

Comparative Study between Various Aspects of the Academic and Nonacademic Institutions Websites

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ABSTRACT

Designing a good Web site for an academic institution has now become a highly specialized field as more and more educational institutions understanding the magnitude of having an online presence. Web site designing for educational institutions involves creating a web site that is only functional but is attractive, informational and dynamic as well. An educational institution's web site is now more than just an informational site, it works to advertise and promote the particular school, college or university's image. On other hand, with regards to the nonacademic and commercial organizations, we found that the degree of importance of website in running a business depends on the type of business. So, the Websites play an important role in advertising and maintaining business at an international level. This paper will attempt to shed some light on the main difference between the criteria that differentiate between academic and nonacademic institutions specially that is related to design, template, and software available to be guided with as we go on evaluating the performance of both Webpages of educational and commercial purposes.

1. INTRODUCTION

Web site designing for educational institutions is now becoming increasingly specialized in today's world. An educational institutions web site design should be clear, precise, easy to understand, interesting and informative all at the same time [1]. On the other hand if we investigate the rules and criteria that are used in designing the website of the commercial purposes, we will find that many companies today have benefited significantly from the use of corporate websites. The use of websites

in export marketing boosts sales through ease of communications and transactions, and publicly traded companies with corporate websites have seen steady increases in stock activity due to their ability to post up-to-date information [2]. In other words, corporate websites increase visibility and convenience for customers. Visibility of a company or brand—how easily it can be viewed—contributes immensely to brand recognition among consumers. More and more, companies are losing customers to those businesses with websites. This is because they are more visible, as websites enable people around the globe to visit the business, and more easily recognized. This problem could easily be resolved by setting up a corporate website; not only will it enable the company to release time-sensitive information, but it is an effective way of increasing visibility in every part of the world [2].

Web site designing for education institutions involves employing a system that empowers the non-technical faculty, staff and students to create, update, manage, and maintain massive amounts of content within the site itself [1]. When deciding to design a web site for educational institutions, the following points should be kept in mind: Make sure you plan the site and consider all the options and map them out; Make a blueprint of how your site will be and how it can further expand with time; When building a website, do so gradually making sure all the relevant information is there; Keep it simple and accessible for all users including those with special needs; Use functionalities that are unique to the web making it easier to navigate around the website and seem interesting at the same time, like use hyperlinks, graphics or small animations; Always remember your target audience; Make sure you invite regular

feedback on how others view your web site if it can be more user-friendly; Update your site regularly; Constantly review your site and ensure that the information you provide is regularly updated; As an educational institution the web site should enable current or prospective parents and students to [1]:

- Get an overview of your institution, its philosophy and workings
- Get an overview of the programs offered and/or the curriculum
- View the work done by those in the institution
- Read your institution's newsletter
- Find out the date and time of an event which you are running such as an athletic meet or a student pep rally
- Send email to teachers and/or lecturers within the institution
- Check homework schedules
- Get involved more in the school/college community
- Understand the student life
- Have online communities that showcase your institution's strengths
- Have a link with the outside world in general, such as options for home-school links and overseas collaborations

A well-organized site will help users find key information quickly. It also will make the experience of using the website more coherent, intuitive and satisfying. Additionally, intuitively organized information architecture will help to ensure that all of the phases of the website development run smoothly and efficiently [3]. In fact, it can prevent time-consuming and costly alterations to the visual design and site development by identifying required features, the number and location of navigational links and the placement of content early in the process. If the site is being built in a content management system that allows editors to add their own pages, the site may grow quickly, sometimes in confusing ways. However, if we have planned our organizational structure well, we will be able to easily identify the most appropriate/intuitive location for this additional information [3]. Existing research has investigated factors responsible for website effectiveness. In this context, studies describe different characteristics related to websites such as information quality, website

loyalty, consumer shopping experience and usability. Websites serve different purposes—shopping, information gathering, entertainment, research, and others. Hence there are different "categories" of websites. These categories include among others, retailing websites, news websites and search websites. Much of the research in this area has been on websites belonging to one particular category and has focused on a few parameters that influence website success [3]. Although there are not many studies that analyze and compare characteristics of websites belonging to different domains, academic literature and business sources provide preliminary evidence that customers expect websites of different categories to be designed differently from one another, depending on the task and purpose associated with the website. Therefore the relative importance of a particular website characteristic varies, depending on the domain to which the website belongs.

