886 …,' 'Sugar is the worst. Shame on @CocaCola. You have a business to run but need to be truthful about your product.'

The term 'obesity' was not a frequent term in Coca-Cola's CSR communication, however it is one of the top words within the topic. The following top tweets contain the term: 'Scientists Can Be Bought (Climate Change): Coca-Cola Funds Scientists Who Shift Blame 4 Obesity Away From Bad Diets,' 'Coca-Cola Life: Coke with fewer calories and less sugar to tackle obesity ://bit.ly/1oQPpnN #marketing #health,' 'Don't blame obesity on coca-cola; blame it on consuming 3;500 calories a day- Buffett #BRKLiveStream @YahooFinance,' 'Coca-Cola shifts obesity culprit from calories to inactivity ://buff.ly/1U6U4ns,' 'Coke Tries to Sugarcoat the Truth on Calories #obesity #malnutrition #CocaCola ://nyti.ms/1IMQhmL.'

It is evident that the Consumer Health and Safety topic is controversial, with the public having mixed attitudes towards Coca-Cola and health concerns. Despite Coca-Cola's commitments to help people live happier, healthier lives through its products and initiatives, the topic demonstrates that the company's agenda and consumer perceptions do not fully align. As demonstrated by some of the example tweets people associate obesity with Coca-Cola. Additionally, some are skeptical towards the company's motives to promote happier, healthier lives assuming that the company strategically shifts the 'obesity culprit' from its products to inactivity.

At the same time, the company has started to make changes which is reflected in its well-being commitments which are central in its CSR agenda. The public has taken that into consideration, and has acknowledged that Coca-Cola is moving in the right direction. In order for the debate to shift even more in favor of Coca-Cola and minimize the discrepancy between its CSR agenda and consumer perceptions, the company should clearly communicate its motivations for its CSR initiatives regarding product safety and continue to set specific goals with measurable results (Coombs & Holladay, 2012). Another suggestion would be to be more transparent regarding its efforts to fight obesity. Being more explicit and honest about its initiatives to tackle the problem would contribute to aligning consumer

perceptions with corporate agenda as consumers would be less likely to question the company's motivations.

Labeling

The Labeling topic contains the words: climate - label - gmo - change - legal - product - walmart - law - support – pledge. The tweet with the highest fit to the topic (0.96) concerns GMO labeling: 'Pepsi; Coca-Cola; Nestle; Hershey and Kellogg all money laundering to defeat GMO labeling - ://investmentwatchblog.com…' The term 'gmo' has not been mentioned in Coca-Cola's communication, while the word appears as central to public conversations about Coca-Cola and labeling. The terms 'gmo,' 'label,' and 'law' appear in the following top tweet, revealing a discussion that Coca-Cola finances blocking GMO labeling legislation: 'CocaCola has dumped $2.5M into blocking GMO labeling laws! Boycott all Coca~Cola products! @TheGOPJesus @ArtisMentis.' The finding is unexpected as GMO labeling did not appear in communication regarding labeling in Coca-Cola's CSR report. Thus, the Labeling topic is another topic revealing a lack of congruence between Coca-Cola's CSR agenda and public perceptions. In terms of Coca-Cola's CSR agenda, the Product and Service Labeling sub-theme was present within the *Stakeholder* and *Legal* dimensions. One of consumers' expectations regarding socially responsible firms according to Öberseder et al. (2013) is labeling products clearly and honestly. Firms need to be aware that compliance with the laws regarding proper labeling is crucial for maintaining favorable brand image. This topic is a proof that a failure to align consumer expectations with corporate behavior could lead to negative attitudes towards the firm, which in turn could threaten its reputation and legitimacy.

The terms 'climate' and 'walmart' and 'pledge' appear to not be closely related to Labeling, so it is not entirely clear why the terms demonstrate a strong fit in the topic. Tweets involving the terms such as: 'Obama admin. launching the American Business Act on Climate Pledge; joined by huge companies like Apple; Coca-Cola; PepsiCo & Walmart,' concern the pledge of Coca-Cola, Walmart and other companies to help fight climate change. Thus, those terms are more connected to the Environment topic. The connection between the Labeling topic and the Environment topic is surprising as the *Stakeholder* and *Legal* dimensions were not immediately linked to the *Envrionmental* dimension in Coca-Cola's CSR communication. The following tweet: '@mikebairdMP Coca-Cola wants to make sure NSW doesn't get proper recycling laws. #stopcoke trashing Australia & choose cash for containers!' reflects consumer demands that companies comply with environmental laws. At the same time this thesis revealed that the *Legal* and *Environmental* dimension are the least linked CSR themes within Coca-Cola's CSR agenda. Thus, companies should reconsider their communication strategies by adapting to consumer expectations to express their active participation in environmental laws compliance.

Corruption Scandals

The last topic, Corruption Scandals was the most consistent during the numerous topic modeling runs, and every time it appeared with the same terms: fifa - corruption - sponsor - visa - rights - human - world - mcdonalds - cup – blatter. The highest fitting tweet (0.94) from the topic gives and explanation to why these terms are discussed together: '#Qatar2022 sponsors ""proudly supporting human rights abuses"" and #corruption ://www.filmsforaction.org/articles/people-make-antilogos-to-urge-sponsors-to-withdraw-from-qatar-2022-world-cup/#.VWsRcA2hcKg.twitter … @CocaCola @adidas.' As a sponsor of the World Cup, Coca-Cola together with other companies, including McDonalds and Visa is discussed as 'supporting human rights abuses.' An article from the Guardian reveals that after the public criticism, Coca-Cola has called on Fifa to address issues of corruption; however, the company has not withdrawn its World Cup sponsorship (Rushe, 2015). The word 'blatter' refers to the then president of Fifa Sepp Blatter, who has stepped down after the corruption allegations: 'FIFA sponsor Coca-Cola calls for Sepp Blatter to step down immediately "so a credible & sustainable reform process can begin in earnest.'

This topic corresponds to the sub-theme Corruption which belongs to the *Legal* dimension and the sub-theme Nondiscrimination which is a part of the *Ethical* theme. The two sub-themes were not present in other CSR dimensions, and were not extensively communicated by Coca-Cola. Thus, the topic is another point of tension between Coca-Cola's CSR agenda and consumer perceptions. Despite the fact that the topic is dedicated to an isolated case, firms should take into consideration that the public expresses strong reactions towards discrimination and corruption violations. When such incidents occur, it is important to communicate the firm's commitment to fighting corruption and discrimination, being transparent in communicating the involvement in the scandal and apologizing if ethical or legal societal expectations were not met. When a firm fails to conform to consumer judgments its legitimacy and reputation could be threatened. In such cases strategic CSR communication is the tool that can allow organizations to repair their legitimacy. Successful CSR communication could alleviate the consumer backlash caused by a failure to act within the boundaries of socially acceptable behavior (O'Donovan, 2002).

