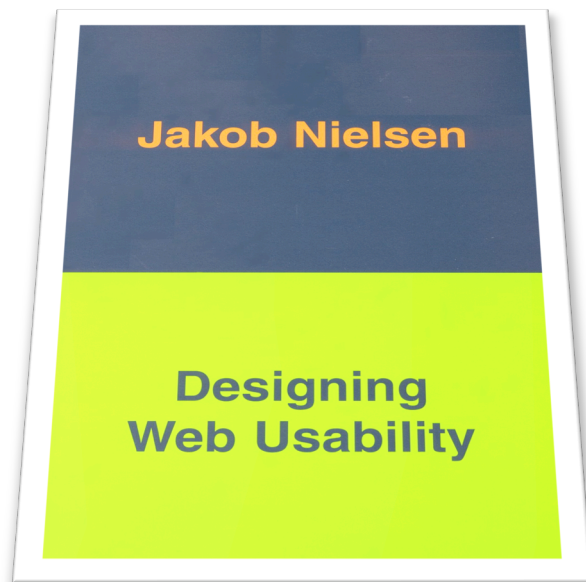


51Nuts.com

Book Extract



Web Usability...

- Usability rules the web. Simply stated, if the customer can't find a product, then he or she will not buy it.
- Web users exhibit a remarkable impatience and insistence on instant gratification. If they can't figure out how to use a website in a minute or so, they conclude that it won't be worth their time. And they leave.
- Users experience the usability of site before they have committed to using it and before they have spent any money, on potential purchases. The equation is simple:
 - In product design and software design, customer pay first and experience usability later
 - On the web, user experience, usability first and pay later
- There are essentially two basic approaches to design:
 - The artistic ideal of expression yourself &
 - The engineering ideal of solving a problem for a customer
- Innovation is 10 percent inspiration and 90 percent perspiration.
- Place your customers needs at the center of your web strategy.
- Usability lessons will make you avoid making mistakes again and again. After all, those who do not know history are doomed to repeat it.
- Fundamental errors on all levels of web design:
 - Business Model: Treating the web as a brochure instead of fundamental shift that will change the way we conduct business in the network economy.
 - Project Management: Managing a web project as if it were a traditional corporate project. A website should be managed as a single customer-interface project.
 - Information Architecture: Structuring the site to mirror the way the company is structured. Instead, the site should be structured to mirror the user's tasks and the views of the information space.
 - Page Design: Design for an optimal user experience under realistic circumstances, even if your demos will be less "cool".
 - Content Authoring: Don't write in the same linear style as you have always written.
 - Linking Strategy: Hypertext is the foundation of the Web and that no site is an island.
- As a rule of thumb, content should account for at least half of a page's design and preferably closer to 80 percent. Navigation should be kept below 20 percent of the space for destination pages, although navigation options may account for much higher proportions of home pages and intermediate navigation pages.
- Simplicity always wins over complexity, especially on the web where every five bytes saved is a millisecond less download time. Simplicity should be the goal of page design. Users are rarely on a site to enjoy the design; instead, they prefer to focus on the content.

- Considering the fundamental facts in both human factors and computer networking, there is only conclusion: Web pages must be designed with speed in mind. In fact, speed must be the overriding design criterion.
- Glimpsing the first Screen-full

The most important issue in response time is when the user gets to see a screen-full of information. It matters less if it takes longer to load the full page and all its illustrations if the user can start acting on some information quickly. Guidelines for fast initial loading include the following:

- The top of the page should be meaningful even when no images have been downloaded i.e. more text and less images
 - Use ALT text attributes for images so that users can understand what they are about, before they are rendered.
- Linking - Links are the most important part of hypertext: They connect the pages and allow users to go to new and exciting places on the web. There are two main forms of links:
 - Structural navigational links: These links outline the structure of the information space and allow users to go to other parts of the space. Typical examples are home page buttons and links to set of pages that are subordinate to the current page
 - Associate links, which are within the content of the page.
 - Link Descriptions: The oldest web design rule is to avoid using “Click Here” as the anchor text for a hypertext link. There are two reasons for a hypertext link. There are two reasons for this rule. First, only mouse-using visitors do in fact click, whereas disabled users or users with a touch screen or other alternative device don’t click. Second, the words “Click” and “Here” are hardly information-carrying and, as such, should not be used as a design element that attracts the users attention.
 - Advertising Links: Web advertising studies have found that about 20 to 30 percent of web users who click on a banner ad only to find out that they have been connected to a corporate home page hit the back button almost immediately. After all, if you dump users at your homepage, you are leaving it to their own web-survival skills to ever find any valuable information that relates to the reason they clicked on the ad in the first place.