Some parts of the typical Web checkout process are particularly annoying examples of what we call "technology steps"—actions that are not part of the user's agenda but are present because of the failure to overcome or work around limitations in the technology. The "recalculate total" or "update order" button is a common example. Recalculating the total is not the user's problem; it should happen automatically anytime the form has been changed. There are dozens of ways to achieve this behavior on the Web. Perhaps the worse sin in the form of a technology step is allowing user entered data to vanish through use of the back button [13]. Never lose, discard, or corrupt user input. Requiring the user to re-enter the information in a long form is one of the surest ways to lose a sale and possibly a customer. Another technology step that mars the final stages of the purchasing process is the need to change the quantity to zero to remove an item from the shopping cart. Best practice provides a button or glyph to remove an item.

2. RELATED WORKS AND LITERATURE REVIEW

2.1. Characteristics of a Good Websites

A number of characteristics can be used to describe websites. *The first* of these is related to the content of the information on the website. Researchers have suggested that

the information should be relevant to the purpose of the website, easy to read and comprehend, and useful. It should also be of adequate scope and depth and current. *Second*, the navigation characteristics of the website are also important. Navigability depends on the manner in which the information is organized and arranged, in terms of design, layout and sequencing. Information organization also includes aspects such as the number and effectiveness of hyperlinks, and the overall organization of the information. These characteristics affect the ease with which the website can be navigated [4]. *Third*, the website should be easy to use. It should be designed so as to facilitate effective completion of the tasks associated with it. This property has been variously referred to as usability and ease of use. The extent to which a website is fun to use and visually appealing is seen to be an indicator of how easy it is to use it. The use of graphics, multimedia and other interactive elements also makes the website interesting and easy to use. Features such as search engines and shopping carts make it easy to interact with websites. Overall the ease with which the website can be used enables users to accomplish their purpose and goals at the website with effectiveness, efficiency and satisfaction.

Fourth, personalization characteristics and the capability to cater to customized information requirements of specific groups of customers are important aspects of website design, and make it easy for customers to use the website [4]. For instance customization capabilities such as the "one click" feature or "My Yahoo" features help customers to easily return to specific information and make it easy for them to interact with the website. Customization capabilities also include response related features such as search capabilities and shopping carts. *Finally*, the technical properties of the website are also seen to be important characteristics. Security features are determined by provisions for user authentication and secure transactions. The access speed is characterized by how fast the website can download its pages and how fast it can display successive pages. A third technical property is the accessibility or availability of the website. Accessibility is important because if the website is not available on a sustained

basis, browsers are not likely to return to it. Accessibility and access speed depend on the overall technical reliability of the website and are dependent on the underlying IS infrastructural platform.

2.2. Differences in Website Functionality

Recent studies have suggested that users who visit websites do so with a variety of goals, predispositions and purposes. Hence websites in various categories should have different combinations of properties, depending on user requirements and the purpose of the website. In other words, the different website characteristics should be emphasized to varying extents. In a study of website usability characteristics across four different kinds of websites (airlines, bookstores, auto manufacturers and car rentals), Agarwal and Venkatesh [5] found that each domain differed in the extent to which various usability criterion are valued by users. For instance, they found that customers did not think that the extent to which the website engaged the customer emotionally was equally important, for all the four varieties of websites. Similarly, it was found also that in the case of retail websites, users valued website security over other characteristics such as information content and privacy. Other studies on retail websites suggest that information content, ease of use, and trust and security are characteristics that are valued by customers to different extents. Chung and Tan [6] in a study of news and information search websites suggest that perceived playfulness, as given by the "extent to which the individual perceives that his or her attention is focused on the interaction with the World Wide Web; is curious during the interaction; and finds the interaction intrinsically enjoyable or interesting," is an important indicator of the extent to which they would use these websites. They further suggest that perceived playfulness is influenced by navigation properties, ease of use, feedback and website content. Hence there are indications that all characteristics are not equally important for all categories of websites.

3. AN OVERVIEW OF WEBSITE DESIGN PHASES

Fig.1 illustrates an overview of the Website Design (WSDM) method [17]. As shown from this fig., the

first step is to define the Mission Statement. The Mission Statement should express the purpose and subject of the web site, and declares the target audience. Based on the Mission Statement, the Audience Modeling is performed, in two steps: Audience Classification and audience class Characterization. During the Audience Classification phase, the different types of users are identified, while during Audience class Characterization, characteristics of the different Audience Classes are given. Next, Conceptual Design, in three steps: Information, Functional and Navigational Modeling. During Information Modeling we observe what kind of information is needed, while in the Functional Modeling phase we observe the functionality. The Navigation Design phase, we consider the global navigation through the information and the functionality. The next phase, Implementation Design, performs Page, Presentation and Logical Database Design. During these phases, grouping in pages, specifying the look and feel, and designing the database is included. The logical data base schema can be derived from the Business information model, which is made during the Conceptual Design [17]. The last phase, Implementation, is the actual realization of the website using the preferred implementation environment.

