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Harnessing stakeholder sentiment on social networking sites: a new conceptual framework for online reputation management

ABSTRACT

Communicating reputation to stakeholders and assessing whether these messages have been received favourably are essential components of organisations' overall communication strategies. These actions are, however, becoming increasingly difficult to execute as a result of sophisticated stakeholder expectations as well as notions of continuous stakeholder participation and engagement on social networking sites (SNSs) by means of the co-creation of communication content. This research proposes a new conceptual framework for reputation management on SNSs that aims to address these issues. The framework is essentially based on the utilisation of computer-aided qualitative data analysis software (CAQDAS) such as Leximancer and Centim in the reputation management process. Based on the findings, it is suggested that CAQDAS enables reputation managers to accurately measure stakeholder sentiment, identify prevalent stakeholder discourses pertaining to organisational communication disseminated on SNSs, and detect threats that could damage corporate reputation.

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INTRODUCTION

The exponential rise of social networking sites (SNSs) and stakeholders' expectations to access organisation-specific information on these media platforms have compelled organisations to engage with stakeholders in a collaborative fashion. The classic monologue of merely disseminating information to stakeholders has evolved into organisation-stakeholder dialogues that are regarded as responsive, interactive, and engaging (Brønn & Vrioni, 2001; Morsing & Schultz, 2006; Smith, 2003).

Being present on SNSs and constructively connecting and engaging with stakeholders also afford organisations the opportunity to signal their openness and willingness to co-create as well as co-construct meaning with their constituents. Although establishing meaningful dialogue on SNSs may promote organisations' corporate reputations, it may also render corporate reputations vulnerable. This is partly due to sophisticated stakeholder groups who continuously apply pressure on organisations through SNSs to deliver on brand promises and to add value on multiple levels. SNSs have, thus, become another platform on which corporate reputation has to be managed (Smith, 2003).

The aim of this article is to re-theorise SNSs, originally considered as engagement platforms, to platforms where stakeholder sentiment can be measured and managed. In addition, when SNSs are re-theorised as active media on which stakeholder conversations are monitored, a new framework for reputation management on SNSs is proposed that ultimately provides organisations with a mechanism to manage corporate reputation strategically based on dominant discourses and prevalent stakeholder sentiment levels observed on SNSs.

The core of the new framework for reputation management on SNSs rests on the incorporation of computer-aided qualitative data analysis software (CAQDAS) programs in the assessment of stakeholder conversations on an organisation's SNSs. It is proposed that CAQDAS such as Leximancer and Centim enable organisations to measure stakeholder sentiment in real time, which would result in a more rapid identification of reputational threats. This would, in turn, allow reputation managers to remedy and manage any identified threats timeously. While reactive responses to reputational threats may address negative stakeholder sentiment, it is argued that CAQDAS should be implemented as a proactive tool. Both Leximancer and Centim afford organisations key insights into how stakeholders interact with communication disseminated on SNSs. For example, Leximancer has the ability to perform conceptual (thematic) analysis and relational (semantic) analysis (Kivunja, 2013). This entails surveying and analysing textual data on a variety of platforms such as websites, SNSs, blogs and other written texts such as media releases and annual integrated reports, to identify dominant concepts and themes. This process can be performed on both real-time data from SNSs or historical data collected by researchers or organisations over a period of time. The "primary product[s]" of Leximancer are interactive visualisations (concept maps) and other data exports (sentiment lens lists) that provide reputation and SNS managers with actionable insights, namely contextual associations in texts, stakeholder sentiment, and the prevalent themes inherent in stakeholders' responses to

corporate communication (Kivunja, 2013:54). Similarly, Centim is able to categorise unstructured data from both internal sources (e-mails, questionnaires, and call centre voice recordings) and external sources (SNSs, product review websites, and online forums/communities). Centim is regarded as an extremely useful analytics tool for SNSs since reputation and/or SNS managers often require "an immediate understanding" of "new customer exchanges" that take place on SNSs (Consulta, 2014:1). While Leximancer produces concept maps, Leximancer generates heat maps that specifically denote positive, negative and neutral stakeholder sentiment.

By using these CAQDAS programs, organisations could perform social media monitoring more efficiently and study real-time responses and historical trends pertaining to certain communication campaigns communicated to stakeholders on SNSs. Should the trends suggest that a certain campaign evoked negative sentiment, organisations could adapt the messages to be more stakeholder-specific. The adaptation of communication based on stakeholders' reactions could, thus, result in effective stakeholder engagement, positive stakeholder sentiment, and enhanced corporate reputation.

To assess the applicability of Leximancer and Centim within the new framework, corporate social responsibility (CSR) communication disseminated by two South African financial institutions to stakeholders on Facebook and Twitter, as well as stakeholders' responses to these messages, were analysed by the two aforementioned programs. As such, only one parameter that influences corporate reputation, namely CSR, was identified and other communicative themes present on the financial institutions' SNSs were excluded.

The subsequent section briefly outlines definitions of corporate reputation management and CSR that formed the theoretical basis of this research. It must be noted that this article does not intend to provide a lengthy literature review but rather aims to offer practitioners a pragmatic framework based on key theories and prevalent trends in the reputation and strategic communication management disciplines.

1. CORPORATE REPUTATION MANAGEMENT AND CSR

Corporate reputation is a multi-faceted construct that elicits various interpretations from scholars. The definition proposed by Fombrun and Van Riel (1997:10), namely that corporate reputation is the combined manifestation and representation of the organisation's "past actions and results" which signals to stakeholders its capacity and ability to deliver on its core brand values and promises, is regarded as the most concrete conception of the construct. Not only does it encompass notions of the sedimentary nature of reputation – remnants of how the media report on the organisation and the organisation's own actions that accumulate in the minds of stakeholders – it also hints at the process of constructively representing and managing communicative products to establish a sound reputation.

Moreover, as reputation is built over a period of time by means of forming relationships with stakeholders, organisations invest in relationship-building mechanisms and strategies that aim to enhance its corporate reputation (Boulstridge & Carrigan, 2000; Fombrun & Rindova, 1998;

Fombrun & Van Riel, 1997; Rindova & Fombrun, 1999). One such method is communication. Various theorists argue that communication fosters mutually beneficial relationships between social actors and is used to bridge the gap between organisations and their stakeholders (Balmer & Greyser, 2006; Fombrun & Shanley, 1990; Fombrun & Van Riel, 1997; Van Riel, 1997).

Related to the importance of organisation-stakeholder communicative exchanges is Van Riel's argument (2012) that stakeholder-reputational alignment is crucial to the survival of organisations. It is purported that alignment is the mutual beneficial relationship that exists between an organisation and its core stakeholders (Van Riel, 2012). Furthermore, it is this relationship that facilitates the attainment of organisational goals, enables the organisation to fulfil its purpose, and assists in delivering on core brand promises (Van Riel, 2012). Central to Van Riel's argument is the communication produced by organisations. It is argued that the formulation of communication and the manner in which reputation management is implemented both contribute to the creation of "total stakeholder support and alignment" (Van Riel, 2012:4). Optimal alignment is, thus, a process during which internal and external stakeholders' expectations of the organisation are investigated, interpreted, and managed by reputation managers and other managerial decision-makers.

A recognisable shift in the reputation management discipline is evident in Van Riel's stakeholder-reputational alignment theory. Where reputation was previously conceived by authors such as Fombrun and Shanley (1990) as a construct solely based on stakeholders' perceptions and assessment of organisations, reputational alignment is cognisant of the social contract that exists between organisations and their internal and external stakeholders. Following this line of thought, organisations use communication to facilitate the co-creation of corporate reputations to elicit the support of all stakeholders (Van Riel, 2012). The co-creation of reputations and communicative content also diverges from how organisations previously signalled reputation, namely by means of strategic projections and informational signals (Fombrun & Van Riel, 1997; Rindova & Fombrun, 1999). The 'reputational turn' and stakeholder centrality, thus, call attention to the alignment of organisational communication and stakeholders.

In this regard Van Riel (2013) points out that reputation and public opinion are interrelated. For example, organisations are now encouraged to consider certain "topics" within their business operating contexts that are regarded by stakeholders as "highly important" (Van Riel, 2013:17). If CSR is found to be an important topic, organisations should formulate their communication content to address this issue. Although key themes and topics favoured by stakeholders should be reflected in organisations' communication, the type of sentiment elicited by it should also be investigated. That is, if negative sentiment is observed in public opinion it should be addressed immediately, as it could result in reputational crises and public "irritation" (Van Riel, 2013:17).

Likewise Doorley and Garcia (2011) propagate the fostering of stakeholder relationships by means of communication that results not only in gaining reputational capital, but also in nurturing organisational growth. In line with this is Hart (2011), who argues that meaningful engagement on SNSs is related to organisations' financial performance. The benefits of honest, ethically-aligned, and useful content disseminated on SNSs are threefold: meaningful stakeholder-

organisation interactions take place; it positions the organisation as a social entity; and it results in the accumulation of reputational capital. As such, when trust is fostered among stakeholders, organisations could enhance their financial performance.

