



12 Allegheny County Airport ♦ West Mifflin, PA 15122
866.647.8282 ♦ www.emscharts.com

Memo

To: Dr. Nancy Barta-Smith, Customer Support & Marketing Supervisor
From: Lindsey D. Kelley, Customer Support & Marketing Coordinator
Date: May 8, 2006
Re: emsCharts Website Analysis and Redesign Project

Purpose

On February 7th, I proposed to you an investigation of the visual elements of www.emscharts.com, prior to our website expansion project. The goal of this analysis was to identify elements of the current design that could be changed to better serve the site's rhetorical situation. By polishing the existing web design prior to the website expansion, it is my hope that the expanded website will be more informative and adhere to the rhetorical strategies that will make it the most effective marketing tool possible. In this memo, I have outlined my findings on the website's rhetorical situation, visual elements, cognate strategies, and guidelines. I have also suggested changes as applicable to further meet the goals of the marketing website. Additionally, I have attached my data spreadsheet and work log for your reference and review.

Summary

For the emsCharts website analysis and redesign project, I systematically examined the current design elements and studied them against the website's rhetorical situation. The goal of this examination was to gain a better understanding of how each visual element in the marketing website was working to either support or detract from its rhetorical strategy. The project was proposed in two phases. Phase 1 of the project is now complete and its results are the subject of this memo. Phase 2 of the project, which will result in the expansion of the current "Integration" page using the redesign recommendations established in Phase 1, will remain on hold until the recommended changes have been approved, and the necessary resources to complete Phase 2 are available.

Introduction

According to Charles Kostelnick in Designing Visual Language, a document's visual language, cognate strategies, and guides for those strategies are all factors of its rhetorical situation, which is composed of the document's audience, purpose, and context. The emsCharts marketing website is no different, in that it contains visual elements on every design level that all work together to support its rhetorical situation. This project has analyzed the website to dissect its visual elements and to provide evidence as to why and how certain elements do or do not support the website's rhetorical situation. The analysis identifies those elements that bolster and those detract from the website's visual rhetoric;

allowing the future design team to build on the elements that are working and change the elements that are not.

According to Kostelnick, a document's rhetorical situation is made up of its Audience, Purpose, and Context (5). Below is a description of each of these categories as they apply to the emsCharts marketing website.

The Rhetorical Situation of www.emsCharts.com

Audience

The emsCharts website was developed to be an informational reference for potential customers, partners, and the general public. The website is available on the World Wide Web, and theoretically could be accessed by anyone in the world with a connection to the Internet. The ideal audience for the website is potential customers who are interested in finding out more about emsCharts products and services. Potential customers for emsCharts products include EMS Providers, City and State EMS Directors, Hospital Information Systems personnel, and Healthcare Billing Companies. Since the homepage of emsCharts.com contains the login location for the emsCharts private customer site, the audience for the emsCharts marketing website may also include current customers who want to learn more about the company and product offerings.

Purpose

The purpose of the website is to provide clear and interesting information to the audience about the emsCharts company, including marketing information about our products and services. The content of the website is meant to inform and persuade potential customers to purchase emsCharts products.

Context

Since the website is primarily an online information resource, it is assumed that the audience will view the website on a computer screen. All company literature provides the URL for audiences to access; therefore the audience member could be accessing the website in response to a marketing mailer, web search, trade show meeting, sales call, or other type of interaction. In any case, it is assumed that the reason for visiting the website is to learn more about the company and products.

By defining the rhetorical situation of the website first, I was able to analyze how every design element works in supporting the website's rhetoric. Once the design elements were identified, and analyzed, suggested modifications could be established and proposed for approval and roll-out in Phase 2 of the project.

Proposed Program

The project was proposed in 2 Phases; one of which has been completed. Phase 1 was the analysis and reported observations of the design elements of the existing website. The design elements from 2 separate pages of the website were systematically studied and categorized, and recorded in Elements Spreadsheet. By studying 2 pages of the website, supra-level patterns could be observed and reported.

