

AN ANALYSIS OF WEBSITE USABILITY ELEMENTS TO INTEGRATE SET OF ATTRIBUTES AND HOW THEY AFFECT SEARCH ENGINE OPTIMISATION

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Abstract:

In the scope of a public university, the use of a internet site is turning into integral in assisting the day by day feature of the university. Public college web sites are now turning into extra like a hub that provides a variety of offerings for a number classes of users. With the specific kind of users, it posed a new undertaking for internet designers, specifically in time period of integrating the internet usability and aesthetics to make certain it is appropriate for all users. Both usability and aesthetics have its personal significance in the basic net overall performance therefore requires a acceptable integration mechanism. This lookup described the identification of a new set of attributes to help net designers in designing a public college internet site that integrates internet usability and net aesthetics. Using quite a few usability opinions models, usability attributes that are without delay involved with or influenced through aesthetic factors are extracted to structure a new set of attributes that will combine internet usability and net aesthetics. The attributes recognized had been learnability, readability, use of multimedia, navigation and loading speed. The attributes recognized will be beneficial for public universities net designers in designing a higher internet site that now not solely grant most desirable usability however additionally eye-catching aesthetics.

Key words:

Web aesthetics, web design, web usability.

INTRODUCTION:

A public college internet site is its face to the world as it performs the position of the digital consultant of the university. The internet site is

the first line of digital interactions between the universities and the customers can also it be the students, personnel or the public. Due to this, it is vital that the format of the internet site be good completed for it displays the photo of the universities. Websites are designed to furnish content material and offerings that serve a range of stakeholders' necessities which consists of students, school members, alumni and researchers. Potential college students can retrieve facts about admission details, modern-day college students can enquire about their examination effects or register for new courses, group of workers can observe the university's modern-day information and alumni can browse for bulletins involving job openings. Websites current new possibilities and challenges to establish, construct and manipulate consumer relationship. This is due to the fact the growing quantity of utilization of internet site due to a range of features it presents will end result in

similarly improvement of the internet site in time period of features for this reason developing new challenges. In this paper, it will first off talk about the lookup history involving the challenges in time period of integrating internet usability and internet aesthetics. Next, the methodology in figuring out the attributes are divided into two components which are usability mannequin choice and extraction of integrating attributes. The subsequent section will be the dialogue of the attributes that was once selected. Finally, the conclusion of the lookup will describe the contribution of the lookup and future work.

RESEARCH BACKGROUND:

One of the difficulties in planning sites is guaranteeing the convenience of the site. Web ease of use can be portray as simplifying the plan enough to guarantee clients, who essentially will in general be objective driven, can finish their undertaking as ideal and effortlessly as could be expected. Nonetheless, ease of use isn't the solitary territory that should be focused on in a website architecture measure. Originators and scientists the same accepted that ease of use was the primary justification dynamic clients' association with a specific

site . In any case, there is a contention that demonstrated that the clients' underlying tasteful reaction to sites which alludes to the unconstrained passionate response dependent on visual inclinations, significantly impacts if clients later accept the sites as usable. Sites that are seen by clients as excellent are likewise seen as usable sites. Convenience and visual style can be said as two significant viewpoints in website architecture. These two perspectives ought to be coordinated in the plan cycle. Site convenience (ease of use) ought to be a significant forerunner for saw visual allure (visual feel) of a site. Site convenience is a significant component of visual feel of the site. On the off chance that a site is hard to explore, it is hard for the clients to assess the site as outwardly engaging. This again shows the connection between site style and convenience and what it means for each other to create a quality site. Every component should not be excessively overpowering towards the other as a lot of consideration put on the stylish plan of the site will make the site look astonishing however will cause dissatisfaction since clients experience issues in finding what they are looking for because of its perplexing plan. A decent website architecture should

give magnificence and allure, yet in addition ideal degrees of ease of use, because of its persuasions towards the condition of the clients. In term of website architecture practice, ease of use and tasteful are two particular segments inside the general engineering of a site that ought to be look as discrete segments that ought to be planned in an equal way because of its impact to each other .To guarantee that the website specialists can plan a site that coordinates web ease of use and web style, ascribes that incorporates both segment ought to be distinguished to be created as rules for website specialists. These credits will guarantee that the convenience and tasteful part of the site supplement each other. There is deficient logical technique accessible to coordinate the web ease of use and visual style of a site

