

Topic | Website

Tutorial 14

Website 101: Usability And Technology

The focus of this second tutorial reviewing the essential elements for your website will be on usability and technology.

Reading time: 15 minutes

Prerequisite: Website 101: Visual Design And Content



1. Usability

According to Wikipedia.com (the free web-based encyclopaedia), usability refers to the “elegance and clarity with which the interaction with a website is designed”. In other words, usability is the practice of designing websites to be more effective, efficient and satisfying.

On the web, usability is a **necessary condition for survival**. If a website is difficult to use, your target market will leave.

Usability can be further classified into two concepts: readability and accessibility that are discussed below.



Photo credit: www.flickr.com/photos/laruth

a) Readability

Readability refers to the ease of reading your webpage. You can easily improve the readability of your website by following a few key principles:

- **Use contrasting colours:** A low contrast between font and background will not only irritate the user and create eye fatigue but will prevent vision-impaired users from reading your site.
- **Bite-size your text:** Users scan-read online text so it is essential to break up your text in shorter, clear, bite-sized paragraphs.
- **Clean font style and size:** Use Sans-Serif fonts instead of Serif fonts (Sans-Serif fonts do not have the characteristic small horizontal lines at the tops and bases of characters that Serif fonts have), avoid fancy fonts and fonts smaller than 1 em.

This is a fancy font that you should avoid

This is a plain Sans-Serif font that is safe to use

- **Avoid clutter:** Offer the user a clear, simple picture of what your product and service is about, without sending your user on a wild goose chase across your website.

b) Accessibility

Accessibility encompasses the recommendations and best practices to ensure the web is accessible to all, including people with disabilities. Latest research reveals that 20% of Internet users have accessibility issues. The World Wide Web consortium set up the web accessibility initiative. Accessibility guidelines are located on www.w3.org/WAI/WCAG20/quickref/ and summarised below:

- **Text alternatives:** Provide text alternatives for any non-text content so that it can be changed into other forms people may need, such as large print, braille, speech,

symbols or simpler language.

- **Time-based media:** Provide alternatives for audio and video content (for example text).
- **Adaptable:** Create content that can be presented in different ways (for example simpler layout) without losing information or structure.
- **Distinguishable:** Make it easier for users to see and hear content including separating foreground from background.
- **Keyboard accessible:** Make all functionality available from a keyboard
- **Enough time:** Give users enough time to read and use the content.
- **Seizures:** Do not design content in a way that is known to cause seizures (e.g. webpages should not contain anything that flashes more than 3 times per second).
- **Navigable:** Provide ways to help users navigate, find content and determine where they are.
- **Readable:** Make text content readable and understandable.
- **Predictable:** Make webpages appear and operate in predictable ways.
- **Input assistance:** Help users avoid and correct mistakes. Never assume that a user will know their way around your website.
- **Compatible:** Maximize compatibility with current and future technologies



2. Technology

a) What should my website be made of?

A website is a related collection of web files that includes an **initial file called a home page**.

You can get to a website by typing the home page address (called a URL) in your browser. From this home page you can navigate to all the other pages of the site.

The programming language used to create documents for display on the World Wide Web is called **HTML** (Hyper Text Markup Language). The style (font, colours, look and feel) used to be part of the HTML file but it has now been taken out and centralised into a **CSS** (Cascading Style Sheet) file. This practice eases the layout modifications you may require on your website in the future and makes your content more accessible to search engines.



If your website is recent, you should have been provided with a content management system (CMS) that allows you to edit the content of each of your pages. Having a CMS will reduce the ongoing cost for maintenance of your website as you will be able to make most of the changes yourself without requiring the services of a web developer.

b) *What is HTML, CSS, PHP, Flash?*

HTML is the programming language of your website. As any language, it evolves constantly. The latest versions are XHTML 1.0 and XHTML 1.1, released in June 2008. The previous version was HTML 4.01.

There is a large chance that your website was developed in XHTML 1.0 or HTML 4.01.

Check what version your website is programmed in:

- In Internet Explorer, navigate to your website's home page (www.mysite.com for instance) and go to the VIEW menu and select SOURCE.
- If you are using Firefox, navigate to your website's home page (www.mysite.com for instance) and go to the VIEW menu and select PAGE SOURCE.
- In Chrome, navigate to your website's home page (www.mysite.com for instance) and go to the VIEW menu, select DEVELOPER then VIEW SOURCE.