Some web marketers link their advertising banners to their homepage because they want to entice potential customers to explore their site. Well, you can want this as much as you like, but users are not motivated to struggle with your site. Your site is not the center of their universe. Web users are fleeting, and they want information now – not five clicks from now. If, and only if, the destination page provides interesting information related to the ad that attracted the user, may they reward your site with an extended visit.

Content Design...

- Ultimately, users visit your website for its content. Everything else is just the backdrop. The design is there to allow people access to the content. The old analogy is somebody who goes to see a theatre performance: When they leave the theatre, you want them to be discussing how great the play was and not how great the costumes were.
- The three main guidelines for writing for the web include the following:
 - Be succinct. Write no more than 50 percent of the text you would have used to cover the same material in a print publication.
 - Write for scan-ability. Don't require users to read long continuous blocks of text; instead use short paragraphs, subheadings, and bulleted lists.
 - Use hypertext to split up long information into multiple pages.
- Research has shown that reading from computer screens is about 25 percent slower than reading from paper. The correct amount of attitude in a web page is: Not too much, not too little.
- Often users who are scanning text will read only the first sentence of each paragraph. This suggests that topic sentences are important, as is the "One idea per paragraph" rule.

Site Design...

- The homepage is the flagship of the site and should therefore be designed differently from the remaining pages of course, home pages and inner pages share the same style, but there are differences. For example, the home page should not have a home button, because it is very annoying to click on a button that links right back to the current page. Also, the home page should typically have a larger logo and a more prominent placement of the company name or site name.
- The first immediate goal of any home page is to answer the questions “Where am I?” and “What does this site do?” – both of which require a straightforward and large version of the name. The answers should not be in the form of the dreaded mission statements sometimes seen on overly bureaucratic sites. Rather, it should be obvious from the design what purpose the site would serve for a first-time user. The most important function of a home page is to serve as the entry point to the site’s navigation scheme. Often, this will take the form of a list of the top levels of a hierarchical directory, but depending on the information architecture, different forms of top-level entry aides may make sense.
- The home page is also the place to feature any news or special promotions you want to bring to the attention of all visitors. But remember that most people come to your site in order to accomplish something specific. Only rarely are they interested in simply checking out what might be happening in your company or what products you feel like putting on sale. Therefore the news area should be relatively restrained & leave a large part of the page available for navigation – the exception to this rule obviously being sites that focus on news.
- Most home pages need a prominent search feature because many users are search dominant and don’t want to bother navigating to their destination link-by-link. For sites where search is a primary access mechanism, it makes sense to include an actual search box right on top of the home page.
- No matter, what navigation design you pick for your site, there is no one common theme to all navigation: All it does is visualize the user’s current location & alternative movements relative to the structure of the underlying information space. If the structure is a mess, then no navigation design can rescue it. Poor information architecture will always lead to poor usability.
- On the web users move between sites at a rapid pace, and the borders between different designs are fluid. It is rare for users to spend more than a few minutes at any given site & users navigation frequently takes them from site to site as they follow the hyperlinks. Because of this rapid movement, users feel that they are using the Web as a whole rather than any specific site. Users don’t want to read any manuals or help information for individual sites, but they do demand the ability to use a site on the basis of the web conventions they have picked up as an aggregate of their experience using other sites. In usability studies, users complain bitterly whenever they are exposed to sites with overly divergent ways of doing things. In other words, the web as a whole has become a genre, and each site is interpreted relative to the rules of the game.

Intranet Design...