Website usability:

Consider briefly that a client plans to buy an item or potentially administration on the Internet. The client is perusing the Internet looking for the suitable item at the correct cost and in the long run arrives on a site where the item and cost is acceptable. On the off chance that the client experiences a blunder during the checkout method (or during perusing), no commitment

exists that will compel the client to get back to a similar site to endeavor the purchasing (perusing) measure once more. Truth be told, it bodes well to look for a contender site as it is essentially simpler to do as such than to discover how to fix the blunder, if conceivable by any stretch of the imagination.

Trust and credibility as a website usability attribute:

Barnard and Wesson (2003:258–259) have recognized the WU property trust similar to a basic achievement factor. As per similar creators, Internet clients have genuine concerns in regards to their protection on the Internet. Convenience, validity of data on a site and security all structure some portion of the WU trust trait (Barnard and Wesson 2003:259). Albeit a wide range of ways exist to address trust, Nielsen and Tahir (2001:10–13, 201) propose underscoring the accompanying data on a site as a feature of WU:

- security strategy
- about us
- organization outline page (organization esteems, supervisory group, and so on)
- criticism
- tributes

- contact data.

Eisenberg et al. (2008:32, 192, 195, 196, 240) concurs with Nielsen and Tahir (2001) on the WU sub-qualities and add that the WU credits of believability and trust are joined. Moreover, Nielsen (2005) states that a creator photograph (organization proprietor) can offer a more amiable impression, which thusly upgrades believability and subsequently trust. Furthermore, the photograph can likewise interface the virtual and actual world, making it simpler for the guest to identify with the proprietor.

Single page view, content and frames as website usability attributes:

Bevan (2005) analyzed the draft International Organization for Standardization or potentially Draft International Standard Page 2 of 9 Original Research

<http://www.sajim.co.za>

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(ISO/DIS 9241–151:2005) plan and convenience rules (International Standard for client focused plan of web UI) and the Health and Human Service (HHS) plan and ease of use rules (US Department of Health and Human Service). The HHS rules propose that the substance, page lengths, number of words and sentences ought to be restricted on a

site in light of a legitimate concern for WU. The ISO rules agree with the HHS rules and includes that content a site page should fit on the normal size of a presentation zone. Furthermore, the HHS rules recommend the utilization of edges in specific conditions whereby the ISO 9241–151 rules show that edges ought to be utilized with care. The HHS rules additionally recommend setting significant things to the highest point, everything being equal, showing that less accentuation ought to be applied to content while considering the WU ascribes trust and believability. Johnson (2007:169) states that an excess of text is 'awful composition' and is something that often happens on sites. The creator recommends as a rule that text on each page ought to be divided. The leftover content should then be split once more. Nielsen and Loranger (2006:30–35) deciphered substance from a somewhat alternate point of view and gauge that guests frequently see a page for 45–60 seconds. Similar writers gauge that a guest could peruse a limit of 200 words during that time-frame.

Images as a website usability attribute:

As per Ngindana and Weideman (2004), guests frequently lean

toward realistic based pages instead of text-based pages. Similar creators have tracked down that Flash as well as realistic pictures are tastefully satisfying to guests, particularly when utilizing designs as a component of a sites' route. It is in this way certain that graphical guides take into account simple guest route. George (2005:171,178) concurs and found that guests first notification tones and pictures prior to perusing from left to right and through and through, showing that guests above all else concentrate on pictures. Nielsen and Loranger (2006:247) accept that huge squares of text in pictures (text pictures) ought to be utilized with some restraint. The utilization of text pictures isn't suggested for various reasons

Search engine optimisation contradictions:

Conceptually the single most important SEO element (namely content) is negatively affected by:

- trust and credibility (i.e. privacy policy, about us, company overview, feedback, testimonials and contact form)
- single page view
- minimising content
- frames

- keywords
- images.