In this context, corporate reputation has evolved into a construct that is not only shaped by past and present corporate behaviour, but also by the communication content disseminated to stakeholders on SNSs and the resulting stakeholder sentiment. As a means of interpreting the relationship between communicative content on SNSs, reputation, and stakeholder sentiment, the researchers honed in on CSR messages communicated by two South African financial institutions on Facebook and Twitter.

CSR, one of the six dimensions of corporate reputation, is used by organisations to signify good corporate citizenship, enhance the already established reputations of organisations, and create competitive advantage (Fombrun & Gardberg, 2000; Rindova & Fombrun, 1999; Van Riel, 1997). Although various terms are proposed for the phenomenon of corporate activities that aim to address societal needs, CSR is widely accepted as the overall organisational strategy that guides the manner in which organisations fulfil their responsibilities to shareholders, stakeholders, and the communities in which they operate (Assiouras, Ozgen & Skourtis, 2013). CSR, thus, guides and describes an organisation's social consciousness, the level of stakeholder engagement, and its humanistic values (Brønn & Vrioni, 2001; Derwall, 2007; Smith, 2003; Williams & Aguilera, 2008).

The financial services sector and its governance practices have been under increased scrutiny since September 2008 (Engelbrecht, 2012). This is the direct result of the collapse of financial institutions in the United States of America. According to Gillan and Starks (2003), the preceding Merrill Lynch scandal, in particular, contributed to the loss of confidence in the financial services sector. Consequently financial institutions are more thoroughly scrutinised by both regulatory bodies and stakeholders. It is also believed that stakeholders place their trust in financial institutions to not only safeguard their assets, but also to actively demonstrate their commitment to good corporate citizenship by means of "philanthropic initiatives" (Hamann & Kapelus, 2004:87).

As such, this research aimed to investigate if the communication of CSR by two South African financial institutions on SNSs elicited positive, negative or neutral sentiment from stakeholders. By determining if a certain aspect of reputation has a positive, negative or neutral impact on stakeholders, it would enable reputation managers to engage in further reputation building practices such as the continued communication of CSR initiatives to strengthen ties with stakeholders (Rindova, Petkova & Kotha, 2007).

2.   STAKEHOLDER ENGAGEMENT ON SNSs

The current body of knowledge on SNSs frames SNSs as engagement platforms (Adler & Kwon, 2002; Chesbrough, 2006; Cone, 2007; Porter, Lorsch & Nohria, 2004; Qualman, 2013; Typaldos, 2000). Multiple researchers have explored the functioning of SNSs along with reputation management strategies and techniques that aim to enhance participation and

stakeholder engagement (boyd & Ellison, 2007; Cho & Huh, 2010; Coombs, 2007; Duncan, 2012; Ind & Riondino, 2001; Lyon, 2006; North & Enslin, 2004; Snowden, 2005; Vasalou, Hopfensitz & Pitt, 2008; Woodside, 2010). While the literature contributes significantly to the reputation management discipline, it is argued that the present method of communicating on SNSs, and particularly communicating CSR to stakeholders, is linear.

The linear communication process of communicating CSR to stakeholders through SNSs is interpreted as follows: Firstly, organisations develop communication strategies based on their CSR initiatives. These strategies are influenced by the current industry paradigm of the organisation and how the organisation constructs reality. Secondly, the communication strategies are formulated into communicative products (messages and campaigns) that are disseminated through SNSs to stakeholders. Reputation management techniques, that aim to facilitate and enhance stakeholder engagement and participation, are employed when the communicative messages and campaigns are formulated. For example, organisations use prize money, competitions, the element of participatory fun, and blogs as CSR socialisation tools to stimulate stakeholder involvement. Thirdly, when stakeholders interact with the CSR messages on SNSs, SNS managers and SNS administrators use basic additional reputation management techniques such as fostering mutual trust, answering questions, resolving complaints, and communicating in a humanised voice to overcome any events of reputation disjuncture.

This linear input-output process is centred on the notion that SNSs are merely platforms to facilitate stakeholder engagement and stakeholder dialogue. Organisations create CSR messages as input and then interact with stakeholders who respond with output (comments, questions, and complaints). However, the availability of CAQDAS programs such as Leximancer and Centim, provide organisations with the opportunity to meaningfully assess stakeholder dialogue and measure stakeholder sentiment on SNSs. In addition, whereas the current reputation management discipline focuses on message content formulation and the management of conversations on SNSs (Brown, Broderick & Lee, 2007; Floreddu, Cabiddu & Evaristo, 2014; Hoffmann & Lutz, 2015), the proposed new framework suggests a more in-depth analysis and monitoring process of stakeholder responses.

3.   CONCEPTUAL REPUTATION MANAGEMENT FRAMEWORK FOR SNSS

It is proposed that if CSR is understood from a phenomenological paradigm, organisations will signal their corporate morality to stakeholders in more concrete, overt communicative products. As such, it is proposed that organisations should shy away from implicit CSR messages out of concern that explicit CSR messages will result in stakeholder scepticism. Rather, the explicit signalling of CSR could result in stakeholder socialisation in the CSR discourse, which could have a positive impact on the organisation's reputation.

The researchers acknowledge the tension in the reputation management discipline which indicates that CSR initiatives, the communication thereof on SNSs, and the inclusion of social reporting statements in annual integrated reports could result in stakeholder scepticism (Coombs & Holladay, 2015; Derwall, 2007). This can be attributed to the fact that stakeholders believe that

these statements are employed purely for cosmetic purposes (Williams & Aguilera, 2008). Tokar (1997) also posits that indefinite commitments to sustainable business operations obscure the actual social impact organisations have on communities. The resultant effect is that stakeholders interpret this as corporate greenwashing.

Even if organisations regard explicit CSR communication as unwarranted, the proposed new reputation management framework can still be employed since it focuses on insights that can be garnered from stakeholders' interactions with any type of communication and not only CSR communication. The new framework, therefore, propagates that SNSs should not only be regarded as platforms where organisation-stakeholder engagement takes place, but rather as platforms where crucial insights into stakeholder sentiment and prevalent stakeholder discourses can be harnessed.
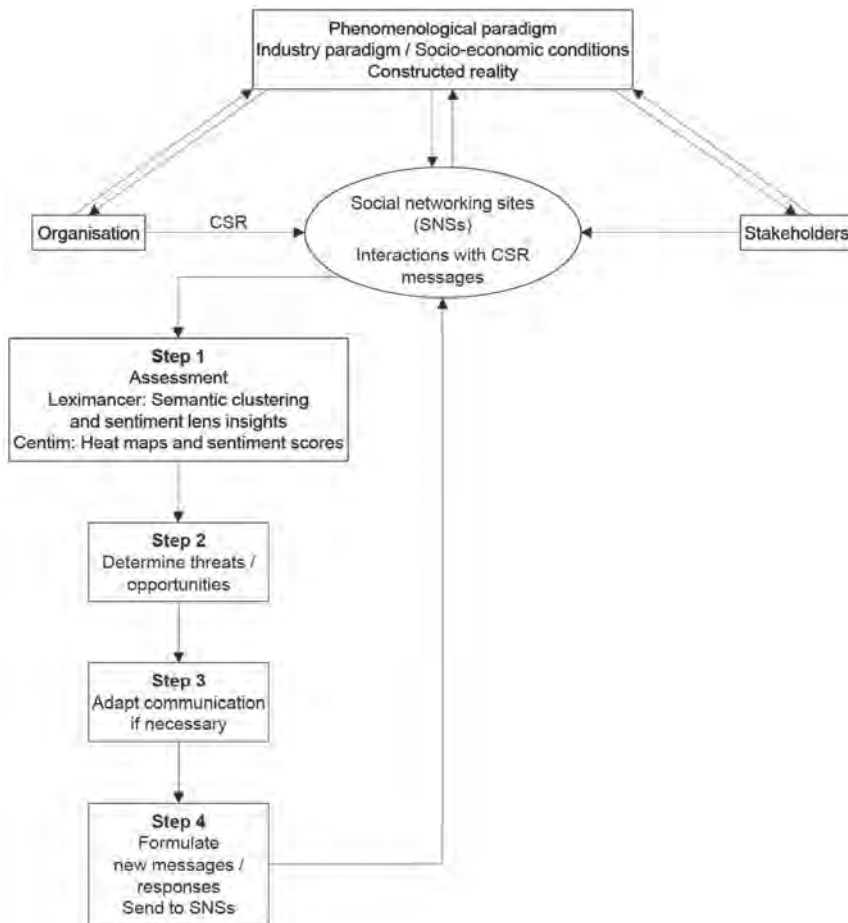

Figure 1: Conceptual framework for reputation management on SNSs

The conceptual framework for reputation management on SNSs (Figure 1) purports that an organisation's reputation should be managed not only by means of the formulation of stakeholder-specific communication content (input), but also through assessing stakeholder output on SNSs such as comments, replies, complaints, suggestions, and other interactions (likes and retweets).