- Intranet design should be treated somewhat differently from Internet design. The most basic reason is that your intranet and your external website are two different sets of goals, users, and technical constraints. Because the two information spaces are indeed so different, different solutions are necessary to optimize the designs for the two sets of circumstances.
- The design for intranet design should be optimized for employee productivity. For external websites “user-centered” design means “customer-centered” design. For intranets, you have to be “employee-centered”.
- It is best to have different user interface designs for internal and external web information in order to make it easier for employees to understand when they are seeing external information and when they are seeing internal information. Two different visual styles and two different sets of templates for the intranet and the external website. Of course, both styles should comply with the company’s overall design language, but they should take this single starting point in two different directions.
- The most obvious difference between an intranet and the Internet is that your intranet users are your employees, whereas your Internet users are your customers. Internal users will be using the Intranet for all the various types of information they need in their work life, whereas external users go to your site only for a limited range of information related to their dealings with your company. Because of this difference in user goals, the intranet for any given company typically consists of between 10 and 100 times as many pages as the company’s external website.
- Except for extremely small companies, an intranet is typically split across multiple sites, each managed by a different department, whereas an external website hopefully presents a unified face to the customers and feels like a single site.
- Intranet designs can assume a less diversified environment than Internet designs.
- An extranet is an extension of the intranet designed to incorporate external users with special access permissions to certain sub-sites. Typically, access may be granted to contractors or consultants who need certain corporate data and product plans, to customers who might enter their own orders or check on the status of pending orders and to suppliers who want to bid on requests for proposals or monitor inventory levels to plan their own production schedules.
- Except for the security needs, extranet design is closer to Internet design than to Intranet design. In particular, an extranet should emulate the style of the external website because customers will be switching back and forth between the public site and their private extranet site. The extranet site should have a design twist of some kind to visually emphasize the different status of the two information spaces and to assure extranet users that their information is kept private and not exposed to the public.
- There are some differences between extranets and traditional websites:
 - The extranet will be viewed by people or groups who already have some relationship with the company, so they will know more about you than the average website visitor.
 - The extranet will be used for a very specific reason either once (for order tracking, for example) or repeatedly for a few tasks (like tracking multiple orders).
 - Extranets have built-in business model because they serve people with whom you already have a business relationship. Thus, they should not carry advertising banners. They should also not be highly promotional. By the time somebody gets access to an extranet, he or she has already chosen to do business with you. Now its time of you to deliver.
- You do have the option of designing more complex interactions for an extranet than for the Internet because the extranet users will have some motivation to learn your design. After all, they have a business relationship with your company and use your extranet to trade with you or conduct other important business tasks. Also, any given extranet application will typically be used only by a small number of your business partner’s employees.

- For public Internet sites, the most important usability attributes are probably learnability and subjective satisfaction. After all, users rarely stay at any given site long enough to become expert users, and their desire to return is often determined mostly by whether they like the site. Web usage is fully discretionary, so users have to be kept happy.
- For intranet designs, efficiency, memorability and error reduction become the most important usability attributes. Because employees may use the intranet every day, they soon become experienced users and the efficiency with which they can navigate the intranet and get their work done will determine their productivity. As more and more job functions move online the efficiency with which employees can use the intranet becomes a major determinant for the productivity of your corporation.
- Because of the productivity impact of intranet design, you can usually justify a rather large investment in usability engineering. As an example, let us consider the value of a redesign that would cut minute off the average time needed when an employee wants to go to a new part of the intranet.
- Corporate efficiency goes up dramatically with clearer communication and the intranet can be the infrastructure for this communication if and only if – it is designed to make it easy for people to find information when they need it.
- The intranet can support top-down communication by making executive decisions, vision statements and strategy discussions easily available. When a lower-level employee writes a product plan or marketing proposal that builds on a high level strategy, then he or she can include a hypertext link to the intranet version of the relevant strategy document, thus making it easy for other project participants to familiarize themselves with the strategy as needed.
- For every employee having a personal intranet homepage with links to the department he or she works in, plus links to project pages for all projects he or she works in, plus links to project pages for all projects he or she works on now or has worked on in the last few years. Much of the knowledge in organization in the last few years. Much of the knowledge in organization exists in the form in the form of personal ties & the fact that somebody knows that somebody else might be the person to ask about a certain issue. By going to this latter person's Intranet home-page, the user will often be able to track down the desired information by following links to the appropriate departments or projects.
- Similarly all projects should have a homepage with links to the personal intranet home pages of everybody working on the project. Project pages should obviously also have links to any project plans and reports that are not top secret. Highly sensitive information should preferably also be linked from the page, but with note stating that access is by prior permission only. Additionally, all organizational units should have a department home page with links to the homepages with links to the home pages for the people working in the group (including the boss) as well as links to the appropriate organizational units above and below it in the organizational hierarchy.
- The big 3 infrastructure components of Intranet are:
 - Directory
 - Search
 - News
- The cost of poor intranet navigation is high: at least 10 million dollars per year in lost employee productivity for a company with 10,000 employees. Worldwide, the cost of bad intranet usability will grow to about \$100 billion by the year 2001 unless better navigation systems are built and much stricter internal design standards enforced.