

# AN ASSESSMENT OF 100 FORTUNE 500 COMPANY WEBSITES

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## ABSTRACT

*Many companies promote their business through the use of websites and are able to convey copious information to a great number of people who access the websites. The key to successful implementation and utilization of a corporate website is to capture the interest of website visitors and to maintain their attention. Website designers must take into consideration that website visitors desire to obtain information without experiencing complications and needless distractions. In this study, the home pages of 100 top US companies were examined and analyzed for the implementation of selected principles of good design or their avoidance of problems associated with website designing.*

**Keywords:** Web Design, Principles, Information, Technology, Website, Design

## INTRODUCTION

With the advances of the information technology age, the Internet has become an essential instrument in many facets of our daily lives. The World Wide Web is heavily laden with information and insurmountable data. Internet web page designers have numerous intentions for making their particular websites available. Many use the Internet for commerce and to conduct and increase business. The key to success on the Internet is capturing the interest of website visitors and maintaining their attention. Website designers who do not employ the necessary qualities for good design should not expect visitors to remain there any longer than the mouse click it takes to move to another website. All entities that possess websites must assess the content therein to determine: To what extent, if any, do the homepages violate the selected principles of good website design?

## RESEARCH OBJECTIVES

The purpose of this paper is to evaluate company websites and to determine whether or not they employ selected principles of good website design. The principles of good website design have been considered pertinent to the overall success that a website may possibly possess. The selected principles of good website design include: 1) No presence of scrolling text, 2) Information presented within a single screen and 3) The availability of a site search via a search box

In addition to these research objectives is the plan to find more valuable information through further data analysis. The following will be determined: 1) What percentage of the websites analyzed have no presence of scrolling text? 2) What percentage of the websites analyzed have information presented within a single screen? 3) What percentage of the websites analyzed have more than one screen? How many screens did they have? What extra information did they provide on these screens? 4) What percentage of the websites analyzed have a search box

available? 5) What percentage of the websites analyzed attained perfection by meeting all three principles?

### LITERATURE REVIEW

“A document created for use on the web that takes advantage of hypertext linking is often referred to as a homepage”(3, p.1). It is the open screen of a website, and every website on the Internet has a homepage for a precursor (2). Those initial pages are crucial because they introduce the company, the product and service offered.

A company’s homepage is the door through which the relationship starts between web users and the company. The web homepage is seen as a key communication component of a website. As with other forms of advertising, the first look is critical in gaining and holding consumers’ attention (1; 11). “If it is to be effective, the page must provide the right information content and it should have a look and feel that persuades a viewer to spend time exploring the site as well as engaging in other favorable behaviors such as book marking the page and revisiting the site“(11, p. 92). If a homepage does not contain what is necessary to a viewer, the viewer can and will quickly move to another website which is a mouse click away.

Because homepages have profound importance in setting a tone and attitude, many view these pages as an advertisement. “Viewing an organization’s homepage as its most important online advertisement has profound implications for how homepages are designed, tested, and evaluated”(11, p.91). Many marketers are including the Web as part of their advertising and promotional mix (10). Worldwide Internet advertising spending is expected to increase from a projected \$6.5 billion in 2000 to over \$33 billion in 2004 (4).

In order for company homepages to fit the mold of an ad, they must “meet the conceptual definition of advertising, physically resemble an ad, and it must perform the same function of an ad” (11, p. 92). The facts are that many homepages meet the definition of an advertisement, which is a “paid form of non-personal presentation of ideas, goods or services, by an identified sponsor, with predominant use made of the media of mass communication” (11). These homepages resemble ads as well, because of the similar theme amongst the two that represents the corporate image as well as the common target they have in purpose.

The function of advertisements is to inform and persuade via a communicated message (11), which also is a definition for homepages. This advertisement concept is important because it focuses on the value of a homepage. If advertisements have the potential to generate revenues and attract new customers, homepages fitting the criteria of advertisements have just as much potential. There are numerous published guidelines for designing web homepages, and several suggestions are relevant to the present investigation (5). The general theme of good website design is: the simpler the better. To be simple and direct allows websites to apply to the necessities of a greater amount of site viewers.

**Scrolling Text.** “Most users don’t go to the web to have an experience or to enjoy the site design. Unfortunately, it is common for sites to aim at being cool, sizzling, or even killers rather than trying to do anything for their users” (8). Most customers actually seek information satisfaction in their web experience, which “influences the overall feeling of satisfaction because

of the wealth of information about a product or service that is available to a consumer” (6, p.2). That being said, “scrolling text fields are universally despised by users because they distract from the content and slow down use of the web” (8).

**Screen Length.** “Opinions vary concerning the appropriate number of screens that a homepage should occupy” (5, p.4). It is idea to have all your information on a homepage viewable within one screen (14). Scrolling must be avoided on homepages; users need to be able to see all their options at the same time (8). When homepages venture beyond one screen length of information, it could tend to be too much information cluttered into a small space. Unless you provide a compelling reason, most users will not scroll beyond the first screen (3).