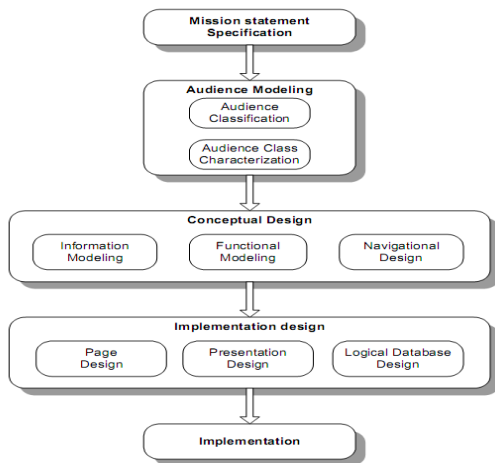


Fig.1 an Overview of Website Design phases [17]

With regards to the university (academic institution) site structure, we should figure out what features and capabilities that we need and knowing how we will use them before we design the layout, place appliances and plugs, and select tiles, curtains and countertops. Good web design requires solid site architecture based on the site's goals and

target audience established in the project brief. The deliverables from this phase are:

1. Content Outline
2. Site Diagram
3. Page Description Diagrams
4. Wireframes

These four deliverables are dependent on each other and need to be completed sequentially.

• Content Outline

Working closely with our clients, create a list of all existing content. Brainstorm content that needs to be created for the site. Review the list of content, trimming anything that does not match the goals or audience needs as stated in the project brief. Take time to think about the future and how the site content might need to grow. Make sure we leave room for growth. Next group our content into categories. As we categorize our content, considering getting user feedback through a card sort. Once our categories are established, create an outline of our content and review it with our clients for accuracy.

• Site Diagram

Take our final content outline and create a sitemap or site diagram. A site diagram is just a visual representation of our content outline and site structure. We can use Excel, Visio or Omni raffle to create our site diagram as shown in Fig.2.

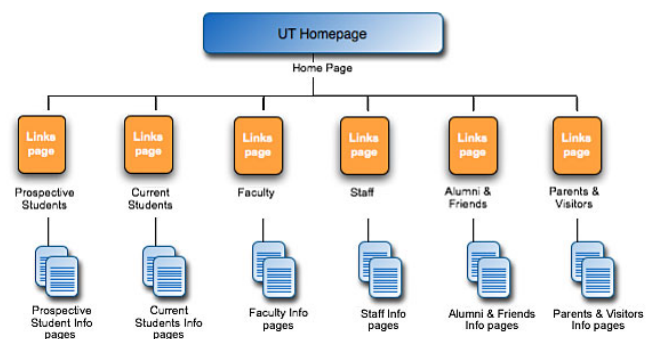


Fig.2 Sitemap Structure of the Academic Institution

• Page Description Diagrams

Many Information Architects are now recommending the use of Page Description Diagrams (PDD) as a step before wireframes or even as a replacement to wireframes. The focus of a PDD is two-fold:

1. What content belongs on this page
2. What is the priority of each chunk of content

A common layout for the PDD is to use the horizontal access for priority. For example, a PDD for any give page might have three columns. The first column would list the high priority content. The second column would list the medium priority content. The third column would list the lowest priority content. The advantages of the PDD over the wireframe include:

- 1- Clarifies all content for a given page
- 2- Clarifies the priority of each chunk of content
- 3- Completely removes visual design (color, font, and placement) from this stage of the conversation.

• Wireframes

A wireframe is a non-graphical layout of a web page. It is a simple drawing of the chunks of information and functionality for each page in our site. We should create a wireframe for the home page, each unique second level page and any other significantly different page on the site. Wireframes include the containers for all the major elements of the page. Elements include navigation, images, content, functional elements (like search) and footer.