4.3.2 Sentiment Analysis

In order to assess the overall consumer sentiment towards Coca-Cola and CSR, sentiment analysis was first performed on the whole Twitter textual data (*N*=10874). The analysis was performed with the tool SentiStrength. The algorithm provided by SentiStrength allows for analyzing sentiment by both arousal (low to high) and valence (positive to negative) (Thelwall, et al., 2010). The graphs were visualized in the software tool Tableau and demonstrate two sentiment strength values in a line of text: -1 (not negative) to -5 (extremely negative) and 1 (not positive) to 5 (extremely positive). The

5 and -5 indicate the maximum positive or negative sentiment, while values of 1 and -1 both indicate neutrality. The value of each cell indicates the percentage of all tweets that exhibit the sentiment as indicated by the row and column sentiment values.

Table 4 reveals that almost half of all tweets (49.95 %) are neutral in sentiment.

Table 4: Sentiment Analysis of Coca-Cola and CSR Public Tweets

Negative Tweets	Positive Tweets				
	1	2	3	4	5
-1	49.95%	11.67%	7.48%	0.97%	0.02%
-2	12.18%	3.05%	1.56%	0.06%	
-3	6.37%	1.95%	0.92%	0.06%	
-4	2.29%	0.73%	0.65%	0.01%	
-5	0.04%	0.01%	0.01%		

The next highest proportion of tweets, 12.18 % is slightly negative as the tweets correspond to -2 and no positivity and are followed by 11.67 % slightly positive tweets (with no negativity). Overall, consumer perceptions appear to not be polarized, and lean towards neutrality. Next, 7.48 % of all tweets are relatively favorable, while 6.37 % are relatively unfavorable. A very small amount of tweets belong to the highest negative spectrum (0.04%) and only 0.02% belong to the highest positive spectrum.

The overall neutrality of consumers' Twitter conversations suggests that while public debate about Coca-Cola in regards to CSR has not sparked major controversies and thus negative reactions, it has not been particularly positive either. Taking into consideration that companies utilize CSR to gain favorable reputations, establish legitimacy and appear to be a 'good' company (Lewis, 2001), the neutral sentiment indicates that Coca-Cola's goals to enhance its reputation through CSR communication have not been achieved. At the same time, most of the sentiment is concentrated either on the negative or positive spectrum. This indicates that most opinions are one-dimensional, making it clear that consumers exhibit polarizing attitudes towards the company's involvement in CSR. Furthermore, as demonstrated by the table, 20.88 % of the tweets are entirely negative in sentiment. Even though this is not a very high percentage of tweets, it does indicate a discrepancy between Coca-Cola's CSR agenda and stakeholders' perceptions on social media.

Next, tables visualizing the sentiment analysis of tweets per topic are analyzed. Each topic consists of the tweets which were extracted from each Twitter topic search string (see Appendix B). It has to be taken into account that the topics do not correspond to the topics revealed by the topic modeling, rather the tweets represent the topics revealed from Coca-Cola's CSR communication. Tweets could correspond to different topics, which is a limitation of the approach.

Table 5: Sentiment Analysis of Coca-Cola and CSR Public Tweets (Stakeholder)

Negative Tweets	Positive Tweets			
	1	2	3	4
-1	48.55%	12.49%	9.89%	1.93%
-2	14.50%	3.35%	2.16%	
-3	3.12%	1.41%	0.59%	0.07%
-4	1.34%	0.37%	0.15%	0.07%

The sentiment analysis of the *Stakeholder* themed tweets echoes the sentiment analysis of the Twitter corpus overall. Almost half of the tweets (48.05 %) are neutral. Next, 24.06 % are positive (with no negativity), while 18.76 are negative (with no positivity). The 24.06 % of favorable tweets are an indication that Coca-Cola's initiatives concerning the dimension, such as the commitment to empower women, have garnered positive traction online. At the same time, more needs to be done to create even more positive debates and diminish the negatively charged conversations.

Table 6: Sentiment Analysis of Coca-Cola and CSR Public Tweets (Environmental)

Negative tweets	Positive tweets				
	1	2	3	4	5
-1	64.48%	11.31%	6.97%	0.69%	0.10%
-2	9.88%	1.58%	0.89%		
-3	2.57%	0.44%	0.25%		
-4	0.49%	0.25%			
-5		0.05%	0.05%		

The *Environmental* theme displays predominantly neutral sentiment (64.48 %). The rest of the sentiment is evenly spread out, revealing a balanced consumer attitude towards the topic. The *Environmental* dimension is the second most prominently communicated dimension within Coca-Cola's CSR agenda. Additionally, the topic modeling analysis revealed two topics, Environment and Sustainable Packaging, which are a part of the dimension and generated discussions online. This is the only dimension within which two topics emerged, and thus could be considered as the Coca-Cola's CSR communication theme that most successfully aligned with consumers' perceptions. Despite the mostly neutral sentiment of the tweets, 19.07 % were positive (no negativity), while 12.94 % were negative (no positivity). The higher proportion of positive tweets is not unexpected as the topic modeling revealed that the two topics generated favorable comments and prompted consumer-company identification. It could be argued that even a higher proportion of tweets could have emerged; thus, the company might benefit from evaluating why the topic has not attracted more favorable opinions.

Table 7: Sentiment Analysis of Coca-Cola and CSR Public Tweets (Ethical)

Negative Tweets	Positive Tweets			
	1	2	3	4
-1	36.46%	11.71%	7.99%	0.87%
-2	17.01%	3.97%	2.24%	0.10%
-3	5.04%	1.99%	0.81%	
-4	6.01%	2.39%	3.36%	
-5	0.05%			

The *Ethical* theme follows the pattern of the previously discussed themes with a big proportion of neutral tweets (36.46%). However, the topic reveals that 28.11 % of the tweets are negative in nature. As one of the topics revealed by the topic odeling analysis was Corruption Scandals which was communicated mostly within the *Ethical* theme, the high percentage of negative tweets is a reflection of the negative opinions and consumer backlash prompted by Coca-Cola's involvement in the corruption scandals surrounding Fifa and the 2022 World Cup in Qatar. The Consumer Health and Safety topic also falls within the *Ethical* dimension. The topic was another tension point between Coca-Cola's CSR strategy and consumer perceptions as it generated consumer skepticism regarding Coca-Cola's promotional activities to promote healthier, happier lives.

At the same time a relatively high percentage of Twitter opinions are positive (20.57 %). This could be partly due to the theme's high correlation with the *Stakeholder* theme, which discussed positively among Twitter users.