The first step, assessment, entails using CAQDAS programs such as Leximancer and Centim. Leximancer offers organisations insight into the basic themes present in stakeholder interactions, as well as basic lists of favourable (positive) and unfavourable (negative) terms used by stakeholders. The semantic clustering feature inherent in Leximancer also provides organisations with a clear understanding of how closely aligned stakeholder comments are to the message content that was originally communicated on SNSs. As such, the prevalent discourses and recurring themes within stakeholder interactions are automatically generated by Leximancer.

In order to refine the assessment of stakeholders' interactions on SNSs, Centim is employed. Centim provides organisations with a text and sentiment analytics tool to achieve insight into what stakeholders are saying on SNSs and whether the responses to communicative products are positive, negative or neutral. Not only does Centim create automatic heat maps that represent the themes inherent to verbatim stakeholder content, it also measures sentiment in unstructured data sourced from SNSs.

With both CAQDAS programs organisations can, therefore, identify and describe the dominant discourses and themes present in their stakeholders' interactions. While Leximancer's sentiment lens provides one with a fundamental understanding of positive and negative words used by stakeholders, Centim generates refined, quantitative reports and graphs.

The second step entails interpreting the reports, graphs, and semantic clustering maps generated by Leximancer and Centim to determine any threats and opportunities. Threats to an organisation's reputation are related to negative stakeholder sentiment. On the other hand, positive stakeholder sentiment should be regarded as an opportunity on which the organisation could build to enhance its reputation. Any neutral sentiment themes could also be treated as opportunities, since these themes could be turned into positive themes.

In all three aforementioned scenarios, reputation managers should consider how the sentiment associated with particular communicative messages disseminated on SNSs could be enhanced or negated. To achieve this, Step 3 involves adapting the organisation's communication. Reparative measures could be used to reformulate messages to reverse negative sentiment. Negative sentiment can be regarded as a reputation risk since negative comments on SNSs have an adverse impact on an organisation's reputation and should be addressed in a timely fashion.

When positive stakeholder sentiment is observed in stakeholder interactions, organisations could also use it to their advantage. For instance, the themes associated with positive stakeholder sentiment (effective service, CSR, and innovative products, for example) should be integrated into the organisation's online communication strategy. That is, if stakeholders respond positively to

information and/or advertisements regarding the organisation's CSR initiatives, the organisation should formulate additional messages pertaining to this activity and disseminate newly formed content through its SNSs.

The same principle applies to instances of neutral sentiment. In theory, organisations would like to evoke positive sentiment among stakeholders pertaining to all its business activities, products, and services. A theme that has neutral sentiment attached to it may, however, be adapted to induce positive sentiment in stakeholders.

The final step, the formulation of new messages and/or responses and sending these to SNSs (Step 4), entails sending the adapted and/or new communicative products to SNSs. The four-step process is cyclical and after the new messages and/or responses have been sent to the organisation's SNSs, the assessment of the new communication (Step 1) can commence again.

4.   PROBLEM STATEMENT AND RESEARCH OBJECTIVES

The field of corporate reputation management does not currently offer descriptive and exploratory insight into how CSR is communicated to stakeholders and how these stakeholders respond to CSR messages on SNSs. In South Africa no empirical research has yet been conducted on the phenomenon of SNSs that can be used to gather findings on stakeholder sentiment. Through an investigation into stakeholders' responses to CSR communication on SNSs, empirical evidence is presented that contributes to stakeholder theory as well as the establishment of a reputation management framework that can be applied to the SNS sphere. Based on the problem statement, two research objectives were formulated:

Research objective 1 (RO1)
To measure stakeholder sentiment to CSR messages communicated by Bank A and Bank B on SNSs (Facebook and Twitter).

Research objective 2 (RO2)
To re-theorise SNSs, originally regarded as engagement platforms, to platforms where stakeholder sentiment can be measured.

5.   METHODOLOGY

The research on which this article is based departed from a phenomenological research paradigm. The research was also concerned with understanding stakeholders and their relationships with institutions and practices found in the sphere of everyday life. The meaning that is created from stakeholder interactions with communicative products on SNSs and the manner in which CSR communication is interpreted formed the basis of the study. Two qualitative instruments, discourse analyses and a literature review, were used to render the phenomenon of communicating CSR to stakeholders through SNSs researchable.

5.1 Sampling

A qualitative inquiry strategy was followed and purposeful, non-probability sampling was employed (Babbie & Mouton, 2001; Burns, 2000). The units of analysis were selected according to the purpose and objectives of the researchers and criteria for selecting the sample were established (Burns, 2000; Holstein & Gubrium, 2003).

The researchers purposefully selected two South African financial institutions as the units of analysis, as Bank A and Bank B have different brand values, corporate identities, and missions. This enabled the researchers to compare and contrast the findings.

The first sampling unit of the research was restricted to one type of organisational communication form, namely CSR messages that pertained to each financial institution's CSR initiatives. All other communicative messages such as information about the financial institutions' services, products, trading hours, applications, career opportunities as well as organisation-specific news and media releases that did not explicitly deal with CSR, were excluded from the research. Therefore, only CSR communication disseminated to stakeholders during the period of 1 September 2013 to 28 February 2014 was included in the research. This placed a limitation on the findings of the research as only six months' of CSR communication was studied.

The second sampling unit was the communication platforms on which CSR communication was disseminated to stakeholders. The researchers selected two SNSs, Facebook and Twitter, to collect data from. The financial institutions' Facebook and Twitter accounts were studied for the same six month period.

As the sampling units and units of analysis of this research were relatively small it did not achieve statistical generalisation. However, by focusing on two financial institutions and one specific type of communicative message (CSR), it is believed that the findings may be "generalisable to theoretical propositions" (Burns, 2000:474).

5.2 Data collection

The data collection process was non-empirical as secondary data (CSR communication) were collected from the two financial institutions' SNSs. Bank A and Bank B both have active Facebook accounts that were studied.

Bank A has two separate Twitter accounts: one a verified organisational account that does not actively interact with stakeholders, and the other, an active online persona that interacts socially and frequently with stakeholders. Bank B only has one Twitter account that is associated with the financial institution. In total, three Twitter accounts were studied.

All Facebook posts, pictures and videos as well as tweets communicated by Bank A and Bank B that pertained to their CSR initiatives along with stakeholders' comments, replies, and

retweets were included in the data collection process. The communicative messages were first copied to individual Word documents and thereafter Excel spreadsheets were populated with the verbatim messages and comments for the Centim analysis. In total, 2642 messages (208 original CSR messages and 2434 stakeholder comments) on Bank A's SNSs and 94 messages (17 original CSR messages and 77 stakeholder comments) on Bank B's SNSs were analysed.

5.3 Data analysis

The research employed three methods of data analysis, namely discourse analysis, Leximancer data analysis software, and Centim text and sentiment analytics to analyse the secondary data that had been collected. The manual, interpretive discourse analyses were used in conjunction with CAQDAS programs: Leximancer was used to analyse the verbatim contents of the data and Centim to measure and describe stakeholder sentiment on SNSs. Although NVivo 11 is also a CAQDAS program that automatically codes and classifies qualitative data, the researchers specifically made use of Leximancer and Centim since these programs provide greater insight into sentiment inherent in textual data sets.

Manual coding and interpretation by means of discourse analysis are interpretative acts and are therefore prone to subjectivity, coding errors, and judgment that decrease reliability (Saldaña, 2009). It is posited that the use of CAQDAS assist in minimising researcher bias and subjectivity (Penn-Edwards, 2010). It is, therefore, thought that Leximancer and Centim enabled the researchers to present transparent findings that can be replicated in other contexts (Crofts & Bisman, 2010).

Leximancer is a data or text mining program that locates key concepts and/or words in texts based on how frequently they are mentioned (Adelstein, 2008; Kivunja, 2013; Smith & Humphreys, 2006). The automatic content analysis of textual data by Leximancer based on the program's thesaurus-learning function, produces concept maps in which the frequency, co-occurrence, and relationships of terms and concepts are displayed (Crofts & Bisman, 2010). Although the producing of concept maps substantiated the findings of the manual discourse analyses, the sentiment lens function of Leximancer specifically aided the researchers to identify favourable and unfavourable terms (words) used by stakeholders when they interpreted the two financial institutions' CSR messages.

Leximancer has a predefined set of sentiment concept seed words that are added to user-defined lists when this option is selected. The program differentiates between unfavourable (negative sentiment) seed words and favourable (positive sentiment) seed words which are automatically added to the user-defined lists that are used to analyse the uploaded texts. Among the predefined unfavourable (negative sentiment) seed words that Leximancer has, are: bad, criticise, difficult, disappointed, horrible, frustrating, poor, problem, and problems. The favourable (positive sentiment) seed words include appreciation, best, compliments, convenience, convenient, easiest, easy, effective, efficient, excellent, fantastic, good, happy,

impressed, incredible, performance, quality, satisfied, timely, and wonderful.

The researchers used the Leximancer sentiment lens to generate lists of favourable sentiment terms, as well as lists of unfavourable sentiment terms for each SNS document that was analysed (Bank A's two Twitter accounts and its Facebook account, as well as Bank B's Twitter and Facebook accounts) (Leximancer, 2011).