4. STANDARDS THAT RECOGNIZE THE ACADEMIC WEB SITES

Academic Web sites communicate the brand and mission of the various institutions. Mainly, they are used by prospective students to learn about an institution and then used later to apply [7]. Current students use them to pay tuition bills, register for classes, access course

materials, participate in class discussions, take tests, get grades, and more. Online learning and course-management software programs, such as Blackboard, continue to increase the use of Web sites. They are now an important learning tool for the entire campus community and the primary communication tool for current students, parents, alumni, the community, donors, and funding organizations. Web site standards have developed since the 1990s. Usability and accessibility are now important tenets for Web site designers, especially for educational institutions. As a result, campus Web designers or outside consultants are often responsible for designing large parts of the academic Web site. As Web sites have grown, ongoing maintenance is an important workload issue. Databases and other technologies are used to simplify daily updates and changes to Web sites. This is where the academic template fits in.

An academic template can be defined as a common or shared template used to control the formatting of Web pages in different departments on a campus. Generally, administrators will mandate the use of a specific template or group of templates. This mandate includes guidelines for such things as layout, design, color, font, graphics, and navigation links to be used on all Web pages. Often, the templates are administered using content management systems (CMSs) or Web development software such as Macromedia's Contribute. These programs give different levels of editing rights to individuals, thus keeping tight control over particular Web pages or even parts of Web pages. Academic templates give the Web site administrator the ability to change the template and update all pages with a single keystroke. With regards to the education sites, we see that the on-line course delivery is a major request. Blackboard seems to be the dominate software for on-line delivery. A quick Google for other on-line software shows WebCT, Digital Think, AuthorWare and GeoLearning. Another quick browse through college sites shows an overwhelming use of Blackboard. Blackboard was used at many colleges. An example of an html distance class site is shown in Fig.2. Blackboard includes common links such as syllabus, assignments, etc. It also allows us to create our own links. Students log into Blackboard and can view course material, post

to discussion boards or participate in on-line chats. The education site is too interested in satisfying the following [7]:-

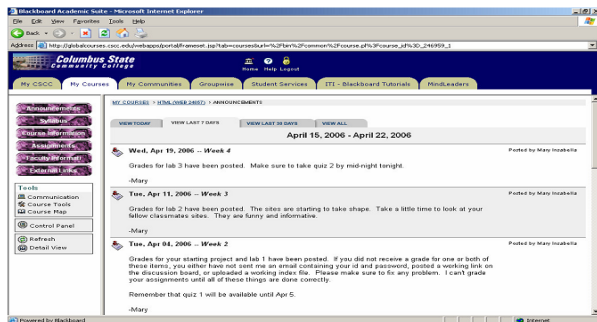


Fig.2 An html distance class site [7]

a- *Test generators*; Creating quizzes and exams to be taken on-line can be done through Blackboard's tools or through third party software tools. Such tools include *Respondus*, *Articulate*, *PrimeExam* and *QuizMaker* to name a few. These tools allow us to take tests created in a word processor and upload into a web delivery format.

b- *Screen capturers*; many on-line course sites offer video and/or audio instruction modules to enhance the web experience. Some capturing tools include *Camtasia*, *Illuminate*, *Captivate* and *Screencast*. These video presentations may record a lecture or demonstrate using a computer or calculator. While this kind of enhancement works well for users with digital connections, dial-up users find it takes quite a while to download the files.

c- *Accessibility*; Accessibility issues are another issue that must be addressed when creating education web sites. Federal guidelines such as Section 508 Standards are mandatory for federal and state websites. Voluntary standards such as Web Content Accessibility Guidelines.

The following actions are encouraged to be exist in the educational website:-

Check the HTML1 of all new web pages. Make sure that accessible elements are used, including alt tags, long descriptions, and captions, as needed.

If images are used, including photos, graphics, scanned images, or image maps, make sure to include alt tags and/or long descriptions for each.

If you use online forms and tables, make those elements accessible.

when posting documents on the website, always provide them in HTML or a text-based format (even if you are also providing them in another format, such as Portable Document Format (PDF)).

In view point of designing well website for the academic institution, it is recommended to follow up the following criteria to fulfill well the user requests and achieve best utilities:-

I- Ease of Use; In order to let the website more attractive to the users, so the usability of it should be easy as the accessibility of users to the requested information should be smoothly and too easily without any complexity or delay since time of the user is too expensive and the internet service provider is working as the user computer is connected across the network.

II- Targeted Sets of users; The process of knowing the characteristics of the sets of users whom will use the website specially whom having special types of skills will assist in determining the nature of the designed website to be compatible with their qualifications. Also, preparing the computer sets that user will use it from accessories or software either on homes or the institution.

III- Design Pattern; following up certain specified design pattern of all website pages will guarantee the familiarity between these pages and user, accordingly encouraging him to use it effectively with high efficiency for all contents of it.