Table 8: Sentiment Analysis of Coca-Cola and CSR Public Tweets (Philanthropic)

Negative Tweets ☰	Positive Tweets		
	1	2	3
-1	16.00%	17.33%	6.67%
-2	4.00%	42.67%	6.67%
-3	1.33%	5.33%	

The *Philanthropic* theme reveals that 42.67% of the tweets are charged slightly more positively and slightly more negatively than the neutral tweets (16.00 %). The topic follows the pattern that a higher amount of tweets are neutral in nature. However, conversations are charged with slightly more sentiment than in the other themes (both positive and negative). It could be inferred that philanthropic CSR initiatives spark more emotion among consumers. The higher polarization of the topic in comparison with the rest of the themes might be provoked by the sensitivity of strictly philanthropic initiatives. The positivity could be caused by appreciation of the company's involvement in the causes, while the negativity might reflect notions of consumer skepticism towards corporate motivations for philanthropy.

This theme did not appear within the topics produced by the topic modeling analysis. Many of the philanthropic initiatives were discussed within the other dimensions, however none of the most representative topic members was the name of a specific initiative. Taking into consideration the company's goals to establish itself as positively contributing to society through philanthropy, it needs to re-evaluate its CSR strategies regarding the theme so that it resonates more with consumers online. It has been argued by several studies (Coombs & Holladay, 2012; Du et al., 2010) that the CSR causes that create the most positive attributions among stakeholders are logically connected to the nature of the company's business which might explain the lower prevalence of the Philanthropic theme.

Table 9: Sentiment Analysis of Coca-Cola and CSR Public Tweets (Legal)

Negative Tweets	Positive Tweets			
	1	2	3	4
-1	38.33%	4.97%	3.03%	0.22%
-2	11.53%	1.95%	1.51%	0.14%
-3	21.76%	5.98%	3.75%	0.07%
-4	5.33%	0.86%	0.43%	
-5	0.14%			

Even though a relatively high amount of tweets (38.33%) pertaining to the *Legal* theme are neutral, the highest amount of tweets (38.76%) is overly negative (with no positivity). Thus, the *Legal* theme elicits the most negative attitudes among stakeholders. Both the *Labeling* and the *Corruption Scandals* topics that emerged from the topic modeling analysis pertain to the *Legal* dimension. It could be inferred that the a failure to comply with the laws which are the fundamental category regarding what is considered fair and ethical in society, instigates the most consumer backlash online. Companies need to take into consideration the importance of committing to legal compliance. Not only that, but actively supporting regulation should not only be communicated, but also proved in action. As demonstrated by the negative opinions emerging from the *Legal* theme, a failures to match words with actions creates a discrepancy between CSR corporate agenda and consumers' views, thus leading to possible threats to reputation and legitimacy.

Table 10: Sentiment Analysis of Coca-Cola and CSR Public Tweets (Economic)

Negative Tweets	Positive Tweets			
	1	2	3	4
-1	73.38%	7.82%	4.24%	0.26%
-2	7.74%	2.40%	1.29%	
-3	2.03%	0.44%	0.07%	0.04%
-4	0.26%	0.04%		

Finally, the *Economic* theme contains the highest proportion of balanced tweets (73.38 %) revealing that consumers have not expressed emotions in discussions about the topic. Only 10.03 % of the tweets were negative (with no positivity), while 12.32 % were positive (with not negativity). It could be concluded that tweets with information about economy and business are factual and informative, thus lacking emotionally charged vocabulary. Even though Coca-Cola did not communicate extensively about CSR and the *Economic* theme, the topic did appear in the topic

modeling analysis. Therefore despite that it was neutral in nature, it was a point that sparked conversations.

5. Discussion

The Discussion chapter focuses on providing further interpretation and discussion of the results. It answers the two research questions posed in the beginning of the thesis, unveiling how the previous chapters have paved the way to answering the main questions in the study. It is explained whether the expectations based on prior findings are met. New interesting outcomes from the research are also discussed. The chapter also includes an analysis of how the findings relate to previous studies and how they build on what has already been done.

This study focused on examining how companies utilize CSR communication as a tool to advance corporate reputation. Furthermore, taking into consideration the increased stakeholder scrutiny regarding CSR activities, it sought to find out Twitter users' perceptions and attitudes towards CSR issues. The study explored its central questions through the lens of a case study of one of the most prominent companies in the world, the Coca-Cola Company. Examining an organization within a unique industry context provides insight into the effectiveness of CSR communication of a company facing a decline in the consumption of its production (Kit et al., 2013).

5.1 CSR Communication Themes

The first research question of this study aimed at finding out what kind of CSR content is communicated by companies in order to advance their CSR agenda. The study addressed the question by employing a two-fold analysis. First, a thematic qualitative content analysis of the most recent CSR report of the Coca-Cola Company addressed the need to revisit what the CSR concept entails as public expectations of the role of businesses in society are constantly changing. In order to contribute to previous research on conceptualizing what domains constitute CSR, the analysis adopted a communication perspective framework.

Previous studies have conceptualized CSR as being comprised of four dimensions: *Economic, Legal, Ethical* and *Philanthropic* (Carroll, 1979, 1991, 1999; Schwartz & Carroll, 2003). The results of the qualitative analysis support the theories that the four dimensions should be a part of the CSR definition. The two additional themes based on Dahlsrud (2006), *Stakeholder* and *Envrionmental*, were also represented in the analysis. Thus, the results of the thematic qualitative content analysis confirm that the proposed six-construct model, designed by combining earlier studies with newer theories, contains a set of societal expectations of CSR which is relevant to the current social context.

Interestingly, the *Stakeholder* and the *Environmental* themes were the most prominently discussed themes in the report. They represent more recent theories on CSR, and are not mentioned within Carroll's (1991) model. It can be concluded that it is crucial to revise the parameters of what CSR

entails as it is subject to variations over time. The *Environmental* dimension is the second most communicated theme, reflecting recent societal trends supporting the importance of environmental engagement of businesses (Öberseder et al., 2013). It could be inferred that, as proposed by the legitimacy theory (Coombs & Holladay, 2012; O'Donovan, 2002), through its communication, companies conform to societal demands to address pressing issues in an attempt to gain legitimacy and a positive image. This notion is further supported by the fact that as opposed to what was found in this study, Dahlsrud (2006) had concluded that the *Environmental* dimension is less frequently included when conceptualizing CSR. Therefore, corporations are adapting to recent trends to prioritize environmental concerns, making them an integral part of their sustainability communication. The theme that emerged as the least prominent, despite its significance within Carroll's (1991) CSR four-construct model, was the *Economic* dimension. According to Coca-Cola, consumers are less interested in receiving information regarding the topic. The prominence of the *Stakeholder* and *Envrionmental* dimensions reveals that companies take into consideration the constantly changing public expectations regarding what constitutes CSR. The CSR definition needs to be revisited often, in order to reflect the most up-to-date expectations of the role in businesses in society.