Charles Kostelnick developed a vocabulary for visual analysis such as the analysis that was performed for the emsCharts website. His terms and theories for visual analysis divide design elements into 4 levels— Intra, Inter, Extra, and Super – each of which can be described in terms of their textual, spatial, and graphic components. By using his terms described throughout the text Designing Visual Language, the analysis performed for emsCharts.com took on the vocabulary as used in the text (Kostelnick).

Phase 1 of the website project took a systematic approach to the analysis of emsCharts.com, following Kostelnick's Visual Language Matrix. The tasks of Phase 1 are listed and described below:

Phase 1 – Analysis and Observations

1. Analysis of Intra and Inter level visual elements
2. Analysis of Extra and Supra level visual elements
3. Development of rationale for or against existing design elements with respect to the website's rhetorical situation

Task 1 – Analysis of Intra and Inter level visual elements

The first task in Phase 1 of the project was to examine the Intra and Inter level visual elements of the website with respect to design strategies and guidelines, as well as each of the three coding modes – Textual, Spatial, and Graphic. The analysis focused on elements present on both the Home Page, as well as elements present on the emsCharts Mobile product page.

Intra-level design elements are those that are observed across a single line of text. Textually, this includes font size and type, case type, and text treatments (e.g. bold, italic, etc.). Intra-spatial elements are those that affect the spacing between letters and words. Intra-graphic elements are punctuation, symbols (e.g. \$, %), and text treatments (e.g. underline).

Inter-level design elements are those that are observed across several lines of text. Inter-textual elements are headings and the numbers or letters of a list. Inter-spatial elements include paragraphs, line lengths, and text justification (e.g. centered, unjustified). Inter-graphic elements include bullets and other listing devices, and highlighted text.

Each of these types of visual elements already exists in the current website. By analyzing the elements on the Intra and Inter design levels, and by establishing their involvement in supporting the rhetorical situation, I was able to make informed decisions for improving the rhetorical strategy of the website on the higher design levels and overall.

Task 2 – Analyze Extra and Supra level visual elements

Similar to the analysis done in Task 1 of Phase 1, Task 2 also analyzed design elements of the website with respect to design strategies and guidelines, as well as Textual, Spatial, and Graphic coding modes. Extra and Supra level elements, however, represent higher levels of design than Intra and Inter levels. This analysis focused on the same web pages that were analyzed in Task 1.

Extra-level design elements are those that are observed outside of the main body of text, and include pictures, data displays, icons, and symbols (Kostelnick). An extra-textual element might be text that is present to aid in the understanding of a data display (e.g. label, key, legend). Extra-spatial elements include the size and orientation of data displays and pictures. Extra-graphic elements include line weights in data elements, and colors in pictures.

Supra-level design elements are top-down items that are observed across the entire document, and help to define, structure, and organize the document as a whole. Supra-textual elements include major section or chapter headings, or navigational bars on a website. Supra-spatial elements include page size and scrollable length for the screen. Supra-graphic elements include page borders and pictures placed over the entire document for cohesion.

As with the Intra and Inter level elements, Extra and Supra level visual elements already exist in the current website. By analyzing these high level elements, and by establishing their involvement in supporting the rhetorical situation, I was able to make informed decisions for improving the overall rhetorical strategy of the website. The results of Tasks 1 and 2 can be observed in the Elements Spreadsheet, attached, and also under the Research section of this memo.

Task 3 – Development of rationale for or against existing design elements with respect to the website's rhetorical situation.

An important task in the project was taking the information gathered in Tasks 1 and 2, and detailing why and how each element is either supporting or detracting from the website's rhetorical situation. By developing rationale for each design element, Task 3 will set up the standards upon which Phase 2 and subsequent website design decisions will be made. The results of Task 3 can be observed under the Analysis & Recommendations section of this memo.