IV- Approaches of presenting the information; although using various shapes to present information (images, figures, text, and video) can offer it easily on the network websites; however excessive use of it may causes barrier in accessing the information and may deny some users from accessing especially if they have not the programs that run these information files.

V- Readiness to meet the requirements of use; in order to let all users utilize efficiently all contents of the website in spite of diversity that exist in their computers and programs, the design team should study the technical aspects of the user equipment's as explorers and the type as well as speed of connecting computers with the Internet.

VI- Make sure the public consideration of the pages and their harmonization; the design team should utilize from the opinions of others especially whom use the website concerning the page shape and template and this will be applied on the color compatibility, background used in the pages, font sizes and types of the used fonts.

Regarding the academic institution website structure, we see that the University website is focused around the user and their needs and purpose in visiting the site, regardless of which School or department serves that need.

• Audience-focused

The top-level sections of the website are based on the different audiences using the site whom cover:-

- Prospective students
- Business and community
- Alumni
- Current students (students do not need to log in to see information aimed at current students)
- Staff (there is no staff 'intranet' - all information for staff is available on the website with small pockets of individual pages being password-protected)

In addition there are three topic-based areas which serve external audiences:

- Research (to showcase the University's research)
- About us (general information about the University)
- Social enterprise

All pages on the site will ultimately fall within one of these top-level sections and these form the site's global navigation (found across the top of every page).

• Content development

Content can be in the form of copy, images, video and audio clips, FAQs, and downloads. The website is built using a content management system (CMS), which allows content to be re-used rather than duplicated if that content is required in more than one place.

1. Categories

Content is added to the website by creating documents, FAQs or downloads. Each item of content can be assigned one or more categories from the taxonomy. The category applied to an item of content will determine where the information appears on the website.

2. Content owners

Each document or download in the CMS has one owner and that owner is responsible for keeping the information current. A document may have several sub-pages, so the owner will also be responsible for the content on all the sub-pages of a document. Content will only be generated by whoever 'owns' that content, for example, the Timetabling manager will create and maintain content about student and staff timetables. Other content owners may add contextual links to Timetabling information, secure in the knowledge that the Timetabling manager will be keeping the Timetabling information up-to-date.

3. Tone and style

Marketing have overall responsibility for the tone and style of content on the website and for the quality and deployment of images across the site.

• Navigation

The left-hand navigation for the site is created from the category names, document titles and subpage titles. Page titles should be brief, but informative. We should also aim to use vocabulary which is meaningful to the intended audience. This can be verified by ongoing usability testing and by regular interrogation of web analytics and search terms.

• Contextual links

When adding contextual links in a page, we should be careful that the page we are linking to is in the correct area of the site. If multiple categories have been applied to a document, then it would be possible to be linking to the document in a different audience area and this would result in the visitor becoming lost and possibly unable to find the information they were looking for.

• Related links

If you wish to link to another area of the site which may be related to the content we are producing but does not fall within the same section, there is the option to add a related link. This will be shown on the right-hand side of the page. Related links are maintained by the web team.

We can summarize the Website structure of the universities as follows: the information architecture of websites includes an organization scheme (content categories) and a structure (usually hierarchical).

• Organization schemes

Information can be structured according to a variety of organization schemes as:

- **Alphabetical:** phone directories, dictionaries
- **Chronological:** diaries, event calendars, publication archives
- **Geographical:** travel, news and weather
- **Topical:** yellow pages, newspapers, academic courses
- **Task oriented:** menu systems on desktop applications, e.g. file, edit, format menus
- **Audience specific:** students, staff, visitors
- **Metaphor driven:** desktop computers use several, e.g. file and folder system, recycle bin

On the web, hybrids of two or more of these schemes are usually used. Organization schemes work best when users understand them. Work with target audience groups when

creating or refining the site's organization scheme. Card sorting and content agreement analysis are user-centered methods for designing an organization scheme. Usability testing can confirm that the resulting scheme is workable. Avoid designing an organization scheme that mirrors the structure of the organization. Users who are unfamiliar with the organizational structure may find it hard to locate resources. Also, organizational changes will require changes to the organization scheme.

• Organization structures

There are two main approaches to organization structures on the web: hierarchical or top down and bottom up as in database models. Some sites also use a linear structure, though this is generally unsuitable for anything other than very small sites.