Next to the extent of the presence of each CSR theme within Coca-Cola CSR agenda, an analysis of the content of the CSR messaging reveals corporate strategies to maintain favorable reputation through CSR communication. For example, prior studies have concluded that strategic and value-driven motivations for CSR would be perceived positively by consumers (Coombs & Holladay, 2012; Ellen, Webb, & Mohr, 2006; Forehand & Grier, 2003). Within the *Stakeholder* theme Coca-Cola communicates that through its initiatives it hopes to not only help society, but also create a win-win situation that strengthens its business agenda, while helping others. Thus, the company creates transparency regarding its CSR motivations. The strong representation of the dimension confirms research that companies strive to communicate explicitly about who benefits from their CSR projects (Coombs & Holladay, 2012; De et al.; Kim & Ferguson, 2014). The *Environmental* theme reveals another strategy employed by Coca-Cola to further its favorable corporate image. One of the company's primary environmental initiatives concerns water, which is the primary ingredient for Coca-Cola's products. By creating a CSR 'fit' between its business and the causes it promotes, the firm creates a sense of trust in the consumers that its motivations are sincere. As outlined by Du et al. (2010), one of the primary obstacles for successful CSR communication is overcoming consumer skepticism.

The semantic network visualization of Coca-Cola's CSR communication themes aimed to build on Carroll's (1991, 1999) model of the CSR pyramid by comparing the ordering of the CSR themes given their overlapping nature. It is not surprising that the created semantic network displayed a distinct division into communities, represented by the CSR themes revealed in the thematic

qualitative analysis. The themes that appeared as the most related, and belonged to the same communities were the *Ethical* and *Stakeholder* themes and the *Philanthropic* and *Economic* themes. Additionally, the *Economic* dimension was situated in between the rest of the dimensions, in line with previous studies claiming that the most inter-linked themes are the *Economic* and *Philanthropic* and the *Economic* and *Ethical* themes (Carroll & Schwartz, 2003). An interesting finding emerging from the semantic network visualization was that the *Environmental* and *Legal* dimensions formed communities that were the furthest apart, implying that the two themes were rarely communicated together. This confirms previous theories that companies do not desire more environmental regulation (Öberseder et al., 2013).

5.2 CSR Communication Public Perceptions on Social Media

The analysis of topics discovered within the tweets discussing Coca-Cola in regards to its CSR activities revealed seven most prominent topics of discussion: Women, Economy/Business, Environment, Sustainable Packaging, Consumer Health and Safety, Labeling and Corruption Scandals. The Women topic was the most coherent, aligning with its central positioning within Coca-Cola's CSR communication agenda. As demonstrated by tweets with the highest fit form the topic, Twitter users discussed the matter by praising Coca-Cola's efforts to empower women and encourage diversity in the workplace. Thus, Coca-Cola has succeeded in advancing its reputation through its involvement in this CSR issue.

A surprising finding was the high coherence of the Economy/Business topic, as it was the least communicated by the company. On the other hand, the topic is central in earlier studies of CSR (Carroll, 1991, 1999; Carroll & Schwartz, 2003). Thus, firms could contemplate being more vocal about the role of economics and business within their CSR agenda.

The topics that created the biggest discrepancies between Coca-Cola's CSR agenda and public reactions were the Consumer Health and Safety, Labeling and Corruption Scandals topics. All three, as illustrated by example tweets from the topics displayed negative reactions and skepticism among consumers regarding Coca-Cola and its CSR actions. In order to overcome such discrepancies, CSR communicators should focus on a less promotional CSR communication and transparency regarding its motivations to pursue the specific CSR causes. By being more vocal regarding the specific problems it has set to tackle (e.g. obesity), the company will elicit more trust from consumers, thus achieving its goals to establish legitimacy and boost its reputation. Another discrepancy between Coca-Cola's CSR agenda and consumer perceptions is revealed in the lack of consumer discussions regarding Coca-Cola's philanthropic initiatives. The *Philanthropy* dimension was represented with discussions regarding women and the environment, however, other philanthropic efforts such as disaster relief, access to medicine and training and education which were promoted by Coca-Cola did

appear within the topic model. The Coca-Cola Foundation, which is Coca-Cola's own philanthropy project was also not present in the analysis. It could be concluded that Coca-Cola needs to change its strategy regarding these specific CSR initiatives and focus on raising more awareness regarding its efforts in the causes.

The sentiment analysis revealed that discussions around Coca-Cola's CSR were predominantly neutral in nature. The *Ethical* theme was the only theme displaying a larger proportion of negative emotions, reflecting the negatively discussed topics Corruption Scandals, Consumer Health and Safety and Labeling. The *Legal* theme contained a high proportion of negative tweets as well, as the Corruption Scandals and Labeling topics are a part of the legal dimension. Thus, the CSR themes communicated by Coca-Cola that created the least alignment with corporate agenda as they were discussed with negativity, are the *Ethical* and *Legal* themes. The *Philanthropic* theme revealed slightly more emotive tweets, implying that philanthropic initiatives elicit more emotional response in consumers. However, as philanthropic initiatives did not emerge as important words in the topic modeling analysis, more needs to be done in order to create stronger associations between Coca-Cola's brand image and philanthropic initiatives. As indicated by research (Kilgour, Sasser, & Larke; Lee et al., 2013), social media provides a unique opportunity for companies to scan for expectation gaps. Once the topics that reveal the most negatively discussed issues are determined, companies could re-evaluate their CSR strategies in order to close the expectation gaps, create a strong alignment with consumers' views and consequently strengthen their reputation and establish legitimacy.

6. Conclusion

The Conclusion chapter further evaluates the contribution and relevancy of the thesis and elaborates on its practical and scientific implications. It also touches upon the limitations of the study and provides suggestions for future research.

The thesis at hand aims at adding breadth to the debate over what constitutes CSR, by adopting a communication perspective of the concept and analyzing consumer perceptions. The study approached the analysis from a variety of angles, using a mixed method approach of thematic qualitative content analysis and digital methods which included semantic network analysis, topic modeling and sentiment analysis. This allowed the analysis to draw upon both qualitative and quantitative measures to achieve its goals. Thus, the results are more comprehensive.