Research

A majority of the research done for the analysis was the collection of data that resulted in the appended Elements Spreadsheet. The collection of this data was accomplished through first hand analysis of each element of the emsCharts marketing website. A record of the time that was spent on each aspect of the project is available in the appended document named Visual Rhetoric Project Time Sheet.

Empirical research was also referenced for the analysis. Universal research is a type of empirical research that involves the use of controlled experiments (Kostelnick 438). Much of the universal research that was used for this analysis was referenced from Kostelnick's text. Although considered to be non-rhetorical, universal research can be useful as a general indicator of peoples' preferences for one design variation over another. Contextual research is document specific information often resulting from user groups, surveys, observations, and interviews. Contextual research provides information on the document at hand, and often reveals strengths and weaknesses in the document's rhetorical strategies.

Analysis & Recommendations

As mentioned previously under the description of the Proposed Program, the website analysis was performed using Kostelnick's Visual Design Matrix as a template. Below is a description of the data that was collected and reported on the Elements Spreadsheet. For each level of design listed below, there are also recommended enhancements that can be made to the website design in Phase 2 of the project in order to solidify the rhetorical strategies for the site.

Intra Level Design

Analysis

A study of the intra-level design of emsCharts.com reveals intra-textual typography that is easily read and free of visual noise. The intra-level spacing between letters and words also contribute to ease of readability. Figure-ground Gestalt guidelines are satisfied by the intra-graphic color choices for the text. Some text treatments such as boldface and italics are used for emphasis purposes and are not overused so as to create visual noise or defeat their purpose.

A comparison among all of the intra-level elements on the homepage and emsCharts Mobile product page revealed that there are some variations in intra-textual and intra-graphic design, for which no reasonable explanation can be determined. Intra-textually, the homepage alone revealed

2 different text styles (Verdana and Ariel) and 2 variations of the color blue (Ocean blue and custom blue) for text in similar textual fields.

Recommendations

Since no rhetorical reason can be determined for the variation in text style and color, it is suggested that these elements be aligned for consistency. Verdana style text is used throughout the website body copy, and it is suggested that the homepage text be changed from Ariel to Verdana to enhance consistency. The News & Events field on the homepage uses a custom blue color for text that is not shared by any other elements present on that page. It is suggested that the intra-graphic text coloration of the News & Events field be changed to Ocean blue for consistency with other fields on the page. Enhancements to the intra-textual and intra-graphic qualities of the individual pages will aid in building ethos for the site.

Inter Level Design

Analysis

Inter-level analysis of the website incorporated the design relationship between lines of text, paragraphs, and text fields. The use of heading levels throughout the pages is consistent and makes use of readers' visual conventions stemming from experience with paper-based forms of design. The use of bullets is an inter-graphic method that lends emphasis and conciseness to the information being presented.

Each of the pages studied could be broken down into separate fields. The arrangement of these fields was compared for usability and consistency.

Recommendations

The homepage exhibited an excessive amount of inter-level white space between the text fields and the page footer information. By removing the excess white space, the page could be considered more concise in its arrangement. This would also eliminate any reader perception that the information on the page was unfinished or missing, and would result in a more professional tone and reinforced ethos.

Through contextual research, it was discovered that page arrangement could be improved by moving the "emsCharts Model" field directly underneath the "News & Events" field on the left side of the homepage. This aligns with the Gestalt principle of visual patterns that is present on other pages of the site (Kostelnick 66). By moving the "emsCharts Model" field to the left column, it creates a visual cohesion with the other pages of the website.

Extra Level Design

Analysis

The extra-level analysis of the website studied the pictorial components of the website, since it contained no data displays.

The emsCharts logo is an extra-graphic element that integrates visual and verbal rhetoric into a single, pictorial representation for branding of the company. The textual elements are clear with adequate spacing between letters. Spatially, the logo was given depth with a light shadow. Additionally, the logo is simple enough to easily withstand size variations. Clear, and free of visual noise or clutter, the logo is adaptable to many media for branding purposes.