Leximancer's sentiment lens function provided insight into how many positive or negative terms were used in the surveyed texts, thus providing a general overview of the number of times positive or negative sentiment terms were used by stakeholders on the two financial institutions' SNSs. The lists of sentiment terms did not appear on concept maps but in report tabs that were exported. The only instances where positive or negative terms appear on concept maps are when these terms are coded as "regular word concepts" or "compound concepts" that appear in the surveyed texts (Leximancer, 2011:107). Although Leximancer's sentiment lens function accurately identified the number of times positive and/or negative sentiment words were used by stakeholders, it only provided the researchers with basic insights into the sentiment inherent in the surveyed texts.

To gain a concrete and measurable assessment of the sentiment present in the texts, Centim, a program developed by Consulta Research and Clarabridge, was used. The program is essentially a text and sentiment analytics tool that is able to convert unstructured textual data sourced from SNSs into quantitative reports (Consulta, 2014). The real-time analysis of stakeholder responses on a variety of external platforms such as Twitter, Facebook, blogs, online forums, and product review websites allow reputation managers to react swifter to new online trends and instances where threats to reputation arise. Whereas Leximancer concepts maps identify dominant discourses in stakeholders' responses and its sentiment lens the use of favourable and unfavourable terms, Centim extracts linguistic content from SNSs, categorises the content, and assigns sentiment scores to the data to distinguish between various aspects of stakeholders' experience with products, services, and corporate communications disseminated to stakeholders (Consulta, 2014).

The text and sentiment analytics process employed by Centim uses natural language processing (NLP) to extract meaning from the surveyed content. Among the five NLP engines used by the program to analyse data concurrently are grammatical parsing, parts-of-speech detection, and named entity detection (Consulta, 2014). This, in turn, enables superior classification and sentiment scoring to take place.

Centim also assigns a score to every textual statement that expresses the level of positivity, negativity or neutrality detected in the surveyed texts. In addition, the program is able to detect descriptions of different aspects of stakeholders' interactions. For example, a stakeholder might post the following comment on Facebook: "*The campaign is great, but the service I experienced at one of your branches was poor*". Each aspect of the comment is interpreted and scored independently. In this instance the two aspects raised in the comment relate to

the financial institution's CSR campaign and the other to the financial institution's service and/or banking experience. The sentiment scoring scale used by Centim ranges from -5 (lowest, most negative score) to +5 (highest, most positive score). In the example given, the clause "*The campaign is great*" might be assigned a score of +4 and the clause "*the service I experienced […] was poor*" a -3.

The overall score pertaining to themes identified in the unstructured data is termed the sentiment score. Centim, thus, categorises the SNSs data into themes and assigns an overall sentiment score for each theme that points to how positively, negatively or neutrally each major communicative theme was interpreted by stakeholders. Lastly, the fact that Centim does not merely aggregate how many times an organisation is mentioned on SNSs or the number of Facebook likes it received but rather provides quantitative findings of stakeholders' comments and online interactions, allows one to gain an understanding of the context in which stakeholder comments were made.

The data analysis process was essentially based on the proposed new framework for reputation management on SNSs. Through analysing the data as suggested in the framework the following was achieved: Firstly, Centim and Leximancer could be used as strategic tools that enable reputation managers to react timeously when negative and/or positive stakeholder sentiment arises on SNSs. Secondly, Centim illustrated that SNSs are not just engagement platforms where organisation-stakeholder dialogue should be co-managed, but that these are platforms where stakeholder sentiment should be measured. Thirdly, it creates new opportunities for reputation managers to devise reputation management strategies that are more holistic, responsive, and stakeholder-specific.

6.   RESULTS

The first step of the proposed new framework for reputation management on SNSs was applied to the CSR communication disseminated through Facebook and Twitter by Bank A and Bank B.

To contextualise the findings of the CAQDAS analyses, a brief summary of the discourse analysis is first provided. It was found that the motive for Bank A's CSR communication on the surveyed SNSs was image management. This is attributed to the fact that the majority of messages related to the financial institution's two cause-related marketing campaigns, '*Stories of help*' and '*Ideas can help*'. The former gives non-profit organisations the opportunity to communicate their success stories to the public on Bank A's blog and the latter entailed a competition for innovative ideas that could improve the lives of South Africans. In general the communication also had limited references to the financial institution's traditional CSR initiatives such as its sponsorships (education, sports development, and innovation), health care and involvement with hospices, as well as environmental awareness.

Bank B applied CSR communication parsimoniously on its SNSs and due to the limited data, substantive conclusions regarding the motives for Bank B's CSR communication could not be

drawn. However, the CSR messages that were communicated to stakeholders were regarded as part of the institution's image management strategy and pointed to positive self-presentation. The majority of messages focused on consumer and banking advice.

In addition, it was established that the majority of Bank A's and Bank B's stakeholders responded with unrelated responses (so-called '*off-topic*' replies) to the financial institutions' CSR communication. Therefore, although stakeholder sentiment pertaining to CSR communication was measured, the analyses are also indicative of stakeholders' sentiment to other areas such as products and services that have a bearing on the financial institutions' reputations.

6.1 Findings from the Leximancer sentiment lens analyses

The Leximancer sentiment lens analyses indicated that the negative sentiment terms used by Bank A's stakeholders pertained to discourse themes such as the financial institution's branches and service levels, high transactional (account) charges, and the perception that the financial institution does not safeguard stakeholders' money. The positive sentiment terms, conversely, were related to discourse themes such as the financial institution's two CSR campaigns ('You can help' and 'Ideas can help'), efficient service, as well as stakeholders who expressed pride in being clients of Bank A. Figures 2 and 3 depict the negative (unfavourable) and positive (favourable) sentiment terms that were used by Bank A's stakeholders on Facebook, while Figures 4 and 5 depict the sentiment terms identified on Bank A's two Twitter accounts.

```
- <seeds>
    - <concept kind= "WORD,USER" value="_unfavterms">
        <term kind= "WORD" value= "abused" positive="true"/>
        <term kind= "WORD" value= "bad" positive="true"/>
        <term kind= "WORD" value= "blame" positive="true"/>
        <term kind= "WORD" value= "criticize" positive="true"/>
        <term kind= "WORD" value= "disappointed" positive="true"/>
        <term kind= "WORD" value= "failed" positive="true"/>
        <term kind= "WORD" value= "horrible" positive="true"/>
        <term kind= "WORD" value= "lack" positive="true"/>
        <term kind= "WORD" value= "poor" positive="true"/>
        <term kind= "WORD" value= "problem" positive="true"/>
        <term kind= "WORD" value= "problems" positive="true"/>
        <term kind= "WORD" value= "refuse" positive="true"/>
        <term kind= "WORD" value= "sins" positive="true"/>
        <term kind= "WORD" value= "worst" positive="true"/>
```

Figure 2: Negative sentiment terms used by Bank A's stakeholders on Facebook

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- </concept>
    - <concept kind= "WORD,USER" value="_favterms">
        <term kind= "WORD" value= "admired" positive="true"/>
        <term kind= "WORD" value= "awesome" positive="true"/>
        <term kind= "WORD" value= "best" positive="true"/>
        <term kind= "WORD" value= "compliments" positive="true"/>
        <term kind= "WORD" value= "convenience" positive="true"/>
        <term kind= "WORD" value= "convenient" positive="true"/>
        <term kind= "WORD" value= "easiest" positive="true"/>
        <term kind= "WORD" value= "easy" positive="true"/>
        <term kind= "WORD" value= "efficiency" positive="true"/>
        <term kind= "WORD" value= "fantastic" positive="true"/>
        <term kind= "WORD" value= "happy" positive="true"/>
        <term kind= "WORD" value= "honored" positive="true"/>
        <term kind= "WORD" value= "honour" positive="true"/>
        <term kind= "WORD" value= "impressed" positive="true"/>
        <term kind= "WORD" value= "incredible" positive="true"/>
        <term kind= "WORD" value= "lovely" positive="true"/>
        <term kind= "WORD" value= "nice" positive="true"/>
        <term kind= "WORD" value= "performance" positive="true"/>
        <term kind= "WORD" value= "pleasant" positive="true"/>
        <term kind= "WORD" value= "positive" positive="true"/>
        <term kind= "WORD" value= "succeed" positive="true"/>
        <term kind= "WORD" value= "success" positive="true"/>
        <term kind= "WORD" value= "successful" positive="true"/>
        <term kind= "NAME" value= "good" positive="true" nameKind ="GENERAL"/>
```

Figure 3: Positive sentiment terms used by Bank A's stakeholders on Facebook

```
- <seeds>
    - <concept kind= "WORD,USER" value="_unfavterms">
        <term kind= "WORD" value= "abuse" positive="true"/>
        <term kind= "WORD" value= "difficult" positive="true"/>
        <term kind= "WORD" value= "ridiculous" positive="true"/>
        <term kind= "WORD" value= "trouble" positive="true"/>
      </concept>
    - <concept kind= "WORD,USER" value="_favterms">
        <term kind= "WORD" value= "awesome" positive="true"/>
        <term kind= "WORD" value= "beautiful" positive="true"/>
        <term kind= "WORD" value= "celebrated" positive="true"/>
        <term kind= "WORD" value= "helpful" positive="true"/>
        <term kind= "WORD" value= "incredible" positive="true"/>
        <term kind= "WORD" value= "nice" positive="true"/>
```

