Illusions of Trust: A Comparison of Corporate Annual Report

Executive Letters Before and After SOX

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Illusions of Trust: A Comparison of Corporate Annual Report Executive Letters Before and After SOX

By Marcia L. Watson

In this post-Enron society, trust in companies has never been lower. The 2002 Sarbanes-Oxley Act was designed to improve investor confidence by making CEOs and CFOs of public companies legally accountable for the veracity and integrity of their financial statements. Prior research has shown that the executive letter is the most widely read section of the annual report, and improving readability seems an obvious way to improve transparency whereby leading to improved trust. To identify changes, a content analysis for both before and after SOX was conducted using 50 annual report executive letters from the top 100 in the 2004 *Fortune* 500 list. The findings indicate little overall change, but there is some indication of improvement. According to Flesch Readability, the average annual report requires a college degree, but after SOX the number of executive letters requiring a postgraduate degree decreased by 10 percent. The findings also indicate changes in the use of passive voice. Additionally, the researcher found that 48 percent of the reports had a change in the signer of the executive letter.

Introduction

With high profile financial scandals like Enron and WorldCom, trust in corporate America has been undermined, so companies need to reach out to the country's 84 million investors to work towards improving trust (Murray, 2004). One way this can be accomplished is through the annual report. According to a convenience poll of American investors over 30, trust is their top reason for deciding where to put their money, so companies must move quickly to demonstrate their trustworthiness (Minnow, 2002, p. 9). Although the annual report is not the only source of information about the performance of a company, it is considered to be an influential source because of its wide coverage and availability (Hooks, Coy, & Davey, 2002; Marston & Shives, 1991).

Essentially, the annual report is a comprehensive communication that has the potential to make company information easily and routinely available in a single document (Hooks et al., 2002). This makes the annual report much more than a financial report; instead it is a multi-objective, multi-audience, communication (Anderson & Imperia, 1992). To better understand the construction of this strategic communication, this study conducted a content analysis of annual report executive letters to bring research a step closer to knowing how company disclosure can be used to communicate trustworthiness.

Furthermore, the purpose of this study is to build on the previous findings of Watson and Supa (2005) that used SOX to identify changes in visual images. They found that while the total number of pages in the narrative section of the annual reports increased by 14 percent, the total number of visual images decreased by 52 percent. Therefore, this study sought to hone in on what filled this additional space – the text.

Literature Review

In 2002, a wave of accounting scandals broke as a number of companies admitted to misrepresenting their financial statements and promoting a false impression of their economic status. When investors witnessed company fraud investigations, shock waves went through the stock market and for the first time in history, the 2002 presidential State of the Union Address included the goal of improved corporate governance (Allen, 2002; Minow, 2002).

In this post-Enron era, investor relations leaps to the top of the corporate agenda, because companies must rebuild investor confidence. In their review of previous literature about trust, Shockley-Zalabak, Ellis, and Cesaria (2003) defined trust as a company's "willingness, based upon its culture and communication behaviors in relationships and transactions, to be appropriately vulnerable" (p. 4). It is important to note that they found trust to be the outcome of communication behaviors, such as providing accurate information, giving explanations for decisions, and demonstrating sincere and appropriate openness.

To work towards restoring trust, the 2002 Sarbanes-Oxley Act (SOX) was passed. Designed to improve investor confidence by preventing corporate scandals, SOX makes CEOs and CFOs of public companies legally accountable for the veracity and integrity of their financial statements (Goodman, 2004). Although SOX is helpful, much more must be done. As Fred Hassan, Chairman of the Board and CEO of Schering-Plough, said, "Business integrity means living up to the intent, not just the letter of the laws and regulations wherever we operate" (Building Trust, 2004, p. 28). One opportunity companies have to work towards higher standards is by improving the annual report.

Annual Reports

Information is the investor's best tool when it comes to investing wisely. The annual report is a critical source of this information because it is the principal document used by most public companies to disclose corporate information to their shareholders. Securities and Exchange Commission (SEC) mandated this state-of-the-company report for public companies in 1934 (Flanagan, 1993). Today, according to the SEC, annual reports are required for companies with more than $10 million in assets whose securities are held by more than 500 owners. The reports are created to disclose information about a company's financial condition and business practices to help investors make informed investment decisions (The SEC, 2004).

