CORPORATE GOVERNANCE AND BUSINESS ETHICS: PICTURES OF THE POLICIES

Nic Terblanche*, Leyland Pitt**, Deon Nel***, Asa Wallstrom****

Abstract

This study analyses the ethics policies of the world's four largest oil companies, as communicated on their websites, using the Leximancer approach. The text contained in the ethics policies of these firms was used in a content analysis and then mapped. This article illustrates a powerful, but simple and relatively inexpensive way for executives and corporate governance scholars to examine ethics policies, particularly as they are communicated online. The intent is to demonstrate a research and analysis method. The major contribution of this study is the use of a new research approach and set of tools that ethics researchers, policy makers and managers can exploit. The technique is easy to use, and the results are similarly straightforward to interpret.

Keywords: corporate governance, ethics, executives

*Department of Business Management, University of Stellenbosch, Stellenbosch, South Africa

**Segal Graduate School of Business, Simon Fraser University, Vancouver, Canada

*** Department of Marketing, Deakin University, Melbourne, Australia

****Division of Industrial Marketing, e-Commerce and Logistics, Lulea University of Technology, Lulea, Sweden

Introduction

Business ethics are an integral constituent of corporate governance if the latter is seen as the aggregate of conventions, procedures, regulations, and policies, which guide the way a firm is directed and controlled. The effective management of the relationships among the many stakeholders involved in the organization, and the attainment of its goals require that ethical standards be set, monitored and maintained. The rights of employees, suppliers, customers, and the community at large cannot in the long term be protected and ensured if the firm's directors and executives act, and allow others to act, in ways that are less than ethical.

Recent corporate crises such as Enron and WorldCom, the enactment of legislation such as Sarbanes-Oxley in the USA, and organized concern, such as the Cadbury report have meant that firms have strived not only to *be ethical* but *seen to be ethical*. This has resulted in firms drafting their own codes and policies regarding ethical behavior in their business, and attempting to ensure that both internal and external stakeholder groups are made aware of these communications through various media. The corporate ethics policies that have arisen vary greatly:

Some are brief statements that broadly address an organization's fundamental views on moral conduct; others are detailed document that describe and prescribe on almost every conceivable ethical eventuality. In their rush to think about, construct, and then act on corporate ethics policies, however, it is likely that less consideration has been given to their literary construction – for example, to the choices regarding words, graphic content, themes and concepts. These are essential deliberations, for these messages, in a sense, construct their own meanings: words can mean different things to different people; graphical images or "pictures" can say a thousand words and sometimes more, and underlying text can construct powerful and influential themes.

While available time may be the fundamental cause of senior executives not taking the occasion to ponder what their communication is actually saying, it is also likely that a dearth of tools and techniques contributes to the problem. If decision makers were availed of devices that would enable them to view their messages, words and images in other ways, or to summarize them, or to gain uncommon insights, then they might be able to think differently, and perhaps take even more effective action. In this brief article we explore an approach to the analysis of the messages contained in corporate ethics policies that allows large numbers of words to be summarized and portrayed graphically so that underlying themes and concepts become clear.

We proceed as follows: First, the current literature on corporate governance with specific regard to ethics codes and policies, is reviewed, with particular attention given to recent identifications of streams of research. In addition, the use of content analysis as a tool for researching corporate ethics is discussed. Second, a new tool for the content analysis of large and complex bodies of text is introduced and explained. Next, we describe a simple study of the text contained within the ethics policies of the world's four major oil companies, and present the findings. We conclude by acknowledging the limitations of this study, pinpointing some implications for managers, and identifying possible avenues for future research.



Corporate Governance, Ethics and Codes of Policy

Observers have long noted the difference between legal and ethical mechanisms in corporate governance. Legal mechanisms involve "doing the right thing", while ethical mechanisms entail "doing things right". Arjoon (2005) argues that legal mechanisms have clearly proven to be inadequate as they lack the moral firepower to restore confidence and the ability to build trust. He uses the concepts of "freedom of indifference" and "freedom for excellence" to present a theoretical basis for explaining why legal compliance mechanisms are insufficient in dealing with unethical practices and may not be addressing the real and fundamental issues that inspire ethical behavior. Overemphasizing legal compliance mechanisms may simply cause accountability to be substituted for responsibility simply, we cannot legislate morality – it needs to come from a more fundamental groundswell in the organization.