Search engines depend on content to fully understand the purpose of any given website. Trust and credibility are both built by the use of generic content which does not assist the search engine in identifying the purpose of the particular website. The lack of keywords along with minimising content will limit the search engines' ability to be more successful at an interpretation of the websites' purpose Table 1 illustrates each of the three major search engines with their respective search engine market share.

Search engine market share	2004 Web Side Story (Sullivan 2004) ¹	2006 Nielsen/NetRatings (Sullivan 2006) ²	2009 Nielsen (Searchenginewatch 2009) ³
Google	40.90%	49.20%	64.60%
Yahoo!	27.40%	23.80%	16.00%
MSN/Live/ Bing	19.60%	9.60%	10.70%
Other Search Engines	12.10%	17.40%	8.70%

TABLE 1: Search engine market share (Sullivan 2004; Sullivan 2006; Searchenginewatch 2009).

Methodology :

The accompanying site ease of use credits, which are in clash with SEO components, were inspected in a pre-test posttest, quantitative methodological plan:

- Trust and believability: Essential for WU, yet increases the value of SEO as the non related substance could weaken accentuation for positioning purposes.
- Single site hit and substance: Essential for WU, yet web search tools depend on substance to all the more likely decipher a site's substance and catchphrase accentuation for positioning purposes.
- Keywords: Avoiding catchphrase over-burden is fundamental for WU. In any case, web search tools rely upon catchphrase thickness and consideration for accentuation purposes regarding positioning.
- Images: Essential for WU regarding being tastefully satisfying to guests. Sadly, web search tools can't make a precise translation of pictures and would thus be able to diminish substance and watchword accentuation regarding positioning.

The essential investigation incorporates the utilization of a current site (made by a non-specialized originator with insignificant information on WU and SEO), which was utilized as the control site. Another site was created by executing the above WU ascribes and overlooking all conflicting SEO components, named the trial website(EW:

www.copywriters.co.za/ppc/). The EW was put in a subdirectory of the CW (/ppc/), permitting the EW to work autonomously from the CW. To guarantee honesty of the test, a robots.txt document was put in the base of the www.copywriters.co.za site, unequivocally training the internet searcher crawlers not to record the EW (/ppc/). Furthermore, no connections of any sort were made from the CW to the EW and the other way around. The EW is in this manner available just through the URL (for example by means of an immediate connect to the EW).

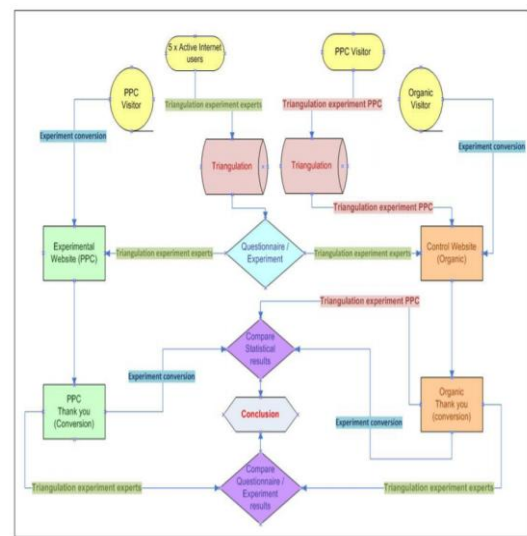


FIGURE 1: Research design diagram.

FINDINGS & DISCUSSIONS:

From the extraction of the models, a new set of attributes was established that function as the integrating attributes between web usability and web aesthetics. The attributes are as follows:

A. Learnability

The greater part of the hypotheses depicted that the stylish plan of the site ought to advance a steady plan. The plan consistency is imperative to accelerate client's learning and convenience of that site level. The catchphrase learnability is picked rather than consistency is because of the way that learnability is the principle concern. Consistency is the best approach to accomplish better learnability. Most speculations and models remembers learnability as a critical characteristic for guaranteeing web ease of use (User Experience Model, Web Design Perspective (WDP), and sans barrier Evaluation Model).

