In the case of annual reports and visuals, Carol David's "Mythmaking in Annual Reports" (2001) discusses the cultural myths companies may help construct in society through visuals. She states that reports might use "idealized images that evoke the beauty and efficiency of business locations and operations, eliminating references to the less positive realities of the business world" (198). Narrative sections of annual reports open the door for a company to project a certain image of itself; however, David states,

[T]he designers of annual reports must answer to the universal rhetorical constraints of reporting financial information and the company's yearly progress, but many companies create interest and elicit emotional responses from the audience by embellishing the documents with lavish visual designs. (206)

Images in these reports shape the cultural perception of the companies and reflect the general trend in society itself. Yet the use of graphs is largely unattended to by David, and she focuses her study on paper reports only. The digital age in which we live provides companies with new avenues for projecting ethos and imagined persona through annual reports. More specifically, the advent of the Internet provides companies with an even more intimate interaction with users. Even more, technology and the amount of data present in society cause companies to re-envision what data and information really means.

Michael Friendly (2008) positions “The Golden Age of Statistical Graphics” in the late 19th century, further aggrandizing Funkhouser’s (1937) “Age of Enthusiasm” because of the influx of new graphic forms as a result of growing data and digital tools to visualize them. Today’s data—and in those years to come—is grander than it has ever been, possibly limiting the cognitive understanding of data if it were visualized. The use of data, graphics, and information in design is blending together, altering society’s perception of data to see it more aesthetically and to see data represented in a true form. Because of this, designers are more apt to use data in creative ways that will work more to persuade audiences and shape a culture’s view of data. We may currently be seeing the beginning of what could be called “The Digital Age of Data Communication.”

Methodology (But looking to re-title)

To begin my research, I will expand on the work of David and turn attention to the narrative structure of annual reports online. More specifically, I look to see how/if data is visualized in annual reports online. I will look back to 1997 at Microsoft (see David’s “Mythmaking” for a complete analysis of the print version) and a few subsequent years; the 1997 Microsoft report will be a solid benchmark to begin, as it represents the burgeoning stage of the Internet, of which Microsoft was a major player. I decided to limit my analysis to companies involved in the technology and entertainment industries to expand on David’s analysis of Microsoft; furthermore, companies in these areas of business may be assumed to have cutting edge, visually intensive

annual reports. Also, I chose larger corporations with the theory that they may have more employees and financial support to produce content-rich online reports. Within each category (see Table 1 *That I need advice on creating*) I examine two competitors and discuss some PDF versions as a comparison with online reports.[i] My hypothesis is that these industries, which are visually and technologically intensive, will be more apt to have highly elaborate and graphic laden online annual reports.

I will explore several areas of each report other than data visualization. In particular, I will address briefly how the site is navigated and how that enhances or detracts from the user experience of the annual report, what the online experience may add to the vision of the company, if and how data is visually presented, and what the future may be for online annual reports. I have broken up the following analysis into sections according to the type of industry in which each company is involved. Each section will do a comparison between companies in each industry. Some of the companies offer past annual reports, so each of these companies will have a general analysis to see how data visualization is incorporated over time.

Computers and Software: Microsoft Evolution and HP 2013[i]

Microsoft's investors page provides online annual reports that begin with 1996 to the current year. Since earlier work (see David "Mythmaking") focused on the 1997 version, this is the first place I start and discuss a few other reports to highlight an evolutionary

change; it is also the earliest online version in my sample set with the next earliest available for viewing being Disney's in 1999. Microsoft's 1997 report's main page opens with a small square with "97" appearing with only four other links spanning the top. If you wait to click on anything, the color of the 97 graphic changes a couple times before launching right into the letter to shareholders in hypertext. The majority of the site is a duplicate version of the print format, only viewers can navigate the report by clicking on different tabs on the top of the page or simply clicking a small "next" or "previous" button; many of the visual icons and images from the print version are also reproduced online.

There are 18 graphs that appear in the financials section, and everyone the same format: Each graph has three vertical bars that are not filled with color, a value (usually dollar amount in millions or billions) at the base of the bar, and the year placed above. The current year's texts are a slightly larger font-size and bolded. Every graph is extremely small and draws little attention from the tables. Consequently, the purpose of the graphs being present is unclear, as they provide no scales or axis labels. The only message given is that there has been an increase for the past three years. The same style of graph is repeated in subsequent years with only a minor change of color fill for the bars; the graphs decrease to only three or four in the entire report after 1997 and 2003 being the last year with any graph.

2004 marks a trend for the layout of the webpage that stays relatively static through 2007. The navigation bars and links operate in the same fashion with only the color theme changing each year. There is no graphic representation in these reports, only data tables transposed from the 10-K format. From 2008 to the current 2013 online report, Microsoft only includes a stock performance graph that is the only data display to appear in 10-K forms. Interestingly, the navigation menu of the 2012 and 2013 versions feature icons (see Figure 1) of a line graph and pie chart to link to financial data, but no actual visualizations are present. Microsoft generally recreates its annual report information into hypertext, only providing navigational tools for viewers that afford quick choices for reading versus flipping through every page of a hard copy; in other words, the table of contents and supra-textual (Kostelnick 1996) design features of a document are merely reformatted to hyperlinks on a webpage.

Figure 1. Screenshot from Microsoft 2012 Annual Report (http://www.microsoft.com/investor/reports/ar12/financial-highlights/index.html)

The online version of HP's annual report for 2013 follows this same translation as Microsoft. The webpage features blue margins on the top and bottom that include icons for navigation (see Figure 2). Viewers can choose to search for items using the magnifying glass icon, print the report with the printer icon, view the index and choose a specific page to navigate to, or simply click the forward or back arrows

to scan through the pages; you can also move your mouse over the upper corners and grab the “page” you are on and “turn” it. However, the online version of the report is a digital copy of the print version. The only interaction is page-turning animations that accompany user navigation between pages. There is no data presented again other than the 10-K stock graph. Yet there are three textually rich images of numerical data (see for example Figure 2) that can be considered as info-graphics. The sharp blue “$11.6B in cash flow” directly shouts to readers a positive message of monetary value for the company, highlighting the data in a way that the text in the stockholder letter would otherwise fail to do.

Figure 2. Screenshot of HP 2013 Annual Report (http://media.corporate-ir.net/media_files/IROL/71/71087/AR-2013-t21sfr/index.html#/2/)

[i] I originally wanted to look at Apple’s 2013 annual report expecting a rich, interactive site. However, the only report offered by Apple is the 10-K form through a PDF.

[i] I chose PDF’s for two reasons: 1) Logistically it is easier to download a PDF version and examine using a computer, which in essence might be considered electronic but is not a hypertext as are the online reports, so they 2) act as a print version for the sake of comparison to online reports even though one might consider a PDF to be electronic. For the purposes of this study, PDF annual reports

(unless otherwise stated as “interactive” by the company) are looked at as print versions.