Scholars have investigated a wide range of issues with regard to corporate governance, corporate social responsibility (CSR) and codes of ethics. Matters such as the environment and sustainability, reporting practices, and the role of business in the international milieu have received particular attention. For example in a recent study of the reporting practices of Fortune Global 250 companies with regard to sustainability, accountability and corporate governance Kolk (2008) found that many of these organizations have begun to mandate board supervision and structuring of sustainability responsibilities, compliance, ethics and external verification. Although comprehensive disclosures are not yet widespread, some companies provided prominent examples of good practice.

A number of scholars have given attention to the importance of codes of ethics, whether these are industry-wide or organization-specific. Bhimani (2008) explores the fusion between ethics and modern economic rationality and reflects on what he calls, the "scientisation of economics and ethics" in academic discourse. He contends that that the enlistment of ethics within the epistemologically privileged posture of economics characterizes corporate governance codes, and uses the UK Combined Corporate Governance Code of 2006 in his analysis to support this. In a retrospective commentary on this work, Ahrens (2008) reports on the corporate governance codes which have adopted a detail ethics linked with economic rationalism, and argues that one problem with this reasoning is that grow of of corporate governance pressure companies to follow those ethics without comprehensible good reason. They are followed simply because of economic rationalism.

There are essentially two kinds of "code of ethical conduct" that a firm can adopt. One the one hand, statutory bodies, such as government units or industry organizations can compile a code and either

require or recommend that firms both adopt these and then comply with them. All manner of moral and legal issues are raised by these actions, including the locus of legal jurisdiction in the case of international firms, and the appropriate censure and its enforceability in the case of transgressors. A simple example would be a multinational of German origin, with worldwide operations, who might transgress in Nigeria. It might be expected that Nigerian law comes into play, but the firm will also be subject to German law, and possibly even a third country's law, e.g. Australia, if those were sufficiently riled by authorities its transgressions. Hsieh (2006) explores the questions of whether, and how voluntary adoption of codes of conduct by multinational corporations (MNCs) affects their accountability. Specifically he looks at the ways in which codes of conduct coordinate the expectations of relevant parties with regard to the provision of assistance by MNCs on grounds of rescue or justice. and contends that this coordinative role of codes of conduct renders MNCs more accountable for the performance of actions specified in a code of conduct than they would be without a code of conduct. Sama (2006) also addresses these issues, and asserts that improving MNCs'ethical conduct is a factor of both the ability of firms to change behaviors in the direction of the moral good, and their willingness to do so. She postulates that constraints and enablers of a firm's ability to act ethically emanate from the external environment, especially the industry environment of which the MNC is a resident, and the host country environment in which it operates. The drivers of corporate choices in the adoption and implementation of codes of conduct, and the relative power of relevant communities to the process are explained by categories of expected firm behaviors and the conceptual model which she develops.

Money and Schepers (2007) conducted extensive depth interviews with 13 main board directors and company secretaries in 13 FTSE100 companies in the UK in order to explore their perceptions of the relationship between corporate governance and corporate social responsibility. Their findings suggest a significant alignment between corporate governance and CSR programs within the sample companies. The authors speculate that the key influencers for this convergence have been regulatory pressure, the rise of business ethics (due to corporate scandals) and the demands of socially responsible investors. Consequences of this increased alignment are the development of more formal governance structures, with companies now organizing CSR board committees, and publishing risk registers and CSR reports. Also in the UK, Idowu and Papasolomou (2007) examined the sincerity of CSR initiatives, with particular reference to the issuing of CSR reports. Their results indicate companies have different reasons for issuing CSR reports. For example, in response to an increasing number of stakeholders requesting information on CSR, companies believe that doing so is good for business, to derive positive



public relations benefits, and to comply with the government requirements for them to issue information on CSR.