B. Readability

In planning sites, website specialists should guarantee that the substance of the site is coherent. The greater part of the speculations examined beforehand have incorporated that the comprehensibility of the substance as a critical trait in guaranteeing the ease of use of a site. As far as giving a comprehensible substance, the Voluntary Product Accessibility Template (VPAT), Barrierfree Evaluation Model and the SCANMIC Model portrayed the tasteful components that impact intelligibility is the legitimate

utilization of textual styles, tones and page format

C. Use of Multimedia

Two speculations (sans barrier Evaluation Model and SCANMIC Model) incorporates the use of sight and sound as the critical trait in guaranteeing web ease of use. These two hypotheses depicted that most website specialists will incorporate different sorts of media as devices to pass on data and furthermore to pull in the consideration of clients of the site.

D. Navigation

Regarding convenience, usability is vital. A site ought to have the option to be utilized without any problem. One approach to guarantee convenience is through guaranteeing acceptable site route. Particularly for a state funded college site, where the substance of data is immense and worries with different capacities for different clients, an appropriate route is critical to guarantee that clients can explore through the site with no issue. In the User Experience Model, no particular notice of route is incorporated, yet there is a conversation on productivity. With an appropriate route, the site will be more proficient in giving the data required by clients. Then again, the Voluntary Product Accessibility

Template (VPAT) referenced availability as one of the characteristic. A legitimate site route instrument will guarantee that the substance of the site is effectively open. The need of a legitimate route instrument is explicitly talked about in the without barrier Evaluation Model and SCANMIC Model as one of the critical property to assess web ease of use.

E. Loading Speed

In the Web Design Perspective (WDP), without barrier Evaluation Model and the SCANMIC Model, a site ought to advance access in an ideal way. One method of guaranteeing quick access, stacking velocity of the site is indispensable. Stacking speed is firmly identified with the use of sight and sound quality. Because of the idea of stylish components comprise of different interactive media, it is significant that the consideration of different sight and sound doesn't impact the stacking speed contrarily. These five ascribes will be utilized as the incorporating credits since it portrayed convenience dependent on tasteful components. Notwithstanding, these ascribes will additionally improve the general presentation of the site after the ease of use and stylish plan of the site was done in a methodical

interaction. There are different techniques that depicted the cycle in planning the ease of use and stylish of a site. The new arrangement of qualities will be utilized after the web convenience and stylish plan have been led. Figure 1 will delineate the use of the coordinating credits in the general website architecture measure.

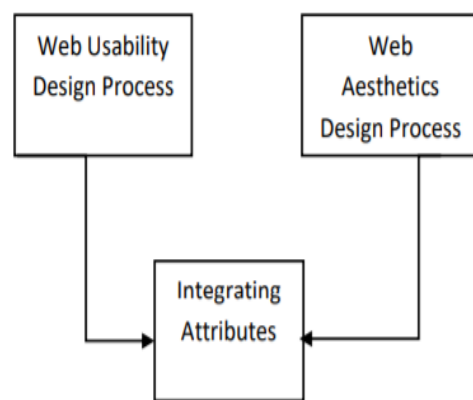


Fig. 1 Usage of Integrating Attributes in the Web Design Process

CONCLUSION:

The aim of this research is to identify a new set of attributes that integrates usability and aesthetics of websites. The attributes will be beneficial to the web designers in designing a better website and also contribute to the body of knowledge, especially in the area of web design and web usability. The attributes are meant to be used after the design of both usability and aesthetic is done through a comprehensive process and then used as a way to integrate both components. These attributes

are not meant to replace existing guidelines, but to be used as supporting resource to assist web designers in designing a public university website, especially in term of usability and aesthetic design through a more systematic and comprehensive process. Further research can be done to explore more about designing a better web usability and web aesthetic design process to provide a more comprehensive web design model that focuses on usability and aesthetics.

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