```
<term kind= "WORD" value= "success" positive="true"/>
<term kind= "NAME" value= "good" positive="true" nameKind ="GENERAL"/>
<term kind= "NAME" value= "great" positive="true" nameKind ="GENERAL"/>
```

**Figure 4: Positive and negative sentiment terms used on
Bank A's organisational Twitter account**

```
- <seeds>
    - <concept kind= "WORD,USER" value="_unfavterms">
        <term kind= "WORD" value= "broken" positive="true"/>
        <term kind= "WORD" value= "crap" positive="true"/>
        <term kind= "WORD" value= "frustrating" positive="true"/>
        <term kind= "WORD" value= "poor" positive="true"/>
        <term kind= "WORD" value= "wrong" positive="true"/>
    </concept>
    - <concept kind= "WORD,USER" value="_favterms">
        <term kind= "WORD" value= "celebrated" positive="true"/>
        <term kind= "NAME" value= "great" positive="true" nameKind ="GENERAL"/>
```

**Figure 5: Positive and negative sentiment terms used on
Bank A's active Twitter account (online persona)**

Stakeholder responses from Bank B were also analysed by means of the Leximancer sentiment lens function. Due to the limited sample of stakeholder comments that were surveyed, not many favourable and unfavourable terms were identified by Leximancer. Figures 6 and 7 respectively depict the negative (unfavourable) and positive (favourable) sentiment terms that were used by Bank B's stakeholders on Facebook and Twitter.

```
- <seeds>
    - <concept kind= "WORD,USER" value="_unfavterms">
        <term kind= "WORD" value= "hassle" positive="true"/>
        <term kind= "WORD" value= "problem" positive="true"/>
    </concept>
    - <concept kind= "WORD,USER" value="_favterms">
        <term kind= "WORD" value= "best" positive="true"/>
        <term kind= "WORD" value= "easiest" positive="true"/>
        <term kind= "WORD" value= "easy" positive="true"/>
        <term kind= "WORD" value= "helpful" positive="true"/>
        <term kind= "NAME" value= "great" positive="true" nameKind ="GENERAL"/>
```

Figure 6: Positive and negative sentiment terms used on Bank B's Facebook account