• Hierarchies (top-down approach)

Hierarchies are simple and effective ways of organizing information and everyone is familiar with how they work. Three important things to remember about designing hierarchies are:-

1. Hierarchical categories are usually mutually exclusive, however, there may be good reason for cross-listing between categories
2. Aim for a balance between breadth and depth; if a hierarchy is too broad, users may have to choose between too many options; if it is too deep, they may have to click too many times to reach the content
3. Don't restrict yourself to the hierarchical model; some content may be better organized using the database model.

• Database models (bottom-up approach)

The database model is useful with relatively homogenous content. Course information and staff directory content are good examples. In the database

model, metadata is the key. Here, the metadata relates to structural elements of content objects. For example unit code, unit name, unit description, prerequisites and year offered are elements of the unit content object.

- **Linear structure**

Use of a linear structure assumes that users will move through the content starting from point A and progress through an ordered series of page to point Z. This may be useful for material that requires a linear approach, e.g. some instructional material, but this approach is generally unsuitable for websites with more than a few pages.

5. RULES AND CHARACTERISTICS OF NON ACADEMIC WEBSITES

For organizations engaged in electronic business, the corporate website has emerged as the single most important interface through which transactions are carried out [7]. This being so, appropriate design characteristics are required to make websites effective. Customers expect websites to be designed differently, depending on the task and purpose associated with the website. There are six critical characteristics of websites and the relative importance of these characteristics varies across categories. For organizations using the Internet to conduct commercial and non-commercial transactions, the website has emerged as their "window to the world." It is the interface through which employees and customers carry out their business with the company. Indeed the number of tasks that are accomplished on the Internet is increasing every day. This being so, appropriate design characteristics are required to make websites effective. Therefore the study of website characteristics and their influence on website performance forms an important aspect of framing strategies for website design. Most of websites we visit would be considered commercial in nature. Like education sites, there is a need for clarity and usability in these sites. Web site conversion refers to the likelihood that someone coming to a commercial site will actually purchase something. According to w-edge Design (<http://www.w-edge.com>) 98% of site visitors do not buy anything. Even people, who come to a site ready to buy, only complete the

transaction 30% of the time. "Most failures in getting a customer to convert (to a sale, lead, subscription, registration, etc.) stem from a perception of a lack of value, trust, confidence, security, or relevance," writes Eisenberg Bryan in *Persuasive Online Copywriting*.

When creating commercial websites, it is important to understand how people scan the site. The Stanford Poynter Project discovered that when people view websites, their eyes to the text first, particularly to captions and summaries. They scan graphics afterward, so copy is deemed more important than graphics. They also discovered that the center of the screen is the prime area to sell a product. The left side of the page functions well for navigation and the right side for action. Users generally ignore the bottom of the screen. Good Site Design Practices (<http://goodpractices.com>) recommends simple pages that are platform-independent. These pages download faster. Customers who have to wait for a site to download will go on to another. The site also recommends using a validator to test site's compliance with common HTML specification (w3c.com has a validation service). Using color wisely can make the difference between someone staying with our site or leaving it abruptly. Dark backgrounds are hard on the eyes and are harder to print. Fig.3 illustrates a screen shot of a site which allows us to experiment with color combinations, as well as giving the correct html color code [7]. Designing the nonacademic websites verifies the following activities:-

A. Searching

Since many people find websites through the use of a search engine, it's important to know how they work and how to get our site to the top of the list. Search engines vary in the way their spider works, how their database is designed and the algorithms used to give relevant and timely responses to user's queries. A search engine works by sending an automated "crawling" process, called a spider. The spider searches through internet sites and "ranks" sites based on the following content (www.searchengines.com):

- Location of search terms in the document
- Relational clustering
- The site's design
- Link popularity
- Click popularity
- "Sector" popularity
- Pay-for-placement rankings"

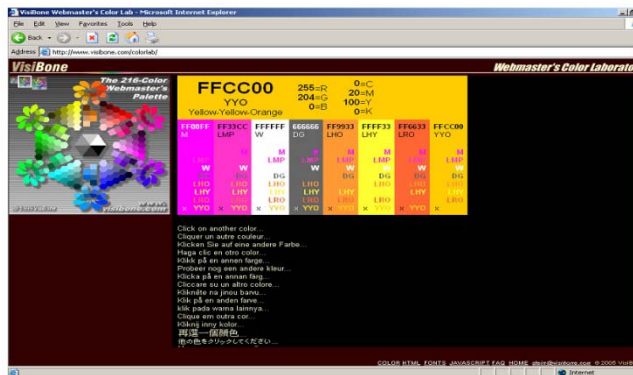


Fig.3 Screen shot of a site that give the correct html color code [7]

B. Metadata

The use of metadata in searching is becoming standardized in the development of Resource Description Framework (RDF), which is a declarative language which uses XML to represent metadata. According to the w3.org site:

RDF provides a framework in which independent communities can develop vocabularies that suit their specific needs and share vocabularies with other communities."