**Search Boxes.** The ability to search a site is one of the most important features a homepage should include. Many users do not desire to waste time reading and clicking, when they know what they are looking for. Instead of guessing where something may be located, a search mechanism can take you immediately to where you need to be. Many users reach for the search button immediately upon entering a website and the rest do so when they get lost (11).

### IMPORTANCE OF STUDY

According to the International Telecommunication Union (13), the number of Internet users world-wide stood at 500 million people at the end of 2001. This figure amounts to a 30% increase from the year previous. The ITU forecasts that at the end of 2002, the global number of Internet users will have grown to 655 million, which would represent a yearly rate of growth of around 31%. In other words, more than 150 million people, roughly the equivalent of a country like the Russian federation, or 2.5% of the world’s population, would be joining the numbers of Internet users every year.

With so many individuals currently using the Internet, along with the prediction that many more are expected to join in, it is important that homepages remain simple. As has already been established, homepages are a company’s face to the world (9). Homepages are e-advertisements that portray the personality of a company; homepages are a valuable first impression.

We live in a society where people want what they seek and they want it immediately. This desire extends to the information users seek via the Internet. A well-known fact abounds: Content is King. Users are more intent on information satisfaction. They seek what they desire right there in front of them, on a single screen, without scrolling. If what they seek is not right there, they look for “the little box where I can type” (9).

The objective of website designers should be to create a website that instantly triggers the desire for many web users to visit initially and to continually visit the website, and even recommend it to others. The selected problems of scrolling text, screen length, and unavailable usage of a website search, have proven to be a deterrent to web users. These problems in effect oppose the objective set forth by web designers. It is important to examine these principles and to see how they are being used, and by whom amongst the selected sample of companies. The results of this study will show us the extent to which these principles are being practiced by the selected sample of companies. The intent is to increase awareness of the issue among website designers.

## METHODOLOGY

The content analysis was performed over the course of two days. Starting Friday, November 15<sup>th</sup> and ending Saturday, November 16<sup>th</sup>, it took five hours each day to analyze the 100 websites that were selected for this study. This research took place at Central Michigan University's Park Library. A Gateway VX920 computer monitor was the instrument used to view the homepages. This monitor has an 18-inch viewable screen. Measurement of the screen lengths required the use of a twelve-inch ruler. The selected homepages were measured in terms of inches, and then the inches were converted. For example, eight inches represented a full screen according to the calculations. A homepage with a sixteen-inch homepage would be the equivalent of two screens.

This research design is the most effective because it enables us the opportunity to view the homepages, collecting the data so that it can be recorded and analyzed with further detail. Implementing a survey or interview with the same sample would not be as effective. Such a research design would be more time consuming, and would not receive as many result as the content analysis that was done. Another approach to this research would be if the homepages selected were to be analyzed by a select sample of people who would record how they felt about the homepages design of the sample chosen. The results would be unproductive because many individuals would judge based on presentation, and not on content. Point being, a content analysis done by one individual is the most unbiased approach to such a study.

It is important to note that the web browser used was the latest version of Internet Explorer. To effectively gather the data, it was necessary that the browser window be open to a full screen. The full screen allowed the precise view of the entire homepage collectively at one time. For the purpose of this study, a purposive, non-probability sampling was taken from the top 100 companies in the United States that were ranked by Fortune Magazine according to yearly revenues. Fortune Magazines provides a convenient online reference on homepage URL's of these companies at <http://fortune.com/fortune500>. These particular homepages were chosen because these companies are rated the top revenue earners in the country. The homepages that represent the companies are some of the most sought after websites for information, products and services. These homepages of top rated companies are most inclined to provide simple homepages that employ good website design. Since the United States maintains the biggest market for e-commerce, this sample allows us to analyze the content of the homepages of these companies.

**Data Analysis.** Microsoft Excel is the program used to store the data. In order to better evaluate and examine the data collected, the data obtained was manipulated and calculated to produce percentages. The results of these calculations will be illustrated by pie charts and used to arrive at conclusions. An Excel spreadsheet is chosen because it is effective for the presentation of data in a clear concise manner.

**Limitations.** This study has some identifiable limitations worth discussing. Firstly, only 100 websites were selected for analysis. This sample pool represents a very small portion of company's homepages on the Internet. Secondly, the sample only represents 100 home-based U.S. companies. Web presence and homepages do exist for companies that are based outside of the United States. For the purposes of this study, US based companies with a multi-national

presence were selected. A practical limitation to this study is the possibility that websites can change in design at any given interval. For the different promotions and services offered as a result of annual events such as the Christmas holidays, website design can be altered in accommodation. This can as a result affect the conclusions.

## FINDINGS

Analysis of the homepages of the top 100 companies ranked by Fortune Magazine according to yearly revenues, revealed some valuable information. In regards to the application of selected principles or lack thereof, overall the company's homepages practiced good website design and in accordance with established criteria. There were minor discrepancies between the suggestion made for good website design, and what was found via content analysis.