```
- <seeds>
    - <concept kind= "WORD,USER" value="_unfavterms">
        <term kind= "WORD" value= "bad" positive="true"/>
  </concept>
    - <concept kind= "WORD,USER" value="_favterms">
        <term kind= "WORD" value= "excellent" positive="true"/>
        <term kind= "WORD" value= "succeed" positive="true"/>
```

Figure 7: Positive and negative sentiment terms used on Bank B's Twitter account

Two similar trends were identified. Firstly, in both Bank A's and Bank B's analyses, both positive and negative sentiment terms were used by the financial institutions' stakeholders in reply to the CSR messages. The mixed sentiment was associated with services and products discourse themes. Secondly, the majority of responses by Bank B's stakeholders were also classified as '*off-topic*' – responses that were unrelated to the original CSR postings.

6.2 Findings from the Centim sentiment lens analyses

Although the Leximancer sentiment lens analyses provided descriptive and qualitative findings, the complex nature of the surveyed communication was not entirely reflected in the identified lists of favourable and unfavourable sentiment terms. Detailed analyses through Centim, however, resulted in visual and numeric outputs that extracted key insights from the surveyed data.

Figure 8 is a heat map of Bank A's stakeholder responses on Facebook and Twitter. The size of the blocks indicate the prominence of each theme based on the number of times certain sentiment-bearing words and/or phrase were used by stakeholders. The white blocks signify positive sentiment, black negative sentiment, and grey neutral sentiment themes.
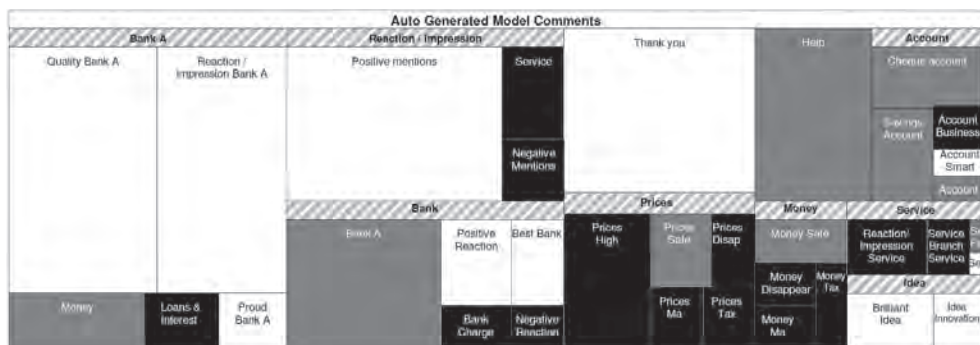

Figure 8: Centim heat map of Bank A's stakeholder responses (Facebook and Twitter)

Figure 9 provides a tabular overview of the 14 themes Centim identified in Bank A's stakeholder responses. It also indicates how many times a certain word (theme) was used by stakeholders and provides a corresponding sentiment score.

Category	Distinct Documents	% of Documents	Sentiment score
Type: Category (14 items)			
Bank A	705	28.96	0.24
Reaction/Impression	372	15.28	0.95
Bank	317	13.02	0.17
Thank you	249	10.32	0.64
Prices	229	9.41	-0.21
Help	165	6.78	0.05
Account	157	6.45	-0.29
Money	107	4.4	-0.37
Service	84	3.45	-0.47
Idea	76	3.12	0.90
Branch	64	2.63	-0.33
Bank B	39	1.60	0.14
Card	36	1.48	-0.51
Animal	35	1.44	0.32

Figure 9: Centim theme analysis of Bank A's stakeholder responses (Facebook and Twitter)

Three positive sentiment-bearing themes (overall reaction/impression of Bank A, the '*Ideas can help*' campaign, and '*Thank you*') were identified. The '*Ideas can help*' campaign was particularly well-received by stakeholders who noted that the featured innovations in the campaign were "brilliant". Two stakeholder response themes signified negative sentiment, namely Bank A's service and its products (card). Nine neutral sentiment-bearing themes were also identified. These themes were associated with responses that mentioned Bank A, transactional fees (prices), money, Bank A's branches, and animals ('*You can help*' campaign that featured animal shelters and other non-profit organisations that take care of neglected animals). One theme also pertained to Bank B that was discussed by Bank A's stakeholders. In this theme, stakeholders compared Bank A to Bank B 39 times. In general, the 39 mentions of Bank B did not impact negatively on Bank A's reputation.

The bar graph (Figure 10) illustrates which stakeholder themes were associated with positive, negative, and neutral sentiment-bearing verbatim content.
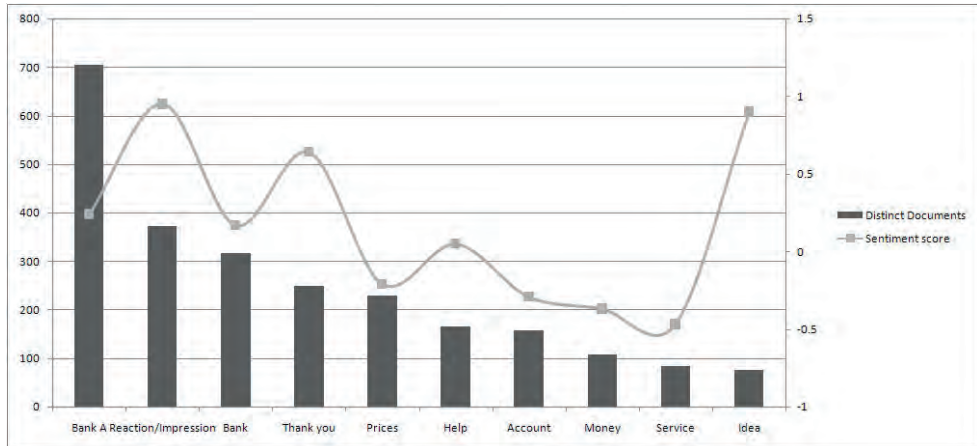
Figure 10: Themes and sentiment scores associated with
Bank A's stakeholder responses on Facebook and Twitter

The stakeholders' overall reaction or impression of Bank A had the highest positive sentiment score (0.9) and the second highest positive sentiment theme was 'Idea' (0.8) ('*Ideas can help*' campaign). Stakeholders also responded positively to the online help the SNS administrators provided them when stakeholders' questions and enquiries were answered ('*Thank you*' theme). However, responses pertaining to Bank A's prices (transactional charges), accounts, general enquiries about stakeholders' money, and service had negative sentiment scores.

Two additional heat maps (Figure 11 and 12) were generated by filtering the positive and negative statements made by Bank A's stakeholders on Facebook and Twitter. The heat maps are indicative of the positive and negative discourse themes present in Bank A's stakeholder responses. The positive responses predominantly consisted of stakeholders' appreciation of Bank A's products and services as well as the CSR initiatives Bank A was involved in. Stakeholders also expressed a feeling of pride in being a client of Bank A. The communicated CSR activities (see content blocks such as '*Brilliant Idea*' and '*Care Animal*') pertaining to the '*Ideas can help*' and '*You can help*' campaigns were also received positively. It is argued that the communicated CSR initiatives influenced stakeholders' opinions about Bank A in a positive manner.

Figure 11: Positive themes in Bank A's stakeholder responses on Facebook and Twitter

The negative responses depicted in Figure 12 mainly consist of stakeholders who expressed their dissatisfaction with the service they received from Bank A. The main areas of concern were related to stakeholders who were disgruntled about being denied home loans, transactional fees which were perceived to be too high, problems experienced with their accounts, and money 'disappearing' from their accounts. In some instances stakeholders also did not appreciate the CSR initiatives Bank A communicated as a result of the perceived poor service they received. Moreover, other stakeholders expressed sarcasm and noted that the communicated CSR initiatives were insincere.

**Figure 12: Negative themes in Bank A's stakeholder
responses on Facebook and Twitter**

To draw comparisons between Bank A's and Bank B's stakeholder responses, Centim analyses were conducted on Bank B's SNSs. Figure 13 depicts the main themes inherent in Bank B's stakeholder responses on Facebook and Twitter.
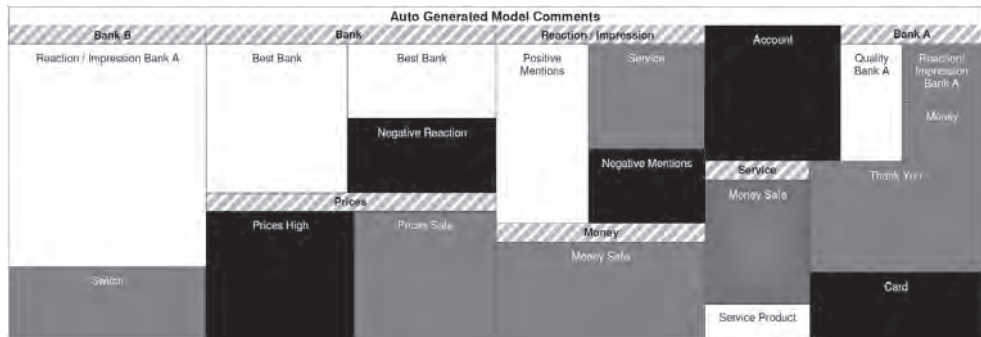
**Figure 13: Centim heat map of Bank B's
stakeholder responses (Facebook and Twitter)**

The majority of stakeholder responses were categorised as positive or neutral. The positive sentiment-bearing themes pertained to Bank B's products and service, as well as stakeholders who exhibited pride in being clients of Bank B. Neutral sentiment-bearing themes were associated with stakeholders' reactions or general impression of Bank B's service, switching accounts to the financial institution, and Bank B's prices. Negative mentions were linked to Bank B's transactional charges (prices), problems with cards, accounts, and Bank B not assisting or 'helping' stakeholders who expressed problems or concerns on Bank B's SNSs.

Figure 14 provides an overview of the themes identified in Bank B's stakeholder responses along with corresponding sentiment scores. Neutral sentiment-bearing themes included words such as "money", "switch", and the name of the bank "Bank B". Stakeholders' general impression of the financial institution's service was also measured as neutral. In six stakeholder responses Bank B was compared to Bank A. The comparisons reflected negatively on Bank B, since stakeholders' sentiment about Bank A was positive. This would, thus, point to negative sentiment toward Bank B.

Category	Distinct Documents	% of Documents	Sentiment score
Type: Category (14 items)			
Bank B	20	25.97	0.27
Bank	15	19.48	0.06
Prices	14	18.18	-0.68
Reaction/Impression	13	16.88	0.82
Money	8	10.39	-0.56
Account	6	7.79	-0.89
Bank B	6	7.79	0.43
Service	6	7.79	-0.17
Thank you	6	7.79	0.33
Card	4	5.19	-0.5
Help	3	3.90	-1.67
Branch	2	2.60	-0.75
Animal	0	0.00	0
Idea	0	0.00	0

**Figure 14: Centim theme analysis of Bank B's
stakeholder responses (Facebook and Twitter)**

The bar graph (Figure 15) illustrates which stakeholder themes were associated with positive, negative, and neutral sentiment-bearing verbatim content. The overall stakeholder sentiment measured on Bank B's two SNS accounts was similar to the graphs that depict Bank A's stakeholder responses. Again, the overall reaction or impression of the financial institution had the highest positive sentiment score (0.8) and the second highest positive sentiment theme was 'Bank A' (0.4). However, in this context, the positive sentiment score assigned to Bank A reflects negatively on Bank B, since its stakeholders signalled positive sentiment towards a competitor.
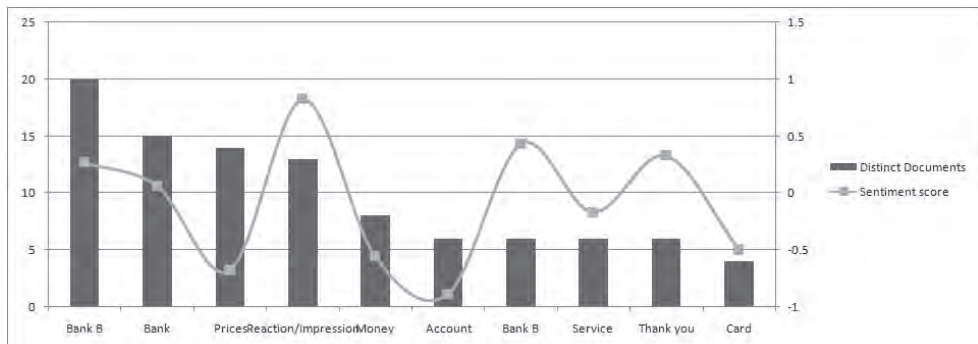

**Figure 15: Themes and sentiment scores associated with
Bank B's stakeholder responses on Facebook and Twitter**

The theme 'Thank you' (0.3) shows that Bank B's stakeholders did, however, respond slightly more positively to the online help received from Bank B's SNS administrators who answered questions or responded to enquiries. In line with the sentiment measured in Bank A's stakeholder responses, negative sentiment was ascribed to Bank B's service (-0.2), stakeholders who experienced problems with their bank cards (-0.5), stakeholders who experienced problems with deductions or 'money disappearing' from their accounts (-0.6), high prices or transactional charges (-0.7), and issues with accounts (-0.9).

Due to the limited number of CSR messages communicated by Bank B through its SNSs, heat maps of positive and negative statements to show the prominence of certain positive and/or negative discourse themes on the surveyed SNSs could not be generated. However, comparative analyses were conducted to measure the overall stakeholder sentiment of each financial institution on Facebook and Twitter.

In Figure 16 the overall stakeholder sentiment scores measured on the two SNSs are depicted in tabular form. These scores are also depicted in Figure 17, where Bank A's and Bank B's stakeholder responses were measured.

Bank	Distinct Documents	% of Documents	% of Attribute	Sentiment score
Bank A Facebook	2301	91.64	100	0.32
Bank A Online persona	95	3.78	100	0.07