Standardizing vocabularies makes searching a database a much more precise endeavor. People using the internet for research will find their responses to be more directly on-point. The aim is to reduce the "hits" and have the hits be more on-target to the searcher's needs.

C. Error Messages

One of the most frustrating things about working with computers, in general, is dealing with error

messages. Whether they are generated by your computer, network, system or website, they can be irritating up to infuriating. On the web, error search engine works by sending an automated "crawling" process, called a spider. The spider searches through internet sites and "ranks" sites based on the following content (www.searchengines.com):

- Location of search terms in the document
- Relational clustering
- The site's design
- Link popularity
- Click popularity
- "Sector" popularity
- Pay-for-placement rankings"

Jakob Nielsen's Alertbox (www.useit.com) recommends the following guidelines for effective error messages:

- Explicit indication that something has gone wrong.
- Human-readable language
- Polite
- Precise
- Constructive messages can be hidden on an already overwhelming page.

6. MAIN BENEFITS RETURNED FROM GOOD WEBSITE TO NON-ACADEMIC INSTITUTIONS

There are some important goals can be achieved if we by develop good website [18], below some of these goals:-

a. Far Cheaper and Much More Flexible Than Print Advertising;

the Internet is extremely different from print advertising in that space is cheap, our advertisement is accessible for a longer period of time, the content can be changed without having to ask someone to do it for you (if we use a content management system) and we can potentially reach a wider audience. This is not to say that we should not use other forms of advertising at all We can use it to entice people to visit our website and find out about our institution and potentially open two-way communication between the potential customer and a sales person (in case of non-academic institution case)

b. Market Expansion; The Internet has allowed businesses to break through the geographical barriers and become accessible, virtually, from any country in the world by a potential customer that has Internet access .

c. Diversify Revenue Streams; A website is not just a medium for representation of our company, it is a form of media from which everybody can acquire information. We can use this media to sell advertising space to other businesses. A recent trend has risen where businesses feature their very own directory of complimentary services, where the visitor can search for information on a business that will enhance the use of your service. The business sells complimentary businesses a listing in their directory. A good example is a catering company featuring a directory with businesses such as event co-ordinators, electronic equipment rental companies, etc .

d. 24 7 365; No more turning customers away when its time to close shop, putting up a note saying closed for public holiday , or leaving an irritating message on your answering service specifying your trading hours tell them to visit your website for information they are looking for .

e. Offer Convenience; It is far more convenient for a person to research a product on the Internet than it is to get in a car, drive somewhere and look for or ask someone for information on a product. Also, a potential customer won't have to judge a call center agent to determine whether he/she has their best interests in mind, or just wants to make a sale.

The potential customer can visit our website whenever they like in their own privacy and comfort, without the stresses and distractions that exist in the real world. Our website is a self-service medium for example, instead of having to wait in a long cue to pay our TV License; we can now do it electronically through the TV License website.

f. Add Value and Satisfaction; by offering convenience, a point of reference and that

touch of individualized customer service, we ultimately add value to our offering and our customers experience a higher level of satisfaction. Our website can add value in other ways too, by featuring tips, advice and general interest content we can entertain our customers. This will also help them remember us better .

g. Standardize Sales Performance; by looking at which approached / pitches have worked in the past and those which have not, we can produce the ultimate pitch and use it with our website, so that we use it on every customer. No more training of sales people and waiting for them to get a feel for your line of trade .

h. Improve credibility; A website gives us the opportunity to tell potential customers what we are about and why we deserve their trust and confidence. In fact, many people use the internet for pre-purchase research so that they can determine for themselves whether a particular supplier or brand is worthy of their patronage, and won't take them for a ride. The Internet also allows for Viral Marketing where our website visitors spread positive word-of-mouth about our business - our customers do our marketing!

i. Growth Opportunity; A website serves as a great place to refer potential investors to, to show them what our company is about, what it has achieved and what it can achieve in future.

j. Two-Way Communicative Marketing; Customers can quickly and easily give feedback on our product and/or marketing approach .

k. Cheap Market Research; We can use features on our website such as visitor polls, online surveys and our website statistics to find out what our customers like more and how they feel about certain aspects of our business to determine how we can improve our product and the way we do business.