Annual reports reach an audience whose interests and backgrounds for reading them vary greatly, so substantial time and money is invested in their creation, with approximately $5 billion spent on annual report production in the United States alone (Hyland, 1998; Fulkerson, 1996; Poe, 1994).

Annual reports contain basic information about a company expressed in financial and narrative texts. The narrative texts, intended to supplement the report's required financial information, include the Management's Discussion and Analysis (MD&A) and the executive's letter[1] (David, 2001). In the MD&A, required by the SEC, managers discuss and interpret the financial statements. The executive's letter, which is not mandated but is typically included as the first item in the report, is written as a signed personal letter from the president or CEO, providing an overview of past performance and discussing plans for the future (Yuthas, Rogers, & Dillard, 2002). Although the executive's letter is rarely the work of one person, Thomas

[1] The executive's letter can also be called the president's letter (Yuthas, Rogers, & Dillard, 2002), the CEO's letter (Segars & Kohut, 2001), and the letter to shareholders (Michalisin, 2001).

(1997) found that it exemplifies the "corporate speak" representative of the top management of the company (p. 48).

Unfortunately, publishing the annual report is often seen as a legal obligation, instead of an opportunity (Flanagan, 1993). Whether it is identified as a marketing tool (Rogers & Brown, 1999) or an information piece (Kwong & Wild, 1994) annual report writers must be aware that effective communication occurs if the messages intended by the sender are those actually interpreted by the receiver (Courtis, 1987).

By combining narrative data and quantitative information, annual reports convey information to decision makers, along with meeting the disclosure requirements imposed by the SEC. These decision makers include stockholders, stockbrokers, employees, regulatory agencies, customers, financial analysts, press/media, potential customers, and the investing public (Anderson, & Imperia, 1992). Even though this mass communication has so many intended recipients, the primary audience is often considered to be stockholders (NIRI, 2004; Kohut & Segars, 1992).

Past annual report studies have found conflicting information about the amount of time spent reading annual reports. For example, Badaracco (1988) found roughly 50 percent of the annual report audience spent less than ten minutes reading it. Rezaee and Porter (1993) studied investors and found they spent 5-15 minutes reading the annual report, but Epstein and Pava (1994) found that about half of individual investors either skim or do not read annual reports, while Oliver (2000) found employees to spend an average of three minutes to read the executive letter. Although studies these findings vary, most research has shown that the executive's letter is the most widely read section of the annual report (Hynes & Bexley, 2003; Courtis, 1982).

Despite the importance of the executive letter, narrative texts have received relatively little attention from scholars interested in their communicative effectiveness (Yuthas, et al, 2002). However, existing studies suggest that annual report text can be manipulated based on the type of information being conveyed. For example, Subramanian, Insley, and Blackwell (1993) found that annual reports for companies with good performance were easier to read (requiring a 10th grade level to read) than those with poor performance (requiring at least a 14th grade level or a college education). Furthermore, in their analysis of annual reports, Straw, McKechnie, and Puffer (1983) found that managers took credit for good news and blamed the environment for bad news.

The importance of the corporate annual report stresses its potential to be influential. It can either be a good news communication highlighting superior corporate performance or a bad news communication relating sub-par financial results or corporate actions. Firms that veil negative information are missing an opportunity to gain trust and confidence (Subramanian et al., 1993).

As mentioned previously, annual report readability has undergone scrutiny. With the SEC and the investing community calling for improved corporate disclosure, annual reports must be readable (Shockley-Zalabak et al., 2003). The Flesch readability formula is the most popular measure for assessing textual complexity (Clatworthy & Jones, 2001). This measure, devised in 1948, has received criticism because of its narrow focus and because language has changed since it was first devised. Regardless of the limitations, the Flesch readability formula offers an objective measure of reading ease (Subramanian et al., 1993).

