Organization Values Statements: A Natural Language Taxonomy

Traditionally, the construct of communication has been defined as a two-way exchange of information. Dulek and Campbell (2015) and Thomas and Stephens (2015) define strategic communication as organizational communication directed at stakeholders for the purpose of some initiator intention. This redefinition of communication for the organization has as its focus the molding of an organizational image in the recipients' minds, a form of organizational impression management (Mohamed, Gardner, & Paollillo, 1999). This form of strategic organizational communication is a general category for institutional messages such as shareholder letters, codes of conduct, and mission statements (Henderson, Cheney, & Weaver, 2015).

A part of strategic communication is a values statement. Jaakson (2010) states "a values statement is a specific set of publicly stated organizational beliefs or concepts" (p. 42). Values statements are designed primarily for internal use (Kaptein, 2004) to guide management decisions, set accountability boundaries, and set clear expectations (Urbany, 2005; Anderson & Jamison, 2015). These statements also serve to help visualize differences in informal values that compete or conflict (Anderson & Jamison, 2015). To a lesser extent values statements influence those in the external environment by serving as an impression management tool for the organization (Urbany, 2005). There is some disagreement whether these statements have an effect upon the organization itself (Jaakson, 2010).

There has very little research performed upon organizational values statements. As such, this paper fills part of that gap by discovering a taxonomy for these values statements. In addition this paper creates the taxonomy in a unique way by using natural language found in the values statements. The traditional method of creating taxonomies starts with using classes

defined by the researcher before data collection has taken place. The natural language approach using text analytics reduces the possibility and perceptibility of researcher bias.

Literature Review

Values Statement Research

Little research has been done on values statements themselves. Kaptein (2004) examined many multinational firms and found that only 49% had core values codified into a statement. This study also showed that Asian and European companies are more likely to have values statements than American companies.

Urbany (2005) surveyed 71 individuals regarding their organization's values statement. While many of the respondents gave positive feedback about the values statement, there was also some negative feedback. The positive remarks included providing decision guidelines, accountability, and clear expectations while the negative remarks focused on cynicism and management hypocrisy. The study also showed that the respondents believed negative viewpoints had negative consequences for decision making in the firm. The major finding was that the two roles of values statements, substantive and symbolic, are dependent upon one another. Unless both roles are present, the values statement may be problematic in the future.

Jaakson (2010) created a model for obtaining input from stakeholders when designing values statements. The underlying assumption is when more stakeholders have input, the more likely they are to have ownership and to honor the statement. This study also divides the individual values into a two class taxonomy. The first type of value is terminal where the value is a desired end. An example of this is "all stakeholders will feel respected", a goal and something to be accomplished. However, a value of "employees will show respect to all stakeholders" is instrumental, a way of accomplishing the end.

Anderson and Jamison (2015) analyzed the values statements of the one hundred largest U.S. corporations. The goal was to determine the most used significant words in values statements. The results gave twelve words commonly used. In order from highest usage to lowest are integrity, respect, teamwork. innovation, quality, performance, excellence, trust, diversity, leadership, relationships, and responsibility.

Taxonomy Research

Taxonomies were originally used in the life sciences for grouping organisms (Duarte & Sarkar, 2011). However, the concept quickly extended into other fields including management. Among all the management definitions for taxonomy, the common theme is to make the complex simple. Taxonomies are groups by which elements of a larger set are classified based common attributes of the elements (Andersen, 2010; Autry, Zacharia, & Lamb, 2008; Duarte & Sarkar, 2011; Rich, 1992). Taxonomies have helped management theory by aiding in construct measurement (Marks, Mathieu, & Zaccaro, 2001) and by aiding in developing comprehensive theory (Bunn, 1993; Rich, 1992).

Business researchers have developed taxonomies in organizational behavior fields such as organizational knowledge (Chua, 2002; Dinur, 2011; Huang, Luther, & Tayles, 2007; Ramirez & Nembhard, 2004), organizational justice (Greenberg, 1987), leadership behavior (Mangi, Abidi, Soomro, Ghumro, & Jalbani, 2011), team processes (Marks et al., 2001), and employee turnover (Bluedorn, 1978; Dalton, Tudor, & Krackhardt, 1982). Strategy also has seen taxonomies created in areas such as strategic groups (McGee & Howard, 1986), business-level strategies (Morrison & Roth, 1992), organizational impression management (Mohamed et al., 1999), and innovation strategies (Duarte & Sarkar, 2011). Certain groups of organizations have been classified in studies (Andersen, 2010; Knight & Cavusgil, 2005).