In a global survey of corporate governance and ethics Rossouw's (2005) findings reinforce the notion that corporate governance has a distinct ethical nature. He asserts that the typical arrangements and processes that constitute a corporate governance system are all merely means to ensure that the corporation will act in a manner that is fair, accountable, responsible and transparent - in simple terms: ethical. There is strong recent evidence that good governance does matter. Picou and Rubach (2006) studied stock price reactions primarily attributable to institutional investors occurring when corporations announce the enactment of corporate governance guidelines. Their results show that companies that announced the endorsement of corporate governance guidelines experienced increased stock prices following the announcements.

Building on present perspectives of institutional change, Enrione, Mazza and Zerboni (2006) examine the development of the institutionalization of codes of governance and the role of the different players concerned in promulgating these. Their work presents an empirical analysis of the roles of four groups of actors: law-makers, model makers, market makers, and governance enactors in the enactment of governance codes in a sample of 150 codes of governance introduced in 78 countries from 1978 to 2004. As a result, they were able to identify four distinct stages of institutionalization: precipitating jolts, theorization, diffusion, and reinstitutionalization. As a result, they suggest that a comprehensive investigation of the content of codes of governance and the likelihood of adopting such codes in a given country should be undertaken.

Recently, a number of scholars have begun to propose research agendas to investigate the issues surrounding corporate governance, ethics and policies. Gill (2008) investigates changes in the regulation of corporate governance and CSR and outlines a series of conceptual and methodological inquiries as well as policy ramifications to be pursued by scholars and practitioners in the fields of law and corporate conduct. An essay by Hambrick, Werder, and Zajac (2008) identifies the contributions that strategy and organizational researchers are making toward an understanding of a range of essential corporate governance questions. They consider how these research contributions stem from a willingness to draw from and contribute to different streams of intellectual thought, and we provide an orienting framework to situate this work. In the more specialized fields of accounting and auditing, scholars (Jenkins, Deis, Bedard and Curtis, 2008) have lately summarized research related to accounting firm culture and governance due to the intention of the Public Company Accounting Oversight Board (PCAOB) to consider revisions of the current U.S. interim auditing standards on quality control. Their intention was to bring together various avenues of research on this wide area so as to recognize precise areas of insufficient research. They offer suggestions for future research based on the current status of the literature and the recent environmental changes in the auditing profession. Nevertheless, while these recognitions of research schema are important, there is still much to be done, particularly in the domains of ethics codes and policies, and in the construal and interpretation of what these do, and might, mean. It is in this realm that this paper intends to contribute.

The Study: Leximancer Analysis of the Ethics Policy Statements of Oil Companies

There is a considerable recent history of the use of content analysis to examine the text produced in ethics policy statements and documentation (Hassink, Vries and Bollen, 2007; Svensson and Wood, 2007; Svensson, Wood and Callaghan, 2006). In this study, we introduce the use of content analysis software called Leximancer, a relatively simple but powerful device for understanding, visualizing and then portraying and interpreting, complex textual communication. We study the contents of corporate ethics policies, in the context of the global oil industry. This is an apposite arena for the study of corporate ethics policies and statements. The world's major oil companies are among the largest and most multinational of firms, and oil companies have frequently been the focus of attention and criticism for their corporate governance practices for a number of reasons - environmental, geopolitical, social, and ethical (Cohan, 2003; Hooghiemstra, 2000).

Leximancer (see www.leximancer.com) is a data mining and visualization tool that can be used to extract useful information that enables visual depiction and interpretation of prose data, and give meaning to, vast amounts of text. Leximancer uses a machine-learning technique, in a grounded fashion, to discover the main concepts in a corpus, and how they relate to each other (for a detailed description, see Rooney, 2005). Leximancer does both a conceptual (thematic) analysis and a relational (semantic) analysis, in order to make out concepts in the corpus and how they interrelate. Once a concept has been identified Leximancer then builds a thesaurus of words that are closely related to the concept thus giving the concept its semantic or definitional content. The text is then displayed visually by means of a 'concept map' which portrays the main concepts and their relationships with other concepts. The concepts are more than keywords - they are best conceived of as collections of words that "travel together". The extracted concepts are displayed on a map that details the relative importance of concepts, and the strengths between concepts.