The Flesch Reading Ease score is straightforward and easy to apply, comprising of only two variables – sentence length and syllables per 100 words. The formula is 206.835 – (1.015 x ASL) – (84.6 x ASW), where ASL is the average sentence length (the number of words divided by the number of sentences) and ASW is the average number of syllables per word (the number of syllables divided by the number of words) (Microsoft Word Help). Based on this scale, text is rated on a 100-point scale. The higher the score, the easier it is to understand the document.

Table 1 provides the pattern of reading ease ratings. If the reading ease score lies below 50, the assumption is that the writing is comprehensible only to those who have attained at least some higher education. Additionally, the closer the score is to zero, the more incomprehensible the writing is (Courtis, 1998, 1986).

Table 1
Flesch Pattern of Reading Ease Ratings

Reading Ease Rating	*Description of Style*	*Educational Attainment Level*
0-30	Very Difficult	Postgraduate Degree
30-50	Difficult	Undergraduate Degree
50-60	Fairly Difficult	Grades 10-12
60-70	Standard	Grades 8-9
70-80	Fairly Easy	Grade 7
80-90	Easy	Grade 6
90-100	Very Easy	Grade 5

(as adapted from Courtis, 1986)

Readability elements can come from much more than what Flesch methodologies provide. Specifically, Flesch does not take into consideration other important elements such as "syntax, style, format, graphic design, logic, conceptual density, human interest, organization and reinforcement" (Courtis, 1998). This includes writing in "plain English" so investors can understand what they are buying and can make informed decisions (SEC, 1998). Plain English as defined by the SEC (1998) includes writing at a level the audience can understand by using active voice instead of passive voice and using short sentences. Although created in 1998, the guidelines established have become even more important since SOX.

Kohut and Segars (1992) suggested that the manner companies convey messages in annual reports is an important consideration in corporate communication strategy whereby trust can be earned by convincing others that the company is pursuing a sound strategy. Essentially, annual reports are conduits for the conveying of company information to gain investor trust.

Research Questions

From the above review of literature, the following research questions emerged:

RQ_1: Is the readability of annual report executive letters different after SOX?

RQ_2: Does the readability of annual report executive letters portions (the front part, the middle, and the end) differ after SOX?

RQ_3: Do annual reports showcase the executive letters more by locating it earlier in the report after SOX?

RQ_4: Is there a change in the amount of reinforcement data (i.e. pictures, graphs, tables, and diagrams) in annual report executive letters after SOX?

RQ_5: Is there a relationship between a change in the signer of the executive letter and the readability, location, or reinforcement data?

Method

The methodological premise of this study is that readability and content analysis provide a useful umbrella for examining annual reports. It is important to understand what companies select and present to their publics through their annual reports because this selection and presentation can influence their public's perception of the company.

The goal of this study was to examine executive letters in annual reports to see if companies are presenting things differently after SOX. In a two-step process this study conducted readability and content analysis to systematically identify characteristics within the data (Hocking, Stacks, & McDermott, 2003).

Although interested in identifying trends in all annual reports (the universe), for the purpose of this study, the population consisted of the top 100 companies identified on the 2004 *Fortune 500* list (available from http://www.fortune.com/). This list was chosen for this study because it includes companies that by virtue of their inclusion are the most widely followed companies in the investment world.

From this list, the researcher randomly selected 50 companies to create the sample.[2] This probability sampling was conducted by random selection, so each company had an equal chance of being part of the sample and no company was excluded from the sample due to researcher bias. Table 2 provides a complete list of companies used in this study.

Table 2
Complete List of 50 Companies in Sample

Alcoa	General Electric	Motorola
Allstate	General Motors	Northrop Grumman
American Express	Georgia-Pacific	Pfizer
AT&T	HCA	Safeway
AutoNation	Home Depot	Sears Roebuck
Berkshire Hathaway	Honeywell Intl.	Sprint
Best Buy	Ingram Micro	Target
Cardinal Health	International Paper	United Parcel Service
Cisco Systems	Intl. Business Machines	United Technologies
Citigroup	Johnson & Johnson	UnitedHealth Group
Comcast	Johnson Controls	Valero Energy
Dow Chemical	Lockheed Martin	Verizon Communications
Duke Energy	Lowe's	Wachovia Corp.
DuPont	Marathon Oil	Walgreen
Fannie Mae	Merrill Lynch	Wal-Mart Stores
FedEx	MetLife	WellPoint Health Networks
Ford Motor	Morgan Stanley	