Arguably, marketing is the subject that has utilized taxonomies the most. The classifications developed have included customer buying decision processes (Bunn, 1993), strategies for organizational marketing (Hawes & Crittenden, 1984; El-Ansary, 2006), segmentation (Lessig & Tollefson, 1971), and advertising (Laskey, Day, & Crask, 1989; Lamb, Pride, & Pletcher, 1978).

Method

The goal in this research was to determine a taxonomy of values statements. Duarte and Sarkar (2011) state, "When attempting to build taxonomies, one creates a special kind of classification that compares similarities between the objects of study, using systematics to make groups, based on the observed relatedness, and finally order them" (p. 442). This quote typifies the traditional method of building taxonomies: create a classification based on theory, define measurable characteristics for the classes, and finally use quantitative methods to place the subjects in the classes. However, one of the issues challenging this process is the classifications are chosen prior to data collection. This implies that the pre-tested groupings may not have any evidence of usefulness (Duarte & Sarkar, 2011) and may, in fact, be disjoint from theory and do not reflect reality (Kuo-Chung & Li-Fang, 2004). Part of the reason for these issues may be due to researcher error or bias in interpreting the literature. In any event, the researcher and the classes created may share a dependency.

In contrast to the traditional method, McGee and Howard (1986), in developing a taxonomy for strategic groups, state the natural way to assign members of a set to groups should be based on the characteristics of the elements themselves. Similarly, Autry et al (2008) define taxonomy creation as an inductive process whereby data patterns are discovered by examining a set of variables that form internally related groups. Thus, if researcher error and bias can be

eliminated from the study so the classes are created solely upon the merit of the data, a purer taxonomy will develop. Chosen for this study was text analytics because it "helps analysts extract meanings, patterns, and structure hidden in unstructured textual data" (Chakraborty, Pagolu, & Garla, 2013, p. 1), eliminating any potential researcher error and bias in classes creation.

Sample Creation

In order to get the values statements for many organizations, a web crawler was used to retrieve these statements from the Internet. A web crawler is a special Internet based program that retrieves and saves webpage textual information (Chakraborty et al., 2013). For the web crawler to work there had to be a beginning web page with links to organizational values statements. This was best accomplished by using a search engine that provided all links on a single page. This one page was then saved and the html information was edited to eliminate any undesirable information such as advertising and irrelevant links. The edited web page was then uploaded to this author's website. This provided 85 links to organizational values statements. Some of the organizations included in the sample are Bayer, IBM, Northrup Grumman, The Smithsonian Institution, and Whole Foods.

Information Extraction

The revised webpage became a seed page for the web crawler program. Beginning with this seed page, the web crawler followed the links on the page and retrieved the information from those links, in this case values statements. Upon the running of the web crawler, all the values statements for the organizations given by the search engine resided upon this author's computer.

Text parsing was the next step in analyzing the values statements. The goal in parsing is to take apart all the values statements word by word so the various statements could be compared

and contrasted. In performing this action, sentences must be identified and parts of speech determined (Chakraborty et al., 2013, p. 5).

Text filtering followed to separate terms by syntax to create an identifying terms list.

This is a list of terms whereby documents are distinguishable from each other. For example, a word that appears in every document does not distinguish anything. Similarly, a term that unique to one document does not tell anything about the structure of the group.

Filtering allows the user to add or remove terms from the analysis. Because of the number of values statements gathered, the number of terms automatically generated was quite extensive. The list is generated be default from all terms occurring in at least four documents. This was changed to twenty documents to reduce the complexity of the analysis. The analysis was run both ways and the results were not significantly different.

The user during the filtering stage can also decide to include or exclude parts of speech.

By default articles and conjunctions are eliminated. Values statements focus upon performing an action on something, this author chose to run the analysis with only verbs and nouns. Again, the analysis was run both ways and resulted in no appreciable difference between the two outcomes.