Leximancer stochastically calculates a map of the concepts in the corpus that enables the researcher to see holistically what the important concepts in a body of text are and also the relationships between these concepts. So, concepts that are directly related but not necessarily strongly semantically linked can be far apart on the concept map, while concepts that are strongly semantically related will be close to each other on the concept map (Rooney, 2005, pp 410-412). In this way, concepts that occur in very similar semantic contexts tend to form clusters. The map can then be used by the researcher to present an overall representation of the corpus and to guide interpretation.

The Leximancer technique is based on Bayesian theory - bits and pieces of evidence that can be seen to predict what is actually happening. When this is applied to text, the words which make up a sentence predict the concepts that emerge and can be discussed. The tool automatically and efficiently learns which words predict which concepts, and this can be done for very large numbers of concepts across very large document collections. A very important characteristic of these concepts is that they are defined in advance using only a small number of seed words, often as few as one word. The automatic selection of important concepts and entities within text has demonstrated good agreement with expert human judgments over many trials.

Scholars have successfully used the tool across a wide range of disciplines in the social sciences in recent times. In the area of corporate risk management, Martin and Rice (2007) profiled enterprise risks in large computer companies using Leximancer and were successfully able to identify risk themes, concepts, and ideas from the screening and contextual analysis of business reports and corporate data. Smith and Humphreys (2006), working in the field of behavioral research, validated the output of Leximancer, using a set of evaluation criteria taken from content analysis that were appropriate for knowledge discovery tasks. In the area of tourism, Scott and Smith (2005) have used the software for event image assessment, specifically to

examine changes in the public representation of events over time.

Methodology

The websites of the world's four major oil companies – BP, Shell, ExxonMobil, and Shell, were visited, and the text in the ethics policies as stated on these websites copied, and then pasted into a word processing package. This served as the input data for the Leximancer analysis.

Results and Observations

The Leximancer results of the four websites are shown as maps in Figures 1 through 4. Due to the qualitative nature of both the content, and in a sense the output, the interpretation maps is of necessity subjective. The maps display a picture of distinct differences between the websites of the respective oil companies under observation. To assist with the interpretation, it is useful to review the fundamental principles underlying Leximancer maps. Readers can see further details at <u>www.leximancer.com</u>.

With regard to the elements of the concept map, there are certain main issues that are important. Circles represent central thematic groups of concepts. These groups are automatically pulled from the textual data by the Leximancer software without any user input. How these concepts are positioned relative to one another is based on their contextual similarity. This means that concepts appearing in the same context within the source text will group together within the Leximancer output. The size of concept point indicates its connectedness to other concepts, with larger concept points indicating greater connectedness. Lastly, the intensity of the concept label indicates relative frequency in the text. We now move to employing the above-described ideas to the Leximancer output for the four oil companies.

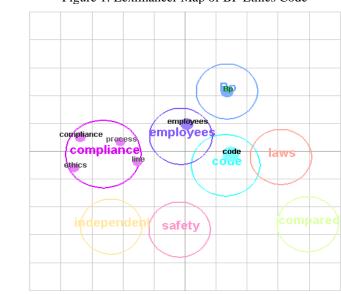




Figure 1: Leximancer Map of BP Ethics Code

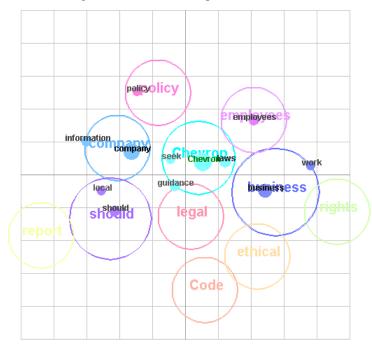
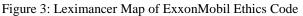
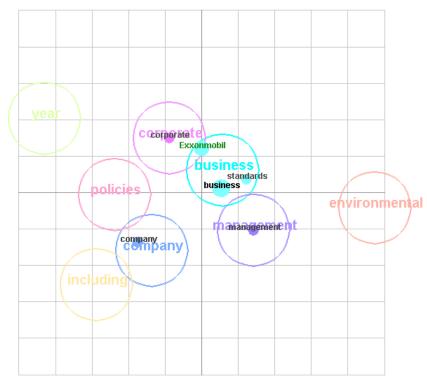