As previously mentioned, the signing of SOX was the major world event that the researcher used to evaluate the annual report executive letter content around. Since SOX was passed in July 2002 (The SEC, 2004), and many companies may not have made changes in their

[2] The total coding of 100 (50 per year) was selected as an appropriate sample size based on previously published studies of executive letters in annual reports. For example, Smith and Taffler (2000) had a sample of 66 annual report executive letters, Clarke (1997) looked at 32, Kohut and Segars (1992) looked at 50 letters, Courtis (1987) looked at 65, McConnell, Haslam, & Gibson (1986) looked at 40, and Heath and Phelps (1984) looked at 20 letters.

reports this first year, this study included annual reports for the years of 2001 and 2003 omitting 2002, resulting in a total of 100 annual reports. This included the same 50 companies for each year. The online PDF versions of the selected annual reports were used after downloading from the Investor Relations Information Network (IRIN) Web site at http://www.irin.com/ or directly from the company Web sites.

Procedure

After the annual reports were collected, the research was conducted in the following two phases. For phase one, each executive letter in the sample was imported into Microsoft Word. This allowed the researcher to run readability statistics. For the purpose of this study, this included calculating the number of sentences, number of words per sentence, number of passive sentences, and the Flesch Reading Ease score. These measures were determined to be appropriate because they provided a reliable measuring stick for readability comparison. This reliability was determined by the consistent application of the same measurement to each executive letter.

To capture a complete picture of the readability, the analysis was run four times for each report. This included a run for the entire executive letter, the first part, the middle, and the end. To maintain a level comparison, each section consisted of complete sentences containing at least 100 words. This use of readability is based on previous studies with similar methodology (see Clatworthy & Jones, 2001; Courtis, 1998).

For phase two, content analysis was conducted. For the purpose of this phase, the units of analysis were, the signer of the executive letter, its starting page, and the number of pictures, charts, diagrams, and tables in the pages containing the executive letter. Coders recorded their findings on code sheets based on the category components included in the codebook.

Content Analysis

Two coders were used and both were experienced in content analysis. After reviewing the process, it was determined that no changes in the process or coding materials were necessary. The complete collection of 100 articles were separately coded on a year-by-year basis (not company-by-company) by each coder. Once this was completed, Holsti's (1969) formula for inter-coder reliability was calculated at .97. Overall, this portion of the study was designed to meet the content analysis requirements identified by Hocking et al. (2003) and Stacks (2002).

Results

Upon completion of the readability and coding for all 100 annual report executive letters, the data was entered into the statistical program SPSS® (Statistical Package for the Social Sciences) Version 12.0 and statistical analyses was conducted. The researcher considered the alpha level of $p \leq .05$ as statistically significant.

Readability

As stated previously, the readability was run four times once for the entire executive letter, the front part, the middle, and the end. This was done for both 2001 and 2003. The readability components are discussed separately allowing for a comparison between the years. Based on the below findings, RQ_1 and RQ_2 were determined to have limited overall differences, however, specific differences were noted.

Full Letter. A paired-samples *t* test was conducted to evaluate the difference in each of the components (number of words, number of sentences, number of words per sentence, passive sentence percentage, and reading ease) for the full executive letter both 2001 and 2003. The only category found to be significant was the average words per sentence. Although the differences between the years were not found to be significant for the other categories, the data contained important findings. Table 3 provides the averages for each category.

Table 3
Total Executive Letter Reading Ease

	2001	2003
Average Number of Words	1911.60	1981.44
Average Number of Sentences	93.16	91.92
Average Number of Words/Sentence	20.27	21.74
Average Percentage of Passive Sentences	7.50	7.02
Average Reading Ease*	34.55	34.11

* The lower the reading ease, the more difficult it is to read.

Overall, the average number of words in 2001 was 1911.6 and 1981.44 in 2003. This ranged from 540 to 11279 in 2001 and decreased to 335 to 11715 in 2003.