**Scrolling Text.** Through this analysis, it was discovered that 90% of the companies have no presence of scrolling text. The following ten companies had scrolling text on their homepages: Duke Energy, Conoco, Johnson and Johnson, Lehman Brothers Banking, Marathon Oil, Phillip Morris, Phillip Petroleum, SBC Communications, Supervalu, and Viacom.

**Single Screen.** 64% of the homepages analyzed were found to have their information presented within a single screen. This represents a little over half of the homepages profiled. Among the homepages that have more than a single screen, 17% of them required minimum scrolling. These homepages have screen lengths between a single screen and a third, and a single screen and a half. Of the remaining homepages with more than one single screen, 12% were found to have 2 pages or more in screen length. The content found amongst this extra screen space included for the most part news headlines about the company. Many of the companies did not utilize the space given them on the homepage correctly. This is the reason why their homepages were more than one screen in length. The homepage for State Farm has its information centered down the middle of the page, failing to use space available to them on the left as well as the right. The homepage for Fannie Mae also has a similar design, failing to use much space available on the right. The information continues down the page beyond one screen.

The homepage for General Motors has the length of 2 screens, without any information on the second screen. The screen space was taken up by a flash object that required room to move over the page. If this graphic were not employed in its homepage design, the website could have easily amounted to one single screen, been more user friendly and most likely more inexpensive to implement. Two of the companies with homepages greater than one screen actually have a lot of information to display. Sears Roebuck and Target, both in the retail business, have homepages up to three screens in length. The information contained on the extra screens included the many sales items sold by the companies during these holiday seasons. Both offer a vast array of products, which are difficult to confine within one screen.

**Search Box.** In the last principle, it was discovered that 80% of the company homepages provided a search box, where 20% of the company homepages neglect to provide a search box. Of the 20 company homepages that do not provide search boxes, there is what seems to be an alternative. Companies such as Bank of America provide drop down lists that give choices as to what one wishes to explore. Other company homepages such as Allstate, Sprint, Coke, and

Merrill Lynch, provide site maps, which provide an organized layout of the different pages assessable within the website.

**All Criteria Met.** Out of 100 homepages profiled, it was found that 40% of the company homepages met all three of the criteria set forth for good website design. These companies have no presence of scrolling text, a single screen, and provided search boxes for their users to utilize.

## CONCLUSION

The first problem of scrolling text shows that 10% of the company homepages profiled use this technique. It can be concluded that scrolling text is relatively outdated. In the information technology age, new ideas are introduced each and every day. Design techniques used two or three years ago can become obsolete and unpracticed with today's new technology. A good majority of the companies have a presence of flash graphics on their homepage. This new design element is more prevalent on homepages today. Although this element would be interesting to analyze, it is not objective enough to place a measure on it. The findings of this principle are overall consistent with what was determined in the literature review. We can conclude that most of the companies realize scrolling text is not a good design technique.

**Single Screen.** In the second problem, the use of numerous screen lengths on homepages, it was discovered that 36% of the companies have more than a single screen on their homepage. As stated earlier, it is concluded that these were design mistakes characterized by the misuse of space. Many of the homepages simply did not use the space provided. A few of the companies were found to have three screens of information on their homepage. These retail companies could not fit their information into single screens. Some companies that have extensive information to offer will not be able to confine the information to one screen. Since homepages are online advertisements used to market products and services to Internet users, it is important to advertise the majority of this information on the opening page. Murphy (7) contends that when advertising to the goal-directed consumer, it may not be necessary to squeeze information, links, and graphics on a single screen or home page. The conclusion regarding information presented within a single screen is dependent on the website. If the particular homepage is a retail oriented company, which needs to present much of its products on the initial page, then it will not meet the criteria set forth in the literature review.

**Search Box.** In the last problem of inability to search a site, we found that 20% of the websites neglected to provide a search box on their homepages. Some provided sitemaps instead, which organized websites into self-explanatory sections. As a result of this measure, we conclude that these companies who neglect to implement a search box on their homepage did not feel it was necessary. Instead of a search box, an alternative would be a sitemap which can provide a strong sense of structure and navigation support in a site" (8, p. 67). Nielsen (8) contends that search mechanisms are essential for any site with more than 200 pages. The amount of pages on the websites is unknown, but can play a factor in this principle. If the homepage does not have enough viable information to search, a search box isn't necessary.

**All Criteria Met.** From the data it was discovered that 40% percent of the homepages analyzed met all three conditions set forth as principles of good website design. This is nearly half of the companies surveyed, but from this it can be concluded that not all companies have followed the

good principles website design set forth by this study. The homepages studied are just as different as the industries from which they come. Each has a different goal and different perspective. No matter what the sample, homepages will never follow one specific model of design. Like the individuals responsible for the design, homepages have different personalities that make them attractive, unattractive and unique. After completion of this research, it can be implied to IS practitioners that a reevaluation be considered. This reevaluation should emphasize the availability of search boxes and page length with regard to web page design. Both principles were not met in a good portion of the home pages studied.

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