Figure 2: Leximancer Map of Chevron Ethics Code





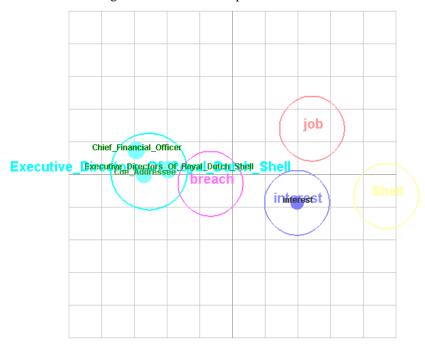


Iterations = 1000

Iterations = 1000



Figure 4: Leximancer Map of Shell Ethics Code



In Figure 1, four clear concept themes emerge for British Petroleum. First, is the issue of compliance as a major premise. Four distinct text phrases describe compliance. At BP compliance is seen as a "process". It is important to notice that the word policy is not used in the context of process. Policies are generally regarded as formal guidelines to align priority issues with the business vision. In this map policy is rightfully addressed as a separate issue under the theme labeled as code. The word process can be interpreted as the operational procedures to be followed to implement ethics policy at BP. The emphasis is not so much the "what", which is the policy component, but rather the process of "how" BP operationally intends to carry out ethics policy. This is an important distinction in interpreting the results. BP, like most large companies, has its widespread application of business ethics in place in terms of policy, but it is really focused on the narrow implementation of process, making sure that specific procedures are followed. Secondly, this narrowness of the application of the ethics process is corroborated with the use of the text "compliance" within the theme of compliance. It demonstrates strong language: ethics is not negotiable, it represents rules to be followed. A member of the organization either complies or is in breach of procedure. Thirdly, the text "ethics" is strongly associated with the compliance. There is no confusion where compliance is required. The association between "ethics" and "compliance" is explicit in the data. Lastly, the word "line" emerges. The idiomatic expression of "toe the line" is beautifully used here. The very apt meaning of conforming to a rule or as in this case the ethics process is implicitly revealed in the BP map.

The three remaining themes are related to employees, the BP brand and the actual ethics code.

Ethics in an oil company can have many dimensions such as care for the environment, social awareness, and governance issues. It is important to flag the importance BP attaches to its employees acting in an ethical manner. It is the text "employees" that is associated with the theme employees. None of the other dimensions of ethics were mentioned here. The two lesser themes of the BP brand and the code had much less descriptive text to express them. BP would do well to use more text to associate its brand with the ethics code or policy more strongly. Also the lesser description of the "code" could indicate that policy is less important than process. It could be that code as a theme is seen as the ethics policy component that enjoys broad application. Overall, the map for BP presents a coherent picture of the ethics code issues at this oil company. The logic clearly emerges and demonstrates the polarity between broad policy and narrow process implementation. The danger of under representing the ethics code is that ethics is viewed as a reactionary issue dealt with by procedural rules, rather than a philosophy guided by company policy. This can be a weakness that needs to be addressed.

The map for Chevron is shown in Figure 2. There is a striking difference between Chevron and its competitors on ethics. Chevron has the most themes, but it is also the richest map with strong underlying theory of best practice. Ten themes are identified, with four providing a strong sense of principled direction. First, is the theme of business. The text that describes it is "business" and "work". This demonstrates that the essence of work in the modern day is defined as business activity and that it is related to ethical work practices at Chevron. Secondly, the theme of what you should do features strongly. The text "local" and "should" is associated with this theme. Both the theme "should" and the text "should" are of great significance in the context of ethics. It has an important theoretical meaning in the realm of philosophy and the ethical theory that describes the principle of "should". The deontological theory of ethics states that people should adhere to their obligations and duties when analyzing an ethical dilemma. For example, a deontologist will always keep promises and will follow the law. This principle is clearly visible from the Chevron Leximancer map. Thirdly, the theme of Chevron as the brand is described by the words "seek", "laws" and "guidance". Again these words are of high significance from а theoretical correctness perspective. It relates directly to utilitarianism which is an ethical theory based on the choice that yields the greatest benefits to the most people. The choice of words at Chevron closely resembles the branch of "rule utilitarianism" that takes into account the law and its concerns with predicted outcomes. From these two dominant themes Chevron has considered the foundations of ethical analysis and has successfully captured the principles in the ethics code. The remaining themes complete the overall ethics code at Chevron. These comprise the supporting notions of policy that is information driven, and that should be adhered to by its employees. Overall, the analysis paints a succinct picture of ethics at Chevron. It is based on sound theory and its implementation is aimed at achieving the maximum good.