The final stage was to form groups based on the words that identified the values statements. The analysis provided key terms that described the groups that were obtained.

Results

This section examines the results of the previously employed method. The method created a natural language taxonomy for values statements. This taxonomy consists of three classes.

The first classification accounted for about 17% of the documents analyzed. The key words that emerged from the analysis were "governance", "report", "investor", "history", and

"shareholder" in decreasing order of significance. Snippets of text where these occur revealed the organizations utilizing this type of values statement are concerned with protecting those investing in the organization by way of creating proper governance and utilizing appropriate reporting requirements. This paper will refer to these values statements as the Protectors.

The second class that emerged from the analysis consisted of about 24% of the values statements. The key words emerging for this classification were "member", "standard", "responsibility", "statement", "commitment" in decreasing order of significance. A reading of the text snippets where these are used showed organizations that wanted a culture of team membership while maintaining accountability for those members. For this discussion, this group will be known as the Internalizers.

The final group accounted for 59% of the values statements examined. In order of significance, the key words emerging from this cluster were "grow", "customer", "build", "term", "search", and "culture". Examination of text where these terms appear showed values statements centered on business growth through customer care. Finally, this group will be known in this paper as the Growers.

Discussion

Analysis

This study has contributed theory in several ways. First, there has been a paucity of research regarding values statements. Second, until now there has not been a taxonomy of values statement types. Finally, this paper has used the qualitative analysis tool of text analysis, the use of which has been very limited in research.

The three classes of the taxonomy are Protectors, Internalizers, and Growers. The Protectors are values statements that focus upon governance and reporting requirements in order

to protect investors. The Internalizers are statements created to define a team culture in the organization while also emphasizing accountability. Finally, the Growers are statements that concentrate on customers and growing the organization.

The findings here are in agreement with existing theory. Anderson and Jamison's (2015) work found the top words in values statements for the 100 largest companies. These words included integrity, respect, teamwork, innovation, quality, performance, excellence, trust, diversity, leadership, relationships, and responsibility. Many words in this list are the key words for the classifications found above. The words that are not key words are closely associated with words that are in the key word lists. Also, Urbany (2005) stated that value statements increase accountability. The study presented here agrees by discovering an entire class, the Internalizers, that focuses upon accountability and responsibility.

Application

The following paragraphs describe the process for classifying a values statement into one of the classes. This process bridges the gap between theory and practice.

The original analysis used natural language to discover the classes that exist. Hence, it would be logical to have a process for classifying new values statements that relies upon the words in the statements. The key to using this process is to identify whether certain key words exist in the statement or not. There are other ways of developing a process than the one below. However, the process below is sufficient to classify and yet it simplistic enough to be understandable. Also, a word and its plural are considered the same word for this process. For example "wall" and "walls" carry the same weight and meaning. Only the singular word is used in the process even though the plural form would work just as well. Finally, once a statement is

classified, the remainder of the steps do not need to be performed; however, the steps must be performed in order.

- 1. If the term "shareholder" is present and the word "value" is not present of if the word "governance" is present and the word "value" is not present, then the values statement is to be classified as a Protector.
- 2. If the term "standard" is present and the word "customer" is not present or if the word "responsibility" is present and the word "search" is not, then the statement is to be classified as a Internalizer.
- 3. If the word "help" (or any form of the verb) is present in the statement, then the statement is to be classified as a Grower.

There are a couple of things to note about this process. First, there are three steps to classify three types of statements. Generally, when classification is done, there would be two steps and then whatever is left would become part of the last group. However, this procedure allows for the possibility of a values statement that is a new type. Thus, the three groups are classified and any statement not falling into one of the groups must be of an undiscovered type.

Second, the words used in this process may not be the same as the words mentioned in the analysis section. There is a two-fold reason for this. One reason is the analysis section only gives the first few key words to help describe the class rather than the fifteen to twenty words that actually come from the analysis. The other reason is that because the procedure must be performed in a specified order, certain words are excluded from a later step because they were used in previous steps. This leaves the discrimination of the groups up to other significant words that were not obvious at first.

The following is a values statement for the Mayo Clinic.