In the header present at the top of the website, the logo is accompanied by a blue pictorial element combining a picture of an ambulance and a picture of a helicopter. These visuals allow the audience to identify with visual conventions that link what they know about ambulances and helicopters with the content of the website. Since the website is about emergency medical

software, these pictures are not only relevant, but may also help to bolster the ethos of the site. The visual in the header has a reduced contrast that leads to decreased emphasis; thus transferring most of the emphasis of the header to the company logo.

The extra level elements discussed above also carry over consistently to other pages; thus making them supra-level elements to be discussed again later. One element that is not present on other pages of the site is the revolving graphic present on the homepage. The size and placement of the graphic makes it an element of focus for the homepage. The movement of the graphic provides emphasis to the extra-level element. The fact that it is hyperlinked, however, provides an additional feature that can be considered supra-level since it connects pages to one-another. The graphic is simple enough that it does not drastically affect load-time, which is a concern for the conciseness of the webpage.

Recommendations

There are no major recommendations for the extra-level components of the website. It is thought that the extra-level elements are well-designed and possess proper emphasis that supports the rhetorical situation of the website.

Supra Level Design

Analysis

The supra-level design of the website is, perhaps, the most important for the purposes of this project. It is, after all, the supra-level design that will carry over to the expanded pages of the website to create visual cohesion with the rest of the site.

The header bar previously discussed with the extra-level elements is present on every page of the website, and remains consistent throughout. Directly adjacent to the header bar is the top navigation menu. The navigation menu functions as a drop-menu which aids in the conciseness of the website by collapsing the navigation information under a category until selected (Kostelnick 20). It's arrangement at the top of each page with the header provides emphasis for the menu (Kostelnick 17). The use of navigational bars on the website is an example of a web-specific convention with which audiences are now familiar (Kostelnick 40). By providing navigation bars for the audience, the ethos of the website is supported by reassuring readers and fulfilling their expectations for website navigation (Kostelnick 22).

The website also provides navigation features in the footer. Hyperlinked categories that align with the same categories of the top navigation drop menu are accessible in the footer of each page of the website. The hyperlinks provide a supra-level access point for all pages of the website. One additional web-specific point that Kostelnick makes is that the presence of hyperlinks and navigation menus in websites means that the overall arrangement of the website pages is left solely to the reader. The pages are dynamic, and therefore arrangement is virtually random, depending on what links the reader activates (Kostelnick 15).

The background emsCharts wallpaper provides the backdrop for each and every page of the website. The wallpaper displays a repeating emsCharts logo vertically oriented with a dark-gray to light-gray figure-ground contrast. The purpose of the wallpaper is to provide visual interest for the audience while accounting for differences in browsers and individual screen resolutions. Certain uncontrollable factors such as variances in browser speed and type, screen size, quality, and resolution can all have an effect on the clarity of the website for the audience. By taking these items into consideration, and adjusting when possible, the affect may not be as detrimental.

Recommendations

Although the presence of the wallpaper has a purpose, it was revealed through user testing and other contextual research that users noticed the wallpaper and found it visually distracting. Some

users commented that it gave the perception of blank or incomplete space waiting for content. Although the background should be visually interesting, it should not take the focus off of the main panel of the website. The design right now is pulling too much focus from the main panel of each webpage.

One solution to this would be to decrease the amount of contrast between the light gray logo and dark-gray ground. This would allow the background pattern to be less visible and therefore less distracting. Additionally, the wallpaper would probably benefit from a gradient or gradual fade-in/fade-out of color from top to bottom. This would aid in taking the focus off of the background and placing more focus on the central panel of the website.

References

Kostelnick, Charles, and David D. Roberts. *Designing Visual Language*. Needham Heights, MA: Allyn & Bacon, 1998.

I would like to thank you for the opportunity to pursue this project. I am available at your convenience to discuss the details further. Please do not hesitate to contact me with any questions. I can be reached via email at the following address: Lindsey Kelley - lcd4467@sru.edu