In Figure 3, ExxonMobil displays eight themes. The four themes that are supported with descriptive text are business, corporate, company and management. These four themes are conceptually closely related and cluster together on the map. First, the business theme is described by two concepts "standards" and "business". This is similar to the Chevron interpretation that acknowledges the way of doing business at ExxonMobil follows standards. It is supported by the brand ExxonMobil as part of the corporate theme. Again this is a familiar finding that links corporate identity with good ethical practice for the American based oil companies. Both Chevron and ExxonMobil have a strong branding association with ethics, whereas BP and Shell did not make such a strong brand statement along ethical lines. Both the company and management themes were supported with exactly the same text descriptors. There was no confusion of the concepts. The remaining four themes are not lexicographically described and are more scattered on the map. They are the themes: environmental, policies, including and year. It is perhaps harder to speculate why these themes surfaced but are not adequately described by supporting text. One way of interpreting these vague terms could be the famous oil spill by the Exxon Valdez in Alaska many years ago. The four terms environment, including, policies and year all fit with this oil tanker catastrophe and corporate headache. The oil spill was an environmental disaster at a time of weak inclusive policy in a distant year, but damaging enough to still linger in the corporate memory. It is almost saying we know it is there, but lets not accentuate a past public relations nightmare too much.

The map for Shell is depicted in Figure 4. It is the map that conveys the least amount of information about the ethics code at a leading oil company. Four themes are identified. The two that are supported with text are Executive Directors of Royal Dutch Shell and Interest. The non-descriptive themes are breach and job. The executive directors theme is described by the words "chief financial officer", "executive directors of Royal Dutch Shell" and "addressee". It seems that Shell is very aware of the profit impact of the ethics code issues at Shell. The map tends to show that if ethics is mentioned at Shell it should be addressed to the CFO or the executive directors. Firstly, it is commendable that this enjoys such senior management priority but it also has a somewhat ominous dark cloud in its presentation. This is because of the association to the theme labeled interest and annotated with the text "interest". It is hard not to have the suspicion that ethics can be interpreted at Shell as something that should be managed with self interest and closely guarded by senior management. There is no mention of policy and procedures. That can leave the impression that ethics is managed on a case by case basis as opposed to be regulated by clear enforceable policy. This seems at odds with the other organizations analyzed in this study. In particular Chevron and ExxonMobil make explicit mention of policy and process. At these organizations, senior management is responsible for the policy setting but the implementation is regulated by a clear rules based procedure. The question is why ethics must be handled by the "addressee" which in the case of Shell is the senior executive officers? The remaining two themes that are not supported by text, namely job and breach are not helping to ease the suspicion here. Job in the context of the Shell map seems to indicate that the job of handling procedural ethics is a senior management role at Shell. The word breach probably implies that a breach of ethics is something serious and should be handled by experienced managers. It is beyond the scope of this paper to investigate possible breaches of ethics policy at Shell, but a quick search on Google does provide interesting insights into the context of this debate and the relevance of the map produced here. There is reference to the breach of Shell's own ethical code, ethical norms and rapacious greed. Although these may be alleged reports it has the potential to incur reputational damage and it can be addressed by tweaking the language used to better reflect the ethics code at Shell.

In summary, two clusters can be identified from this analysis. The two American organizations have a stronger foundation in the philosophical grounding of why ethics matter. There is more conclusive evidence that American policies and procedures are rooted in good ethical practice. The companies with their head offices on European soil seem to have a more reactive



approach. It does appear that as BP has increased its exposure to North America in recent years, it is evident from its Leximancer maps that reference to process is taking a stronger preference. The lesser reference to policy by the Europeans puts them behind the curve of its American competitors.