Breaking this total down to sentences, the analysis found that the average number of sentences went from a range of 27 to 556 in 2001 to 25 to 630 in 2003. A closer review found that 50 percent of the letters in 2001 had 75 sentences or less, while in 2003, 50 percent of the letters had 69 or less sentences. Overall, the average number of sentences in 2001 was 93.16 and 91.92 in 2003.

As stated previously, the difference between the 2001 and 2003 words per sentence were found to be significant. The results of a paired-samples t test indicated that the mean for the number of words per sentence in 2003 (M = 21.74, SD = 3.80) was significantly greater compared to 2001 (M = 20.27, SD = 3.45), $t(49) = 2.73$, $p < .005$. Additionally, the words per sentence went from 14.6 to 27.2 in 2001 to 11.2 to 32.2 in 2003.

All the executive letters in 2001 used passive sentences, but two letters in 2003 did not use passive sentences. In 2001, the percentage of passive sentences ranged from 1 to 23 percent, while in 2003 they ranged from 0 to 17 percent. Overall, the average percentage of passive sentences in 2001 and 2003 was 7.5 percent and 7.02 percent respectively.

The readability of the full executive letters found an average of 34.55 readability in 2001 and 34.11 in 2003 (both in the low end of the difficult/undergraduate degree range). In 2001, the number of letters with readability under 30.0 (the benchmark for the most difficult readability, requiring a postgraduate degree) was 16 (32%), while in 2003 it decreased to 11 (22%).

A One-Way ANOVA was run on the readability of report section variables to evaluate the relationship between the sections of the executive letter (beginning, middle, and end) and the readability. The One-Way ANOVA was significant, F =36.60, df = 2/294, p = .001. Post hoc comparisons using Scheffe's test found at least .006 significance between the beginning (M = 35.75), the middle (M = 29.97), and the end (M = 45.19) sections when each section was compared against the other. Because significance was found between the sections, the following reports the analysis of these three sections – the front, the middle, and the end. Each section used in the analysis included the first 100 words taken to include complete sentences, therefore, the average number of words, average number of sentences and the average number of words per sentence were not important as with the full letter analysis.

Front Part. A paired-samples t test was conducted to evaluate the difference in each of the components (number of words, number of sentences, number of words per sentence, passive sentence percentage, and reading ease) for the front part of the executive letter both 2001 and 2003. The only category found to be significant was the average number of passive sentences. Although the differences between the years were not found to be significant for the other categories, the data contained important findings. Table 4 provides the averages for each category.

Table 4
Front Part of Letter Reading Ease

	2001	2003
Average Number of Words	115.54	112.64
Average Number of Sentences	5.42	5.40
Average Number of Words/Sentence	22.04	21.44
Average Percentage of Passive Sentences	10.44	4.3
Average Reading Ease*	35.72	35.78

* The lower the reading ease, the more difficult it is to read.

As stated previously, the difference between the 2001 and 2003 percentage of passive sentence were found to be significant. The results of a paired-samples *t* test indicated that the mean for the number of passive sentences in 2003 (M = 10.44, SD = 15.61) was significantly greater compared to 2001 (M = 4.3, SD = 8.48), $t(49) = 2.48$, $p < .05$. Specifically, the percentage of passive sentences went from 60 percent not having passive sentences in 2001 to 78 percent passive sentences free in 2003.

The readability of the first portion of the executive letters found an average of 35.72 readability in 2001 and 35.78 in 2003 (both in the difficult/undergraduate degree range). In 2001, the percentage with readability under 30.0 (the benchmark for the most difficult readability, requiring a postgraduate degree) was 36 percent (N=18), while in 2003 it decreased to 28 percent (N=14).

Middle Part. A paired-samples *t* test was conducted to evaluate the difference in each of the components (number of words, number of sentences, number of words per sentence, passive sentence percentage, and reading ease) for the middle part of the executive letter both 2001 and 2003. The only category found to be significant was the average number of sentences, a category that is not important for the specific parts of the report. Although the differences between the years were not found to be significant for the other categories, the data contained important findings. Table 5 provides the averages for each category.