The very first line of the page should be similar to the below. Look for the word after the first DTD (in red in the example below) to see which HTML version your website is built in.

```
<!DOCTYPE HTML PUBLIC "-//W3C//DTD XHTML 1.0 Strict//EN" "http://www.w3.org/TR/xhtml1/DTD/xhtml1-strict.dtd">
```

Apart from HTML and CSS, there are other programming languages that can be present in a website.

- **PHP:** an open-source (free) programming language that allows web developers to create dynamic content that interacts with databases.
- **ASP.net:** a Microsoft-owned programming language that allows web developers to create dynamic content that interacts with databases.
- **Flash:** a way of adding animation to webpages. **Flash poses a lot of accessibility problems**, as it is graphic/image based and search engines cannot read images. However, Google announced in July 2008 that it is now starting to read and index Flash files, which couldn't previously be done. Until now, Flash files created enormous search engine optimisation issues simply because search engines were not able to read the content of the files. They were therefore not able to index the files, as they wouldn't know what the page was about.

THIS SAID, FLASH FILES DO NOT OFFER FULL OPTIMISATION CAPACITIES AND HAVE MANY DRAWBACKS. THEY MAKE YOUR WEBSITE LOOK GREAT BUT THEY ALSO MAKE IT VERY DIFFICULT TO WORK WITH SEARCH ENGINES TO LET PEOPLE KNOW YOUR WEBSITE EXISTS. WE RECOMMEND YOU CAREFULLY CONSIDER THE USAGE OF FLASH.

c) Where can I access some guidelines?

Your web developer is usually a good place to start. We suggest you ask them what version of HTML they use (it should be XHTML 1.0 or 1.1) and what other programming languages they are proficient in.

- If you are being offered a website using a lot of Flash technology, we suggest you stay away as Flash technology is not search engine friendly.
- If you are being offered a website built using HTML Frames technology, we suggest you stay away. This old practice is not search engine friendly.

You can also access documentation from the World Wide Web consortium, **the** HTML and CSS authority. www.w3.org/MarkUp/Guide is an introduction about HTML.

d) What are blogs, forums, and newsletter subscriptions?

In the early days of the Internet, users were only able to surf the web by browsing brochure-like websites. Web 2.0 has now brought interaction to the Internet and users have much more at their disposal than simple websites:

- **Blog:** a blog is like a diary online (a web-log). The blog owner can post daily entries and users can interact with the author by posting comments. Blogs generally complement a website very well. A renowned blog is Seth Godin's blog: <http://sethgodin.typepad.com/>. His website is www.sethgodin.com.
- **Forums:** online forums are online discussion spaces where anyone can ask questions and other users can respond. A very well known Australian forum about online technology is Whirlpool: <http://forums.whirlpool.net.au/>. Asking questions and seeking answers in forums is free.
- **Newsletters:** the purpose of a newsletter is to regularly communicate with your audience. If your website is highly visible on search engines, users might opt-in and register for your newsletter. This will give you access to their email address for future marketing purposes. Newsletters are widely used in the travel industry to send out promotions, special offers in low season and as follow up emails to keep contact. You can also use newsletters to keep your tourism partners (such as concierges in hotels) updated.

e) What is web 2.0?

Web 2.0 describes a growing trend online towards content made by web users, rather than traditional publishers. People also talk about the term "social media". It is an umbrella term used to describe online technologies that facilitate interaction and exchange of information online.

The tutorial titled "The Internet, web 2.0 and the tourism industry" reviews web 2.0.

3. Key learning outcomes

- Usability is closely related to conversions. If a website isn't user friendly it won't easily convert visitors into buyers.
- There are different types of technologies and programming languages used to build a website. Ensure you question your web developer in your brief about which technology they use and what are its advantages?

4. Related material

a) *Related tutorials*

- Website 101: visual design and content
- The Internet, web 2.0 and the tourism industry
- Bringing people to my site with e-marketing
- Blogging

b) *Related websites*

- Getting started with HTML: www.w3.org/MarkUp/Guide/