Managerial Implications

Business firms' activities and policies have been subjected to ever-increasing scrutiny by their stakeholders as well as outsiders that have no financial interest in the firms. The global warming debate has been source for many outsiders renewed interest in the impact that a firm has on the environment. Bonini, Hintz and Mendonca (2008) comment that climate change and the environment are higher on the minds of consumers worldwide than any other socio-political issue. Comments and statements released by firms are studied with enthusiasm by many "green" and other pressure groups to try and uncover any minute bit of evidence with which they can humiliate a firm. Every single word communicated by a firm to the outside world, is not only dissected and studied for context by competitors, but also by a host of other watchdogs, public and official. The Internet has not only made the study of firms' statements easier, it also enables these watchdogs to post any information they wish on the Internet for the whole world to see (Pitt, Berthon, Watson and Zinkhan, 2002). The managerial implications of the afore-mentioned are fairly obvious for a firm and even more relevant if the firm is an oil company.

The most important implication then, for managers, is to be aware of what themes their website and other communications are projecting. Leximancer is an appropriate tool to unearth this information as the program is incredibly complex and powerful, yet easy to use, as well as simple for laypeople to comprehend.

Apart from being merely being aware of their own set of themes, managers need to be knowledgeable of the themes their direct competitors promote. The same software can be applied to the websites of competitors to judge the underlying themes inherent in their text. Competitors' websites might produce themes (and nuances) that may serve as input to enhance own communication strategies. The key advantage of knowing where a firm's website stands relative to competitors can only facilitate in refining one's own website. Leximancer can fulfill a major function in ensuring that communication only communicates what is intended to be communicated. The latter assurance can be obtained by feeding all major communication releases into Leximancer and identify all the possible themes that such communication can convey.

Limitations and Future Research

This research, like most other research, is subject to limitations. This study looked no more than websites, and even then a particular set. We therefore admit that there is more than just a firm's website to guide one to comprehend a firm's business ethics. Miscellaneous sources of information such as online guides, message boards, and blogs from which to glean a firm's business ethics exist. None of these other resources were examined in this study since we were only interested in the officially communicated corporate business ethics on the firms' official websites. Future research could address this gap by exploring such sites and comparing the themes they are espousing to the website of the firm's official website. By gauging these alignments managers can better understand exactly how stakeholder groups view their business, where such perceptions are emanating from, and how best to either cultivate or counter them.

A further limitation of the study is that only English text was examined. Researchers fluent in Spanish may wish to explore the sometimessignificant amount of non-English information available on official websites. Perhaps there is an undiscovered richness to some sites that is only apparent in the Spanish text.

A final limitation is that the present study only examined websites at one point in time. The Internet grows and evolves consistently at an astonishing pace and so do the sites that populate it. A longitudinal study of websites' information might produce a richness of developing and repositioning themes that developed in response to socio-political demands.

Conclusion

This study reports the results of a new approach to analyze themes inherent to text. The technique was used to study the business ethics statements of the four biggest oil companies. For each oil company, the entire English contents of their official business ethics website were downloaded and analyzed using Leximancer software. Output of the analysis was a series of "maps" showing emergent themes, their strength, and their interrelationship with other themes. Results varied widely across the four oil companies studied. Themes related to "how" and not "what" emerged from British Petroleum website. The Chevron website produced a concise picture of ethics at Chevron which is not only based on sound theory; its implementation also strives to realize the maximum good. The ExxonMobil website has a number of very clear concepts, but at the same time some other concepts are difficult to explain - the latter maybe a result of their horrific oil spill experience with the Exxon Valdez in Alaska many years ago. The Shell website, compared to that of the other three oil companies studied conveys the least amount of information about the ethics code at a leading oil company.



In the paper we outline the approach taken, how to interpret Leximancer output, a series of managerial implications, as well as limitation and future research. We also suggest extending the research across types of websites and other sources of information as well as across time in order to track longitudinal website evolution. The cost of creating and storing vast amounts of text is continually decreasing and the tools to simplify the understanding of such large quantities of data are growing in importance. Leximancer and the innovative approach taken in this paper to unearth key themes of websites provides a means of producing succinct, easy to interpret, and yet incredibly powerful maps of textual information.

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