These values, which guide Mayo Clinic's mission to this day, are an expression of the vision and intent of our founders, the original Mayo physicians and the Sisters of Saint Francis.

Respect

Treat everyone in our diverse community, including patients, their families and colleagues, with dignity.

Compassion

Provide the best care, treating patients and family members with sensitivity and empathy.

Integrity

Adhere to the highest standards of professionalism, ethics and personal responsibility, worthy of the trust our patients place in us.

Healing

Inspire hope and nurture the well-being of the whole person, respecting physical, emotional and spiritual needs.

Teamwork

Value the contributions of all, blending the skills of individual staff members in unsurpassed collaboration.

Excellence

Deliver the best outcomes and highest quality service through the dedicated effort of every team member.

Innovation

Infuse and energize the organization, enhancing the lives of those we serve, through the creative ideas and unique talents of each employee.

Stewardship

Sustain and reinvest in our mission and extended communities by wisely managing our human, natural and material resources (Mayo Clinic, 2015).

To execute step one, a search is first done for the word "shareholder". A simple search using a word processor will show the word is not present in the statement. So to finish step one, a search for the word "governance" was made which resulted in nothing as well. Step two is then performed. Searching in the same manner, one will find the word "standard" is not present in the statement. But the second part of step two states to look for "responsibility" and that word is present in the statement. Consequently, that result then requires an examination for the word "search" and it was found that word is not in the statement. Thus, the qualifications of step two are met, so the statement is classified as an Internalizer.

Limitations

There may be limitations to this research. One area of concern is the sample size and its construction. While 85 values statements might be enough for evaluating for-profit organizations or just non-profit organizations individually, this number may not be enough for a joint analysis. In other taxonomy research Kuo-Chung and Li-Fang (2004) examined 1200 firms in Taiwan to develop a logistics taxonomy and Ishida and Brown (2013) created a taxonomy of franchise agreements based on data from 162 firms.

As mentioned, the sample comprised both for-profit and non-profit firms. It is very possible that if the two types of firms were examined individually and separately, there might be a different taxonomy for each. For example, the first class, the Protectors, would not exist for non-profit organizations since there are no investors. Nevertheless, the taxonomy presented in this paper still has the potential of providing a good lens for values statements as a whole.

Another limitation of this study could be the sample itself was not created randomly but provided by an Internet search engine. Search engines often provide information based on what the calculated relevance is rather than what the user is actually trying to find. As a result, the sample used here may have a particular bias that produced a different taxonomy than what is reality. However, it cannot be ignored that the findings from this study do agree with existing theory.

Directions for Future Research

Since values statements have not been studied extensively, there is much that can be researched. One area of research is the relationship between the types of values statements and whether firms actually honor those statements. This type of study could answer the question of which firms are more apt to follow their values statements.

Studies have shown there is a relationship between a firm's values statement and its decision-making and impression management (Kaptein, 2004; Anderson & Jamison, 2015; Urbany, 2005). Thus, another area of research could be whether there is a link between the type of values statement and organizational performance for organizations that follow the values enumerated.

Finally, since values are related to organizational culture, it could be examine whether there is a relationship between the type or values statement and the type of organizational culture. Additionally, one could research the conditions under which culture influences the creation of a particular type of statement or the conditions under which the creation of a values statement influences the molding of a type of culture.

Summary

The purpose of this paper has been to develop a taxonomy of values statements based upon natural language rather than theory driven predetermined classes. The first section presented a literature review that described research into values statements as well as research into taxonomies. The second section described the method of sample gathering and method that was used to analyze the data. Following this was a section for analysis of the findings and, finally, there was a discussion regarding the findings.

This paper is unique in several ways. First, it is one of the few to research values statements. Second, this paper uses the new qualitative analysis tool of text mining to analyze the statements. Third, this study develops a natural language taxonomy for values statements that can be used for research or for education.

As mentioned previously, the findings of this study agree with existing research. Values statements have three types, namely Protectors, Internalizers, and Growers. The Protectors are values statements that safeguard investors. The Internalizers are values statements that promote good relationships within an organization such as teamwork and accountability. Finally, the Growers are values statements that concentrate on developing the firm by way of customer care. These three classes summarize current values statements for organizations.

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