To conclude the analysis, several limitations of this thesis need to be addressed, with each limitation leading towards potential future research. First, CSR initiatives are often communicated via 'interconnected, multichannel' (Austin & Gaither, 2016, p. 4) strategies including press releases, websites, videos, social media and annual reports. This study focused only on the CSR report as a corporate communication tool. Future research could analyze other channels, or a combination of different channels which could be compared. Specifically, analyzing social media as a tool for promotional communication using digital methods could lead to uncovering other dimensions of CSR communication and its public perceptions. Social media allow for a broad distribution of information with minimal publishing supervision (Coombs & Holladay, 2012), enhancing the engagement with stakeholders as it is an uncontrolled media and thus more trustworthy (Coombs & Holladay, 2012; Etter, 2013; Austin & Gaitner, 2016). Thus, exploring CSR strategies through corporate social media accounts could lead to interesting findings which could build on the results of this study.

Additionally, this study focused on a case study of only one company; therefore the findings may not be generalizable for companies from other industries. Other research could focus on comparisons between different companies across various industries.

Finally, despite that digital tools allow for analyzing large amounts of information which could not be possible otherwise, as well as creating visualizations allowing for a quantitative analysis of qualitative results, they have some limitations. For example, the tool Gephi was often stuck, causing information loss which hindered the analysis process. Next to that, automated sentiment coding has limitations in its reliability (Davis & O'Flaherty, 2012). Future research could benefit from manual tweet coding in order to verify the accuracy of the automated sentiment coding (Zhang, et al., 2009). Future studies could also take advantage from the constant development and upgrade of new digital tools in order to produce unique and innovative research.

To conclude, the tension between making a profit and making a difference in the world would most likely be ongoing (Coombs & Holladay, 2012). This thesis provided a novel perspective of looking at CSR communication by combining in-depth qualitative methods, with digital methods analyzing big data sources.

CSR communication is undoubtedly a delicate matter, as a lack of awareness can hinder companies to generate the desired outcomes from their CSR efforts. While a lack of awareness is problematic, too much promotion can lead to leery stakeholders. Despite the often cynical views that companies use CSR as a tactic to boost their reputation, this study has attempted to show that by adopting a win-win communication approach; in other words by communicating transparently not only the nature of their CSR initiatives, but also their CSR motivations, companies could be more successful in achieving their CSR agenda. This could be a way to remove the stigma from CSR, as even if strategic in its nature, the outcomes of CSR benefit society.

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Appendix A: Coca-Cola CSR Report Qualitative Analysis Themes

CSR Dimension	Descriptive Coding
ECONOMIC	**Economic Performance** Economic_profitability financial_resources **Market Presence** sustainability_investment sustainability_business ethical_business growing_ business the_World_Economic_Forum **Indirect Economic Impacts** clean_energy health_and_education economic_impact small_businesses Golden_Triangle financial _services business_ skills value_ chain economic_development economic_empowerment womens_economic_empowerment economic_wellbeing Best_Global_Initiative_for_Womens_Economic_Empowerment Women_in_Leadership_Economic_Forum economically_empower_latinas **Preserving Profitability** economic_sustainability economic_profitability financial_resources Business_loans bridge_loans
ENVIRONM ENTAL	**Materials** **Sustainable Packaging** recover_recovering bottles cans refillable_glass_bottles returnable_glass_bottles refillable_PET_bottles multiuse_bottles reduce_ material_use recycle_recycling_recycled renewable material restorative_ packaging_system community _recycling_systems resource_efficient_packaging PlantBottle package packaging sustainable reused_reuse resources refreshed_packaging_goals recovery curbside_recycling PET plastic lightweight cost_effective environmental_footprint rPET lightweighting_packaging Brazil production conversion crude_oil bioplastics aluminum_can material_efficiency EKOCYCLE will_i_am repurpose_repurposes 3D_printer FIRST robotics ShopinShop CCE Ford_Motor_Company SeaWorld refillable environment Bioplastic_Feedstock_Alliance material_efficiency Capitol_Hill biobased_manufacturing agricultural_crops Virent Gevo Avantium PEF plantbased World_Expo Milan **Climate Protection** **Energy** energy_consumption energy_intensity energy_efficiency Energy_Saving_Challenge energysaving economic_sustainability Clean_Energy_Toolkit CocaCola_FEMSA electricity wind_farm solar thermal biomass BEE Keystone_Policy_Center Environmental_Leadership_Award United_Nations_the_UN Conference_of_Parties_21 Earth_Hour **Emissions Effluents Waste** reduce_reducing carbon_footprint 2020 sustainable sustainability climate_change greenhouse_gas_emissions CO2_emissions drink_in_your_hand carbon_reduction CocaCola_Journey atmosphere natural_disasters environment natural_resources sugarcane corn coffee tea water water_scarcity industry_leader Manufacturing distribution refrigeration ingredient_sourcing Carbon_Scenario_Planner HFC_free cooler_cooling reduction White_House_Climate_Data_Initiative carbon_ pollution China WorldWildlifeFund_WWF Cargill Songyuan footprint corn_farms training_programs workshops **Water Stewardship** water_H2O_replenishment 2020 water balance_ water sustainable_management water_efficiency rainwater harvesting watertressed replenish_replenishing preserve Belgium protect watersheds WorldWildlifeFund_WWF freshwater_resources watersecure_future accessible_water diverse_crops cultivation community_water finished_beverage_volume New_World Sustainable_Human_Development_Initiatives United_Nations_Development_Programme_UNDP WaterAid WASH freshwater_ecosystem universal_access sanitation hygiene holistic_approach conservation Clean_Water_Project One_Foundation local_sources energy food_production agricultural_production energy_generation WaterEnergyFood_Nexus resources Sustainable_Development_Goals_SDGs United_Nations_theUN Millennium _Development_Goals sanitation ecosystem accountability United_Nations_Development_Programme_UNDP Every_Drop_Matters Africa_Group Working_Resources_Group_2030_WRG International Finance Corporation/IFC public_private_partnerships water_strategy CDP risk_assessments wastewater source_water_protection_plan_SWPP governance source_water_vulnerability_assessment aquatic_life recycled_wastewater Water_Management_Policies India rainwater_harvest groundwater_recharge Belgiumwater_replenishment_project water_restoration Natuurpunt groundwater Stappersven_nature_reserve Antwerp poor_water_quality water_scarcity diverse_wildlife irrigation freshwater WorldWildlifeFund_WWF CEO_Water_Mandate Water_Action_Hub The_Nature_Conservancy

Latin_America_Conservation_Council Global_Water_Challenge United_Nations_Global_Compact Golden_Triangle farming agriculture Cargill