Bank B Facebook	53	2.11	100	-0.03
Bank A Twitter	38	1.51	100	0.29
Bank B Twitter	24	0.96	100	0.20

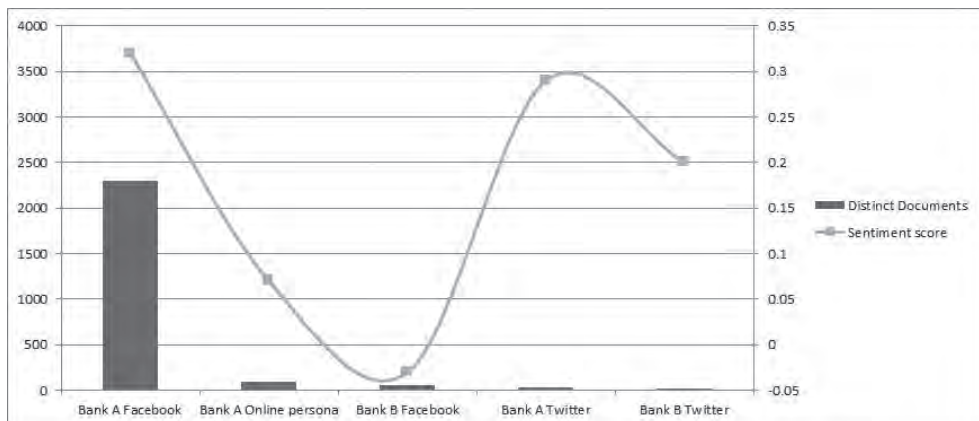**Figure 16: Overall sentiment scores per surveyed SNS**

**Figure 17: Comparison of Bank A's and Bank B's
stakeholder responses on Facebook and Twitter**

7.   DISCUSSION

7.1 Leximancer sentiment lens analyses

The sentiment lens analyses show that Bank A's stakeholders used a considerable number of negative (unfavourable) terms in their responses to the financial institution's CSR messages on SNSs. This was attributed to the '*off-topic*' replies given by stakeholders when they commented on the original CSR messages posted by Bank A. However, when considered holistically, Bank A's stakeholders responded positively to Bank A's CSR communication.

Bank B's stakeholders also responded positively to the financial institution's CSR messages based on the Leximancer sentiment lens findings. However, a manual interpretation of Bank B's stakeholder responses indicated that additional unfavourable sentiment-bearing words were used by stakeholders that were not identified by Leximancer in the surveyed texts. In addition, the Leximancer analysis did not discern between positive and negative sentiment within complete verbatim sentences used by stakeholders. In the following example, the term "excellent" was identified as favourable, but the rest of the stakeholder's tweet – that points to negative sentiment – was not coded:

> "@Bank B You have excellent products for clients, however the service of your consultants, sometimes makes me want to leave Bank B."

Insight was gained into the occurrence of favourable and unfavourable terms used by Bank A's and Bank B's stakeholders by means of the Leximancer sentiment lens function. The identification of positive and negative sentiment-bearing terms used by stakeholders on the two financial institutions' SNSs enabled the researchers to ascribe general sentiment to certain themes and stakeholder discourse; however, the findings were not deemed accurate in all instances. Detailed and accurate findings about stakeholder sentiment were, however, derived from the Centim analyses.

7.2 Centim sentiment lens analyses

The heat map (Figure 8) correlates with the Leximancer finding that the majority of Bank A's stakeholders responded positively to the original CSR messages communicated by Bank A through its SNSs. The negative mentions related to Bank A's interest rates, service, loans, transactional charges (prices), and business accounts. Neutral sentiment-bearing themes were associated with Bank A's cheque and savings accounts and also included responses that contained the words "money" and the financial institution's name (Bank A). The tabular overview (Figure 9) indicates that there is more positive sentiment in Bank A's stakeholder responses than negative sentiment. However, neutral sentiment was detected in themes unrelated to Bank A's CSR communication.

There are three similarities in Bank A's and Bank B's stakeholder responses: Both financial institutions' stakeholders perceived that their institution was "the best"; they believed that their

transactional charges were too high; and client satisfaction levels pertaining to service were split between positive and negative sentiment.

As a result of Bank A's large number of original CSR messages on Facebook and Twitter, there were more stakeholder responses to these messages when compared to Bank B's stakeholder responses. Since Bank B did not communicate its CSR activities as broadly as Bank A, there was limited stakeholder verbatim content to interpret. Based on the data, it is concluded that Bank B's stakeholders are less inclined to comment on its CSR activities. However, due to the limited number of CSR messages communicated by Bank B, an overall impression of its stakeholders' responses and its stakeholder sentiment should be interpreted with caution. In addition, no concrete Centim findings pertaining to whether stakeholders interpreted Bank B's CSR communication positively, negatively or neutrally could be established as a result of the parsimonious application of CSR communication on Bank B's SNSs.

Drawing on the findings presented in Figures 16 and 17, it is deduced that the overall sentiment on Bank A's Facebook and two Twitter accounts was neutral to slightly positive. Sentiment measured on Bank B's Twitter account was also neutral, whereas the responses on Bank B's Facebook account indicated negative sentiment.

The Leximancer sentiment lens analyses provided a basic understanding of the favourable and unfavourable words used by stakeholders in their responses to Bank A's and Bank B's CSR communication. The Centim analyses, conversely, illustrated that unstructured textual data sourced from SNSs could be converted into heat maps and bar graphs that accurately indicate which communicative messages were positively, negatively or neutrally received by the financial institutions' stakeholders.

By employing the new proposed framework for reputation management on historical data from Bank A's and Bank B's CSR communication, the researchers were able to sample qualitative data available on a number of SNSs and apply semantic clustering through automatic text analytics (Leximancer and Centim) to identify dominant themes along with the meaning of SNS users' interactions with the two financial institutions. Semantic clustering (Step 1 of the framework) was used to sift through the 'noise' and conversation that took place on the surveyed SNSs. In theory, reputation managers can steer the conversation in the 'right' direction after they have assessed the sentiment the communicative products have elicited (Step 2 and 3 of the framework). Should reputation managers formulate and disseminate additional CSR communications to stakeholders through SNSs (Step 4 of the framework) as a means of steering (co-managing) the conversation, interactive and collaborative dialogue could be created which could, in turn, result in building a stronger reputation for the organisation.

7.3 Future research directions and implications for practitioners

The reputation management discipline presently focuses on six dimensions of reputation – vision and leadership, products and services, social responsibility, emotional appeal, workplace

environment, and financial performance – along with the creation of communicative products that signal these dimensions to stakeholders (Fombrun & Gardberg, 2000). While it is accurate to argue that these dimensions are used by stakeholders in their evaluation of organisations, methods to glean critical insights into stakeholder sentiment, perceptions, and discourses on SNSs are lacking from the discipline. The proposed conceptual framework with special emphasis on measuring stakeholder sentiment by means of CAQDAS programs, offers organisations the means to timeously and accurately monitor as well as assess stakeholder sentiment on SNSs. This is congruent with the view of Van Riel (2012), who argues that stakeholder expectations of organisations should be investigated, interpreted, and managed in order to create optimal alignment and stakeholder support.

Moreover, this research explored the concept of stakeholder sentiment as measured on SNSs. It is proposed that the reputation management discipline's body of knowledge can be furthered through: (1) continued research on the development of stakeholder sentiment; (2) the refinement of methods and CAQDAS programs to measure stakeholder sentiment; and (3) the development of communication approaches that increase stakeholder sentiment.

Lastly, communication practitioners could utilise CAQDAS programs to assess the discourses present in internal organisational communication. The measurement of internal stakeholder sentiment and the prevalent discourses used by staff could assist practitioners in identifying reputation risks (threats in the form of negative stakeholder sentiment) and reputation opportunities (neutral and positive stakeholder sentiment). It could also aid in addressing low staff morale and developing suitable control measures for detected negative discourses.

8.   CONCLUSION

The researchers proposed that the reputation management discipline currently focuses on the content of corporate communication and how the content should be managed on SNSs. However, when SNSs are re-theorised as platforms where stakeholder responses can be assessed and managed, it provides a new avenue for reputation management. The uniqueness of integrating CAQDAS programs in the reputation management process – as proposed by the new framework for reputation management – lies in these programs' ability to automatically code vast amounts of unstructured verbatim data in real time from any SNS. This means that organisations can gather critical stakeholder insights without large expenditure or the input of human resources. CAQDAS programs also enable organisations to co-construct content with stakeholders and to identify reputational risks timeously, which could enable organisations to formulate reparative communication to react to any threats to their reputation.

As applied in this research, the proposed new framework for reputation management aimed to illustrate the strategic function of incorporating semantic clustering of corporate communication on SNSs into the reputation management discipline. It showed that this framework could enable organisations to 'capture' their own stakeholders' perceptions of and interactions with communicative products. In addition, CAQDAS could be used to investigate which messages

competitors are communicating to stakeholders, and their responses and/or interactions. Trends, discussion topics, and dominant themes could be identified in a short timeframe that would enable organisations to react quickly, should negative sentiment (threats) be detected among stakeholders. The new framework, thus, followed Van Riel's (2012) recommendation that stakeholder expectations should be investigated, interpreted and managed to achieve optimal stakeholder-reputational alignment. Consequently, the proposed framework aimed to not only contribute to the academic body of work relating to reputation management, but also aimed to provide reputation managers and other communication professionals who manage corporate reputations on SNSs with a basic framework to guide their actions, co-create messages, and manage stakeholder sentiment. This could, in theory, facilitate alignment and total stakeholder support (Van Riel, 2012).

