



'How Fast is Your Website? Usability in Action'

By Kevin Lee Elder

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Which is faster, Home Depot or Lowes? No I am not talking about Tony Stewart (#20), Jimmie Johnson (#48) and NASCAR. I am talking about using the homepages of these two companies to purchase a patio furniture set. That is the task and evaluation I gave to my Information Systems students in the System Analysis and Design class this past week here at Georgia Southern. One of my favorite statistics on the internet is that 90 percent of the internet traffic flows through less than 10 percent of the pages. How can less than 10 percent of the pages garner more than 90 percent of the traffic? One would figure the great majority of the revenue would fall to this 10 percent as well. My theory is usability. Quite simply those few web pages are much easier to use and therefore keep the customers coming back.

In System Analysis and Design we teach the students three main areas of design. The first is Process Design or what you want and/or need the system do. The second area of design is Data Design or what data will you be storing and manipulating in those processes. The third area of design is User Interface Design or what will the system look like and how will I interact with the new system. For User Interface Design I have found no better method to teach the students than to focus on Usability.

Several years ago Jacob Nielsen (Who worked on the User Interfaces for Sun MicroSystems), Bruce Tognazzini (Who worked on the UI for Apple) and Don Norman (who has written many popular books on usability such as *The Invisible Computer* and *The Design of Everyday Things*) got together and joined forces in the Nielsen Norman Group. I can not think of another area of research in Information Technology and Information Systems where the three leading researchers have joined forces to work together. The result is some great research that advises everyone on how to make their systems more usable for the average user.

In usability when applied to web pages and systems we look for several things in evaluating a site like Lowes or Home Depot:

Visibility of System Status - the system should always keep the user informed about what is going on, through appropriate feedback within reasonable time.

Match between the System and the Real World - the system should speak the user's language, with words, phrases, and concepts familiar to the user, rather than system-oriented terms.

User Control and Freedom - users should be free to select and sequence tasks (when appropriate), rather than having the system do this for them.

Consistency and Standards - users should not have to wonder whether different words, situations, or actions mean the same thing.

Help Users Recognize, Diagnose, and Recover from Errors - error messages should be expressed in plain language and specifically points out that there should be no codes.

Error Prevention - even better than good error messages is a careful design, which prevents a problem from occurring in the first place. Anticipate problems and design screens to avoid them.

Recognition Rather Than Recall - make objects, actions, and options visible. Zones should be separated by spaces, lines, color, letters, bold titles, rules lines and shaded areas.

Flexibility and Minimalist Design - allow users to tailor frequent actions and provide alternative means of access and operation for users who differ from the "average" user.

Aesthetic and Minimalist Design - a screen should only display information essential to decision making.

Help and Documentation - help and documentation should be easy to search, focused on the user's task, list concrete steps to be carried out, and not be too large.

Skills - the system should support, extend, supplement, or enhance user's computer skills, background knowledge, and expertise - not replace them.

Pleasurable and Respectful Interaction with the User - The user's interactions with the system should enhance the quality of her or his work-life.

Privacy - the system should help the user to protect personal or private information belonging to the user or his/her clients.

So who is faster, the #20 (Stewart and Home Depot) or the #48 (Jimmie Johnson and Lowes)? How do Lowes and Home Depot do on a Usability Evaluation? I'll let you try them out and judge for yourself. I will tell you one is doing a much better job than the other in their score for Usability in the evaluation of the Information Systems students and majors here at Georgia Southern University. Want to know your Usability Score? Contact me and I'll put a team of students on your website and see how fast you are?