Sustainable Agriculture

coffee corn sugar tea fruit shareowners farmers agriculture_agricultural WorldWildlifeFund_WWF farming Sustainable_Agriculture_Guiding_Principles_SAGP workshops bottling_partners agricultural_community economic_development labor_rights workplace_rights ingredient_procurement economic_wellbeing suppliers sustainable_sourcing farm_management Supplier_Engagement_Program economic_profitability environmental_health cane sugar_cane beet_sugar palm_oil high_fructose_corn_syrup soy pulp paper_fiber ingredient_sourcing social_audits community_land_frights land_grabs zero_tolerance land_grabbing human_rights land_rights_violations certified_sugar sustainably_sourced_sugar corn sugar_beets sweeteners artificial_sweeteners Bonsucro TechnoServe USAID PromesaCafe Buffett_Foundation Heifer_International coffee_bean coffee_farmers Project_Unnati women mango women_mango_farmers female_entrepreneurs mango_plantations CocaCola_India CocaCola_University_on_Wheels Harvard_Kennedy_School Collaborating_for_Change_in_Sugar_Production Business _Fights_Poverty sugar_industry fertilizer profit Conservation_International The_Consumer_Goods_Forum SAI_Platform_Solidaridad The_Sustainability_Consortium

Society

Sustainable Communities sustainable_business sustainability_commitments project_Unnati EKOCENTER EKOCYCLE recycle_recycling_recycled bottles aluminum_cans HFC_free cooler_cooling environmentally_friendly 2020 sustainability agriculture ingredient_sourcing sustainable_management climate_protection sustainable_communities green public_private_partnerships EKOCENTER empower_communities social_enterprise philanthropy_public_ benefits IBM Global_Water_Challenge SOLARKIOSK sustainability

PHILANTH ROPIC	**Society**

Society

Sustainability project_Unnati EKOCENTER EKOCYCLE philanthropy_public_benefits IMB SOLARKIOSK
Disaster Relief The_CocaCola_Foundation give_back deadly_ebola_outbreak Phillippines disaster Ebola epidemic Liberia_Sierra Leone_Guinea RAIN The_CocaCola_Africa_Foundation safe_drinking_water Africa Replenish_Africa_Initiative_RAIN water_access PanAfrican_safe_water sanitation hygiene WASH relief_efforts MedShare emergency rebuild_ the_Philippines typhoon_Haiyan_Yolanda Humanitarian_aid donating_donation direct_relief rebuild help CocaCola_Philippines training financial_resources mentoring typhoon bridge_loans microentrepreneurs 2014_ Award_for_Corporate_Excellence_ACE water_quality_Philippines
Access to Medicine Project_Last_Mile healthy_thriving_communities medical_supplies RED global_health_threats critical_medicines last_mile remote_communities HIV_AIDS Queen Wyclef_Jean OneRepublic songs Omaze fundraising Global_Fund World_AIDS_Day medication
Women 5by20_initiative Best_Global_Initiative_for_Womens_Economic_Empowerment Women_in_Leadership_Economic_Forum
Training and Education social_enterprise artisan_programs_businesses Alliance_for_Artisan_Enterprise small_scale_artisans training mentoring mentors role_models Shopkeeper_Training_and_Resources_STAR training Outlet_Creation_programs business_skills

Public NGO Private Partnerships

Belgium Belgiumwater_replenishment_project water_restoration Natuurpunt groundwater Stappersven_nature_reserve Antwerp WorldWildlifeFund_WWF CEO_Water_Mandate Water_Action_Hub The_Nature_Conservancy Latin_America_Conservation_Council Global_Water_Challenge United_Nations_Global_Compact Golden_Triangle United_Nations_Global_Compact United_Nations_Development_Program_UNDP Every_Drop_Matters portfolio Sustainable_Human_Development_Initiatives civil_society CocaCola_Eurasia Africa_Group Working_Resources_Group_2030_WRG International_Finance_Corporation_IFC WorldWildlifeFund_WWF CEO_Water_Mandate Water_Action_Hub The_Nature_Conservancy Latin_America_Conservation_Council Global_Water_Challenge United_Nations_Global_Compact The_Recycling_Partnership EKOCYCLE will_i_am repurpose_repurposes 3D_printer FIRST robotics ShopinShop Ford_Motor Company SeaWorld refillable_plastic_souvenir_cup Busch_Gardens environment Bioplastic_Feedstock_Alliance Field_to_Market Keystone_Policy_Center Environmental_Leadership_ Award UN_climate_negotiations Conference_of_Parties _21 CDC CDC _Foundation Negros_Women_for_Tomorrow_Foundation_NWTF US_Secretary_of_State USAID the_Global_Fund BillandMelinda_Gates_Foundation AIDS_Tuberculosis _Malaria Share the Sound of an AIDSFree Generation public_private_partnerships African_governments International_Finance_Corporation_IFC InterAmerican_Development_Bank_IADB Kiva NGOs UN_Women International_Finance_Corporation_IFC InterAmerican_Development_Bank_IADB WEPs the_UN_Global_Compact
The Coca-Cola Foundation The_CocaCola_Foundation sustainable communities citizenship_priorities sustainability_pillars arts_and_culture economic_ development natural_disasters emergency_relief CocaCola_Matching_Gifts_Program give_back replenish_water empower_women wellbeing difference