Table 5
Middle Part of Letter Reading Ease

	2001	2003
Average Number of Words	109.9	109.76
Average Number of Sentences	5.52	4.92
Average Number of Words/Sentence	21.05	23.08
Average Percentage of Passive Sentences	6.24	4.14
Average Reading Ease*	30.87	29.08

* The lower the reading ease, the more difficult it is to read.

Although the overall percentage of passive sentences in the middle section increased from 6.24 percent in 2001 to 4.14 percent in 2003, the percentage of middle parts without any passive sentences increased from 74 percent (N=37) in to 84 percent (N=42) in 2003.

The readability of the middle portion of the executive letters found an average of 30.87 readability in 2001 (in the difficult/undergraduate degree range) and 29.08 in 2003 (the most difficult readability/postgraduate degree range). In 2001, the percentage with readability under 30.0 (the benchmark for most difficult readability, requiring a postgraduate degree) was 52 percent (N=26), while in 2003 it decreased to 46 percent (N=23).

End Part. A paired-samples *t* test was conducted to evaluate the difference in each of the components (number of words, number of sentences, number of words per sentence, passive sentence percentage, and reading ease) for the end part of the executive letter both 2001 and 2003. The only category found to be significant was the average words per sentence, a category that is not important for the specific parts of the report. Although the differences between the years were not found to be significant for the other categories, the data contained important findings. Table 6 provides the averages for each category.

Table 6
End Part of Letter Reading Ease

	2001	**2003**
Average Number of Words	112.58	113.96
Average Number of Sentences	5.72	5.44
Average Number of Words/Sentence	20.15	22.44
Average Percentage of Passive Sentences	4.74	9.26
Average Reading Ease*	45.33	45.05

* The lower the reading ease, the more difficult it is to read.

Unlike the other sections, the end portion had an increase in the overall percentage of passive sentences from 4.74 percent in 2001 to 9.26 percent in 2003. The percentage without passive sentences decreased from 78 percent (N=39) in to 66 percent (N=33) in 2003.

The readability of the end portion of the executive letters was an average of 45.33 in 2001 and 45.05 in 2003 (both in the difficult/undergraduate degree range). In 2001, the percentage with readability under 30.0 (the benchmark for most difficult readability, requiring a postgraduate degree) was 14 percent (N=7), while in 2003 it decreased to 8 percent (N=4).

Content Analysis

Content analysis was conducted to identify the number of reports that had a change in signer, the starting page, the number of pictures, the number of graphs, the number of tables, and the number of diagrams.

On average, the executive letters in both 2001 and 2003 began between the 2nd and 3rd pages. However, in response to RQ_3, there was a difference noted in the placement on the executive letter. In 2001 the starting page ranged from the cover to the 12th page, while in 2003, the starting page ranged from the cover to the 29th page.

To answer RQ_4 the pages that contained the executive letter were coded for the reinforcement data of pictures, graphs, tables, and charts. This also found slight changes between 2001 and 2003.

In both years, pictures were the most common supplemental material in the pages with the executive letter with an average of 1.98 pictures in 2001 and 1.78 in 2003. More specifically, in 2001 there were 99 pictures, while 10 percent of the reports did not have any pictures (N=5), while in 2003 there was a decrease to 89 pictures and 24 percent did not have pictures (N=12).

Graphs were the second most common supplemental material in the executive letter pages. There was an average of 1.28 pictures in 2001 and 1.72 in 2003. Furthermore, in 2001 there were 64 graphs and it increased to 94 graphs in 2003. However, 56 percent of the letters in 2001 did not have any graphs (N=28) and 60 percent did not have graphs in 2003 (N=30).

Tables were the next most common, with an average of 0.16 tables in 2001 and 0.46 tables in 2003. The number of tables also increased from 8 in 2001 to 23 in 2003 with 88 percent of the letters not having any tables in 2001 (N=44) and 82 percent in 2003 (N=41).

Diagrams were infrequently used in the executive reports with an average of 0.08 in 2001 and 0.14 in 2003. Essentially, 92 percent of the executive letters in both 2001 and 2003 did not have any diagrams, and the total number of diagrams increased from 4 in 2001 to 7 in 2003.

Finally, RQ_5 dealt with the changing of the executive letter signer. Although no significant relationship was found, it is important to note that 48 percent of executive letters had a change in signer from 2001 to 2003 (N=24).