7. CONCLUSION

There are various web design methodologies and strategies that use different mechanisms

and algorithms. However, none of them deals with integrating business rules during the website development process. In view point of designing a nonacademic websites we see that business rules which have been around since ancient times covers many human needs and their daily life business and therefore should be considered in parallel with other design issues. From our vision, regarding the nonacademic institutions, we see that it is too important to satisfy some basic elements in its website including [19]: A clear, concise mission statement, Proofread, thoughtful and professional content throughout; A business blog/news section to attract links and demonstrate credibility; Attractive, modern and standout design; A call to action; Design which showcases the content, not the page; Use effects, bright colors; Some empty space placed strategically; Pages that are easily consumable and scan-able; Clear hierarchy of information; Large, easily readable navigation buttons and finally Continuity throughout site design.

On other hand, regarding the academic websites that covers universities and high schools, the use of academic templates is only going to increase as institutional Web sites grow in complexity and importance. Libraries are an important part of institutions both physically—on campus—and virtually—as part of the campus Web site. Academic templates are part of a unified design scheme for colleges and universities. Web site designers to merge the best of the academic template to the best of the library site while not sacrificing users' needs. The result will be highly used, highly usable library Web sites that attract students and keep them coming back to access the fantastic world of information available in today's academic libraries. Also, in order to determine the most beautiful university website among a number of website, we would definitely rate the website best that has a charming appearance, a good way of handling my doubts and manage all of our needs at the same time. The more they fulfill these forms and factors they would be better for us. Same here is the issue with parents when they surf a University Website and they want to know how good or bad is a college or school and how they functionally represent their working. And the better they can represent themselves the better they are considered. There's a saying "what one sees is what one buys." And this completely is true.

REFERENCES

1. "Web site designing for Educational Institutions",
http://www.smallbusinessbible.org/websitedesigning_educationalinstitutions.html
2. "The importance of a business website",
<http://www.helium.com/items/1760241-why-corporate-websites-are-essential>
3. "Guide to Creating Website Information Architecture and Content"
www.princeton.edu/communications/.../IAguide2.pdf
4. Tarafder, "Analysis of Critical Website Characteristics Across Category Study of Successful Websites"
<http://www.allbusiness.com/technology/computer-software-customer-relation/1056608-1.html>
5. Agarwal, R. and V. Venkatesh. "Assessing a Firm's Web Presence: A Heuristic Evaluation Procedure for the Measurement of Usability," Information Systems Research, 13:2, June 2002, pp. 168-186.
6. Chung, J.F. and Tan. "Antecedents of Perceived Playfulness: An Exploratory Study on User Acceptance of General Information Searching Websites," Information and Management, 41, 2004, pp. 869-881.
7. Mary Insabella, "Designing Web Pages for Educational and Commercial Purposes", Proceedings of the 2006 ASCUE Conference, June 11-15, 2006, Myrtle Beach, South Carolina
8. How do Search Engines Differ from one another?" SearchEngines.com, 2000-2003.
<http://www.searchengines.com>
9. "Haiku Error Messages,"
<http://strangeplaces.net/weirdthings/haiku.html>
10. "Error Message Guidelines," Jakob Nielsen, Jakob Nielsen's Alertbox, June 24, 2001
<http://www.useit.com>
11. "Accessibility of State and Local Government Websites to People with Disabilities," U.S. Department of Justice, Civil Rights Division, June 19, 2003
<http://www.usdoj.gov/crt/ada/>
12. "Metadata Activity Statement," w3c Technology and Society domain, Aug 23, 2002
<http://www.w3.org/Metadata/>

13. "Web Site Development Information,"
kodehost, March 25, 2001
<http://goodpractices.com>
14. "The Secrets of Web Site Conversion," W-
edge design, January, 2006
<http://www.w-edge.com>
15. Kate Peterson, "Academic Web Site Design
and Academic Templates: Where Does the
Library Fit In?", Information Technology
and Libraries, December 2006
16. Larry L. Constantine, "Devilish Details:
Best Practices in Web Design",
Constantine & Lockwood, Ltd.
17. Jehad Najjar, "Business Rules & WSDM
Methodology of Web Design", M.Sc
Dissertation, 2002
18. [http://www.webworldindex.com/articles/12-
Benefits-Of-Having-A-Website.html](http://www.webworldindex.com/articles/12-Benefits-Of-Having-A-Website.html)
19. [http://thefuturebuzz.com/2008/03/05/what-
defines-a-good-small-business-website/](http://thefuturebuzz.com/2008/03/05/what-defines-a-good-small-business-website/)