STAKEHOLDER	**Society** **Community** diverse diversity Golden_Triangle public_private_partnerships civil collaborate collective wellbeing local_communities region water_sources SWPPs Together_We_Move active **Women** empower_women women_entrepreneurs 5by20_initiative 2020 5_million_women womens_economic_empowerment economic_empowerment entrepreneurial_potential families communities success daughters_mothers_caregivers_wives_breadwinners inspiration future enable_women impact UN_Women International_Finance_Corporation_IFC InterAmerican_ Development_Bank_IADB health education economic_impact small_businesses Golden_Triangle financial_services siness_skills mentors role_models NGOs Kenya_@50_Legacy_Project Womens_ Enterprise_Fund Shopkeeper_Training_and_Resources_STAR training Outlet_Creation_programs artisanal Uganda Alliance_for_Artisan_ Enterprise Kiva Best_Global_Initiative_for_Womens_Economic_Empowerment Women_in_Leadership_Economic_Forum Muhtar_Kent Womens_ Empowerment_Principles_WEPs Leadership_Award_for_Community_Engagement UN_Women UN_Global_Compact gender_equality grassroots gender_norms Empowering_Women_ at_the_Grassroots Stanford_Social_Innovation_Review The_Adelante_Movement economically_empower_latinas the_National_Urban_League SERJobs_for_Progress_National_Inc Rainbow_PUSH_Coalition BillandMelinda_Gates_Foundation Mercy_Corps artisan handicraft artisan_programs_businesses recycled_beverage_materials handcrafted_items Alliance_for_Artisan_Enterprise small_scale_artisans business_loans Thirsty_for_More_Coletivo_Case_Study FSG CocaCola_Brazil_Coletivo Coletivo_Retail_Program Coletivo communities in Brazil EKOCENTER Better_Than_Cash_Alliance digital_electronic_payments reduce_poverty Vietnam microbusiness Latino_women_Atlanta business_literacy Gutsy_Grandmothers Barefoot_College 600_grandmothers solar_engineers community_owned_solar_power_systems traditional_power_grid LED_lamps build_regional_training_centers Golden_Triangle **NGO Government Agencies** nonprofit United_Nations_the_UN United_Nations_Global_Compact the_World_Economic_Forum public_policy European_Platform_for_Action_on_Diet Physical_Activity_and_Health EU_Commission **Employees** Code_Business_ConductandWorkplace_Rights safe_inclusive_work_environment workplace_rights Global_Workplace_Rights_GWR International_Labor_Organization Migrant_Worker_Recruitment_and_Employment_Practices transparency workplace_safety safety Quality_Safety_and_Environment _QSE_audits QSE_Professional_Excellence_Program QSE_College QSE_Competency_Model QSE_professionals seatbelt_usage Network_of_Employers_for_Traffic_Safety Bismarck_ North_Dakot_campaign_ buckle_up incident_rate incident armed_robberies Guatemala vehicle_safety contractor_safety fall_prevention protection security_procedures RTM route_risk_management driver_training vehicle_inspection_maintenance safety_performance associate_wellbeing global workforce unite wellbeing Employee_Assistance_Program global_activity_challenges wellbeing_champion the_Coke_Music_Moments Forced_labor Global_Employee_Activity_Challenge active_employees FIFA_World_Cup Employee_Cup_tournament associate_wellbeing Encourage_employee_engagement employee_activity_challenge **Suppliers** bottling_partners global_partners Supplier_Engagement_Program Sustainable_Agriculture_Guiding_Principles supplier_capacity_building_events supplier_engagement_ human_rights Supplier_Guiding_Principles suppliers **Product Responsibility** **Customer Health and Safety** highest_standards product_safety product_quality high_quality transparent_ nutrition_information calories_in_front_of_packages calories_on _the_front_of_packaging nutrition_labeling frontofpack_calorie_information global_policy frontofpack_labeling safe high_quality highest_standards safety quality Company_Global_Product_Quality_Index Global_Packaging_Quality_ Index Quality_Management_System_standard Food_Safety_Management_System quality_management CocaCola_Operating_Requirements_KORE supply_chain packaging Global_Food _Safety_Initiative_GFSI Global_Markets_Programme_GFSI food_safety scientific_research healthy brominated_vegetable_oil_BVO sucrose_acetate_isobutyrate_SAIB calories **Packaging Product and Service Labeling** small_packages transparent_nutrition_information front_pack_calorie_information nutrition_labeling global_policy small_package_size_offerings smaller_package_sizes mini_cans small_glass_bottles **Active Healthy Living** Active_healthy_living programs inspire happier healthier personal_wellbeing low_calorie_ beverage_options no_calorie_beverage_options get_people_moving physical_activity_programs market_responsibly reduce_advertising_directly_to_children_under_12 400_new_beverage_options reduced_low_nocalorie_products 330_active_health_ living_programs 321Move_CocaCola_Icecek Youth_and_active_healthy_lifestyles Iraq_Pakistan_Turkey wellbeing community inspire obesity global_committments_wellbeing expanded_beverage_choices transparent_nutrition_information worldwide collectively Country_Calorie_Commitment public_private_partnerships reduce_calorie_diets help_consumers_make_ balanced_diet_choices sedentary_lifestyle public_health expanded_portfolio choice CocaCola_Life_Coke_Life reduced_calorie_Cola sweetened sugar_and_stevia stevia smaller_package_sizes mini_cans small_glass_bottles moderation portion_size small_packages transparent_nutrition_information calories nutrition_labeling frontofpack_calorie_information labeling reduce_beverage_calories_per_person_20%_by_2025

The_Alliance_for_a_Healthier_Generation the_Clinton_Foundation the_American_Beverage_Association Balance_Calories_Initiative balance_calorie_intake physical_activity calorie_awareness innovation reduce_calories_committment Healthy_Weight_Commitment_Foundation_HWCF The_Robert_Wood_Johnson_Foundation 78_fewer_calories_per_ day EPODE tackle_childhood_obesity $1_Million_grant EIN OPEN_project overweight obese reduce_childhood_obesity_committment mission health EIM Exercise_is_Medicine advance_health global_health_campaign American_College_of_Sports_Medicine EIM_on_Campus healthcare wellbeing get_people_moving physical_activity_programs The_CocaCola_Foundation nutrition_physical_activity active_living regular_physical_activity good_health exercise movement sports activity ride_bikes walk Copa_CocaCola_Camps Olympic_Active_Healthy_Living_Showcase Olympic_Moves ParticipACTION_Teen_Challenge inclusive active _teens EPODE_International_Network_EIN Exercise_is_Medicine_EIM StreetGames World_Cup_Brazil sports_ festivals youth_mentoring at_risk_youth_in_Spain young_African_leaders

Marketing and Communications market_responsibly no_advertising_to_children_under_12 responsible_marketing_policy no_advertising_placements_targetting_ children no_ marketing_for_children_under_12 policy International_FoodandBeverage_Alliance_IFBA compliance responsible_marketing_commitment

Economic Performance
Shareholders shareowners sustainable_agriculture agricultural transparency corporate_governance bylaws corporat_governance_guidelines Board_of_Directors overall_company_success financial_strength senior_management board_oversight board_committees Audit_committee Finance_committee

ETHICAL

Human_Rights

Nondiscrimination safe_inclusive_work_environment diversity embrace_diversity multicultural culture free_of_discrimination_and_harassment violations Global_Diversity_and_Workplace_Fairness Roadmap_for_Growth inclusion_mindset harassment actionable_steps ethnic_minorities veterans people_with_disabilities LGBT_community affinity Business_Resource_Group LINC Company_affinity_group_for_women Human_Rights_Campaign Corporate_Equality_Index LGBT_workplace_equality Human_Rights_Conference inclusion vulnerable exploitation human_trafficking recruitment migrant_workers placement forced_labor antitrafficking gender_equality grassroots gender_norms