Discussion

This research was conducted as an exploratory study to identify critical components in annual reports that can impact trust after the implementation of SOX. Previous research found that annual reports are typically poorly written in terms of readability. However, by the SEC stepping in and making executives accountable for these documents while requiring greater disclosure, it can be predicted that the annual report executive letters will be improved.

Overall, the findings do not indicate a large change since SOX. Possibly this is because this study is too soon after its enactment. There are enough differences between the years that warrant a duplication of this study in a year or two. Although the readability for the entire report was relatively similar for the two years, there was a 10 percent decrease in the number of reports with less than 30.0 readability (the benchmark for the most difficult readability, requiring a postgraduate degree).

The analysis for the separate sections also had some interesting findings. The front part found a drastic drop in the percentage of passive sentences and an eight percent decrease in the number of letters with a readability under 30.0. The middle portion saw decrease in the number of sentences with the use of passive voice, and a decrease of six percent in the number of letters with less than 30.0 readability. Conversely, the end portions saw an increase of 12 percent in the number of letters with passive voice. Also, similar to the other sections the number of letters with less than 30.0 readability decreased eight percent.

In addition to the differences between the two years, there were some interesting readability findings about annual reports executive letters overall. This research confirmed previous findings (see Clatworthy & Jones, 2001; Courtis, 1998,1986) that the middle section is the most difficult to read. Essentially, this study found that the middle was the most difficult to read, then the front portion, and the end was found to be the easiest to read.

Additionally, the readability analysis of the full reports found the use of passive sentences in the writing ranged from zero percent to 23 percent, with an average of 7.26 percentage of the sentences in the letters containing passive voice. Further analysis of this is warranted because as Thomas (1997) noted, active voice promotes the idea that a company is moving forward, progressive, and successful; whereas, the use of passive voice is reserved for occasions when the writer finds it advantageous to be distanced from the message. Possibly, this relates back to the study by Straw, McKechnie, and Puffer (1983) that found managers take credit for good news and blamed the environment for bad news.

Although, the SEC *Plane English Handbook* does not provide specific statistics to stay within, this average percentage of passive sentences seems high especially since some reports went as high has 23 percent. Another area that could benefit from a more specific guidance is the range for the average number of words per sentence for companies to stay within. With an average of 21.01, indicating a greater need for more tight writing.

The content analysis also indicated that future research is necessary, but there were a few findings that stood out. Although the pages did include graphs, tables and charts, this study identified that pictures were the most common supplemental material in the executive letters. In 2003, there was almost an equal amount of pictures and graphs. This increase in graphs warrants further research into message distortion. This is because past studies have found the graphs to be manipulated to create a more favorable impression of the company's performance (see Beattie & Jones (2002) for a review of literature about annual report graph distortion).

The finding that forty-eight percent of the executive letters had a change in the signer(s) is interesting. It is important to note that SOX made CEOs and CFOs of public companies legally accountable for the veracity and integrity of their financial statements (Goodman, 2004). Possibly there is a direct relationship between this large change and SOX; therefore, future research should look into the relevance of this change with the overall status of the annual report and changes in the management of the companies.

Conclusions

This study was successful in its ultimate goal to gain a better understanding of the narrative text, specifically the executive letter, in annual reports after the enactment of the Sarbanes-Oxley Act. Established to help prevent fraud and mistakes, SOX requires companies to improve their financial communications. This study is a frontrunner in its identification of changes since the 2002 act was passed.

Although this study led to important findings, further analysis of annual reports is warranted. By using this study as a benchmark, a stronger understanding of annual reports can be gleaned. Along with this replication, future study can include additional elements such as return on investment, or thematic, and/or transparency elements.

As with most research, this study suffered from limitations. Specifically, by limiting the study to the companies included in the top 100 of the 2004 *Fortune* 500 list, the sample excludes many annual reports. Instead, as was appropriate for this study, it includes the best of the best. Therefore, further research could be expanded to incorporate a broader sample.

Finally, the implications for this study are two-fold. First, it provides much needed scholarly research on annual reports. Second, it has applicability in the practice of annual report writing by identifying current status of readability.

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