ACKNOWLEDGMENTS

ENDNOTES

1. The researcher danah boyd wishes to write her name and surname in lower case. Capitalisation will not be used when referring to this author.
2. The original heat maps produced by Centim have green blocks (positive sentiment), red blocks (negative sentiment), and grey blocks (neutral sentiment).

REFERENCES

Adelstein, J. (2008). *Discourse, dogma, and domination: knowledge work as art and politics*. Unpublished doctoral thesis, Ultimo: University of Technology, Sydney, Australia. Retrieved April 15, 2014, from https://opus.lib.uts.edu.au/handle/10453/20046

Adler, P.S. & Kwon, S.W. (2002). Social capital: prospects for a new concept. *Academy of Management Review*, *27*(1):17-40.

Assiouras, I., Ozgen, O. & Skourtis, G. (2013). The impact of corporate social responsibility in food industry in product-harm crises. *British Food Journal, 115*(1):108-123.

Babbie, E. & Mouton, J. (2001). *The practice of social research*. Cape Town: Oxford University Press South Africa.

Balmer, J.M.T. & Greyser, S.A. (2006). Integrating corporate identity, corporate branding, corporate communications, corporate image and corporate reputation. *European Journal of Marketing, 40*(7/8):730-741.

Boulstridge, E. & Carrigan, M. (2000). Do consumers really care about corporate responsibility? Highlighting the attitude-behaviour gap. *Journal of Communication Management, 4*(4):355-368.

boyd, d.m. & Ellison, N.B. (2007). Social network sites: definition, history and scholarship. *Journal of Computer-Mediated Communication, 13*:210-230.

Brønn, P.C. & Vrioni, A.B. (2001). Corporate social responsibility and cause-related marketing: an overview. *International Journal of Advertising, 20*:207-222.

Brown, J., Broderick, A.J. & Lee, N. (2007). Word of mouth communication within online communities: conceptualising the online social network. *Journal of Interactive Marketing, 21*(3):1-19.

Burns, R.B. (2000). *Introduction to research methods* (4th ed.). London: SAGE.

Chesbrough, H. (2006). *Open business models: how to thrive in the new innovation landscape*. Boston: Harvard Business School Press.

Cho, S. & Huh, J. (2010). Content analysis of corporate blogs as a relationship management tool. *Corporate Communications: An International Journal, 15*(1):30-48.

Cone, E. (2007). *Social networks at work promise bottom-line results*. Retrieved November 1, 2012, from http://www.cioinsight.com/c/a/Trends/Social-Networks-at-Work-PromisebrBottomLine-Results

Consulta. (2014). *Sentiment and text analytics*. s.l.: s.n.

Coombs, T. & Holladay, S. (2015). CSR as crisis risk: expanding how we conceptualise the relationship. *Corporate Communications: An International Journal, 20*(2):144-162.

Coombs, W.T. (2007). Protecting organisation reputations during a crisis: the development and application of situational crisis communication theory. *Corporate Reputation Review, 10*(3):163-176.

Crofts, K. & Bisman, J. (2010). Interrogating accountability: an illustration of the use of Leximancer software for qualitative data analysis. *Qualitative Research in Accounting & Management, 7*(2):180-207.

Derwall, J. (2007). *The economic virtues of SRI and CSR*. Unpublished doctoral thesis, Rotterdam: Erasmus Universiteit Rotterdam, The Netherlands. Retrieved March 6, 2014, from http://hdl.handle.net/1765/8986

Doorley, J. & Garcia, H.F. (2011). *Reputation management: the key to successful public relations and corporate communication* (2nd ed.). New York: Routledge.

Duncan, R.D. (2012). *The role of online social networks in inter-firm collaborative innovation and problem solving*. Unpublished doctoral thesis, Pretoria: University of South Africa, South Africa.

Engelbrecht, M. (2012). *The art of shapeshifting: facilitating strategic foresight to independent non-executive directors – a strategic approach to corporate governance in SA*. Unpublished doctoral thesis, Stellenbosch: Stellenbosch University, South Africa.

Floreddu, P., Cabiddu, F. & Evaristo, R. (2014). Inside your social media ring: How to optimise online corporate reputation. *Business Horizons, 57*(6):737-745.

Fombrun, C.J. & Gardberg, N. (2000). Who's tops in corporate reputation? *Corporate Reputation Review, 3*(1):13-17.

Fombrun, C.J. & Rindova, V.P. (1998). Reputation management in global 1000 firms: a benchmarking study. *Corporate Reputation Review, 1*(3):205-212.

Fombrun, C.J. & Shanley, M. (1990). What's in a name? Reputation building and corporate strategy. *The Academy of Management Journal, 33*(2):233-258.

Fombrun, C.J. & Van Riel, C.B.M. (1997). The reputational landscape. *Corporate Reputation Review, 1*(1):5-13.

Gillan, S.L. & Starks, L.T. (2003). Corporate governance, corporate ownership and the role of institutional investors: a global perspective. *Journal of Applied Finance, 13*(2):4-22.

Hamann, R. & Kapelus, P. (2004). Corporate social responsibility in mining in southern Africa: fair accountability or just greenwash? *Development, 47*(3):85-92.

Hart, L. (2011). Social media. In J. Doorley & H.F. Garcia (Eds.), *Reputation management: the key to successful public relations and corporate communication* (2nd ed.). New York: Routledge.

Hoffmann, C.P. & Lutz, C. (2015). The impact of online media on stakeholder engagement and the governance of corporations. *Journal of Public Affairs, 15*(2):163-174.

Holstein, J.A. & Gubrium, J.F. (2003). *Inside interviewing*. Thousand Oaks, California: SAGE.

Ind, N. & Riondino, M. (2001). Branding on the web: a real revolution? *Journal of Brand Management, 5*(1):8-19.

Kivunja, C. (2013). Qualitative data mining and knowledge discovery using Leximancer digital software. *Lecture Notes on Information Theory, 1*(1):53-55.

Leximancer. (2011). *Leximancer manual version 4*. Retrieved January 15, 2014, from: https://webcache.googleusercontent.com/search?q=cache:5C839s5ldfMJ:https://www.leximancer.com/site-media/lm/science/Leximancer_Manual_Version_4_0.pdf+&cd=1&hl=en&ct=clnk&gl=za

Lyon, D. (2006). 9/11, synopticon, and scopophilia: watching and being watched. In K. Haggerty & R. Ericson (Eds.), *The new politics of surveillance and visibility*. Toronto: University of Toronto Press.

Morsing, M. & Schultz, M. (2006). Corporate social responsibility communication: stakeholder information, response and involvement strategies. *Business Ethics: A European Review, 15*(4):323-338.

North, E. & Enslin, C. (2004). Building brands through alternative brand contact communications. *Communicatio, 30*(1):151-165.

Penn-Edwards, S. (2010). Computer aided phenomenography: the role of Leximancer computer software in phenomenographic investigation. *The Qualitative Report, 15*(2):252-267.

Porter, M.E., Lorsch, J.W. & Nohria, N. (2004). Seven surprises for new CEOs. *Harvard Business Review, 82*(10):62-72.

Qualman, E. (2013). *Socialnomics: how social media transforms the way we live and do business*. Hoboken, New Jersey: Wiley.

Rindova, V.P. & Fombrun, C.J. (1999). Constructing competitive advantage: the role of firm-constituent interactions. *Strategic Management Journal, 20*(8):691-710.

Rindova, V.P., Petkova, A.P. & Kotha, S. (2007). Standing out: how new firms in emerging markets build reputation. *Strategic Organisation, 5*(1):31-70.

Saldaña, J. (2009). *The coding manual for qualitative researchers*. London: SAGE.

Smith, A.E. (2003, May/June). *Automatic extraction of semantic networks from texts using Leximancer*. Paper presented at the Human Language Technology Conference of the North American Chapter of the Association for Computational Linguistics, Edmonton, Canada. Retrieved April 15, 2014, from http://dl.acm.org/citation.cfm?id=1073439&picked=formats&CFID=771876585&CFTOKEN=57597460

Smith, A.E. & Humphreys, M.S. (2006). Evaluation of unsupervised semantic mapping of natural language with Leximancer concept mapping. *Behavior Research Methods, 38*(2):262-27.

Snowden, D. (2005). From atomism to networks in social systems. *The Learning Organisation, 12*(6):2-11.

Tokar, B. (1997). *Earth for sale: reclaiming ecology in the age of corporate greenwash*. Boston, Massachusetts: South End Press. Retrieved March 10, 2014, from http://www.social-ecology.org/wp/wp-content/uploads/2009/12/brian3.Earth_for_Sale-Trading_Earth.pdf

Typaldos, C. (2000). *The 12 principles of collaboration*. Retrieved October 28, 2012, from http://www.digitalplaces.biz/pages/12Principles-Collaboration.pdf

Van Riel, C.B.M. (1997). Research in corporate communication: an overview of an emerging field. *Management Communication Quarterly, 11*(2):288-309.

Van Riel, C.B.M. (2012). *The alignment factor: leveraging the power of total stakeholder support*. Retrieved September 28, 2014, from http://webcache.googleusercontent.com/search?q=cache:btWSR0xHITEJ:www.bi.edu/cccFiles/seminarer/RI_Magazine_main%2520article.pdf+&cd=1&hl=en&ct=clnk&gl=za

Van Riel, C.B.M. (2013). Corporate reputation and the discipline of public opinion. In C.E. Carroll (Ed.), *The handbook of communication and corporate reputation*. Malden, MA: Wiley-Blackwell.

Vasalou, A., Hopfensitz, A. & Pitt, J.V. (2008). In praise of forgiveness: ways for repairing trust breakdowns in one-off online interactions. *International Journal of Human-Computer Studies, 66*:466-480.

Williams, C.A. & Aguilera, R.V. (2008). *Corporate social responsibility in a comparative perspective*. Retrieved October 10, 2012, from http://webcache.googleusercontent.com/search?q=cache:S7vDdr-S38IJ:www.business.illinois.edu/aguilera/pdf/Williams%2520Aguilera%2520OUPfinal%2520dec%25202006.pdf+&cd=1&hl=en&ct=clnk&gl=za

Woodside, A.G. (2010). Brand-consumer storytelling theory and research: introduction to a *Psychology & Marketing* special issue. *Psychology & Marketing, 27*(6):531-540.