Workplace Rights Code_Business_ConductandWorkplace_Rights economic_development workplace_rights workplace_safety human_rights international Human_Rights_Policy United_Nations_Guiding_Principles_on _Business_and_ Human_Rights Supplier_Guiding_Principles social_audits forced_abour land_rights compliance child_labor Oxfam common_standards United_Nations_Guiding_Principles_on_Business_and_Human_Rights bottling_partners suppliers Global_Workplace_Rights_GWR UN_Guiding_Principles Public_Issues_and_Diversity_Review_Committee Universal_Declaration_of_Human_Rights International_Labor_Organization Declaration_on_Fundamental_Principles_and_Rights_at Work UN_Global_Compact Migrant_Worker_Recruitment_and_Employment_Practices transparency complaints due_diligence Myanmar_tea_shops Responsible_Investment_ Myanmar AIM_PROGRESS supplier_capacity_building_events supplier_engagement_ human_rights the_American_Federation_of_Teachers_AFT remediation_of_child_labor advancement_of_school_attendance responsiveness AIM_PROGRESS workplace_safety safety Business_Unit_Presidents Quality_Safety_and_Environment _QSE_audits QSE_Professional_Excellence_Program QSE_College QSE_Competency_Model QSE_professionals seatbelt_usage Network_of_Employers_for_Traffic_Safety Bismarck_ North_Dakot_campaign_ buckle_up incident_rate incident armed_robberies Guatemala vehicle_safety contractor_safety fall_prevention protection security_procedures RTM route_risk_management driver_training vehicle_inspection_maintenance safety_performance associate_wellbeing global workforce unite wellbeing Employee_Assistance_Program global_activity_challenges wellbeing_champion the_Coke_Music_Moments forced_labor

Product Responsibility
Customer Health and Safety highest_standards product_safety product_quality high_quality transparent_ nutrition_information calories_in_front_of_packages calories_on _the_front_of_packaging nutrition_labeling frontofpack_calorie_information global_policy nutrition_labeling frontofpack_labeling safe high_quality highest_standards safety quality Company_Global_Product_Quality_Index Global_Packaging_Quality_ Index Quality_Management_System_standard Food_Safety_Management_System quality_management CocaCola_Operating_Requirements_KORE supply_chain packaging Global_Food _Safety_Initiative_GFSI Global_Markets_Programme_GFSI food_safety scientific_research healthy brominated_vegetable_oil_BVO sucrose_acetate_isobutyrate_SAIB
C_Packaging_Product_and_Service_Labeling small_packages transparent_nutrition_information calories_on_the_front_of_packages frontofpack_calorie_information global_policy_on_nutrition_labeling small_package_size_offerings mini_cans small_glass_ bottles

	Marketing and Communications market_responsibly no_advertising_to_children_under_12 responsible_marketing_policy no_advertising_placements_targetting_ children no_ marketing_for_children_under_12 policy International_FoodandBeverage_Alliance_IFBA compliance responsible_marketing_commitment **Community** climate_change climate energy_efficiency conference_on_business_and_human_rights National_Center_for_Civil_and_Human_Rights Atlanta US_Council_fo_International_Business US_Chamber_of_Commerce International_Organization_of_Employers business_leaders experts accountability transparency ethical_behavior ethics corporate_governance public_trust ethical_business EthicsLine violations highrisk_areas antibribery_risk_assessments antibribery_training due_diligence transparency human_right_to_water_and_sanitation **Public NGO Private Partnerships** State_Department Millennium _Development_GoalsMillennium _Development_Goals United_Nations_Global_Compact CEO_Water_Mandate Replenish_Africa_Initiative_RAIN safe_water Every_Drop_Matters United_Nations_Development_Program_UNDP sanitation responsible_water_resource_management Rio+20_Conference Sustainable_Development_Goals_SDGs UNGC
LEGAL	**Society** **Corruption** anticorruption toolkit due_diligence ethical_business bottling_partners The_Foreign_Corrupt_Practices_Act_FCPA corruption_risk bribery social_audits unethical_conduct antibribery_risk_assessments antibribery_training Cambodia Code_of_Business_Conduct_and_Workplace_Rights Memorandum_of_Understanding_MOU AntiCorruption_Unit_of_ the_Cambodian_Government ethical Best_Group_Trader **Public Policy** Political_Actions_Committees_PACs US _laws political_organizations contributions ballot_measure_campaigns US_political_contributions Public_Issues_and_Diversity_Review_Committee advocacy_efforts lobbying Internal_Revenue_Code Political_Engagement_Policy **Compliance** due_diligence State_Department responsible_reporting_and_transparency **Human Rights** **Workplace Rights** child_labor forced_labor Migrant_Worker_Recruitment_and_Employment_Practices **Land Rights** zero_tolerance_for_land_grabs land_rights requisite_policies thirdparty_country studies cane_sugar_sourcing_countries Colombia_and_Guatemala Brazil_El Salvador_and_Honduras guidance_on_land Singapore foreign_agent_fees land_rights_in_Atlanta studies sugar_supply_chain **Product Responsibility** **Product and Service Labeling** product_safety product_quality high_quality transparent_ nutrition_information calories_in_front_of_packages calories_on _the_front_of_packaging frontofpack_calorie_information global_policy nutrition_labeling frontofpack_labeling safe high_quality highest_standards safety quality Company_Global_Product_Quality_Index Global_Packaging_Quality_ Index Quality_Management_System_standard Food_Safety_Management_System quality_management CocaCola_Operating_Requirements_KORE supply_chain packaging Global_Food _Safety_Initiative_GFSI Global_Markets_Programme_GFSI food_safety scientific_research healthy brominated_vegetable_oil_BVO sucrose_acetate_isobutyrate_SAIB BVO_replacement product_ labeling transparent_nutrition_information **Compliance** legal_barriers_for_recycling beverage_packaging regulatory_restrictions

Appendix B: Twitter Search Strings per CSR Dimension

CSR Dimension	Twitter Search String
Stakeholder	(coca cola) ("community," OR "women," OR "5by20," OR "employees," OR "suppliers," OR "labeling," OR "climate")
Environmental	(coca cola) ("environment, " OR "sustainable," OR "sustainability," OR "renewable," OR "PlantBottle," OR "agriculture," OR "emissions," OR "climate")
Ethical	(coca cola) ("human rights," OR "discrimination," OR "diversity," OR "gender equality," OR "workplace rights," OR "labeling," OR "calories," OR "responsible marketing," OR "ethics," OR "society," OR "climate")
Philanthropic	(coca cola) ("philanthropy," OR "charity," OR "The Coca Cola Foundation," OR "disaster relief," OR "medicine," OR "donate," OR "donating," OR "relief," OR "disaster")
Legal	(coca cola) ("corruption," OR "legal," OR "compliance," OR "laws," OR "policy," OR "regulations")
Economic	(coca cola) ("economic," OR "financial," OR "profitability," OR "business")

Appendix C: Semantic Network of Coca-Cola CSR Communication (Center Close Up)