

## THE FEEL OF THE WEB

Have you noticed how the feel of the web is changing? Perhaps you use LinkedIn - <http://www.linkedin.com> – or Jobster - <http://www.jobster.com> – and very probably you have had a look at Google maps - <http://maps.google.com>

If so you cannot but have noticed that these sites and others have a different look and feel. It's not about but about the way that they seem easier and faster to use.

So many sites are slow and tedious giving you the feeling that you have plenty of time to get a coffee or even go to lunch. It's the horrible hourglass. You click a link and the hourglass appears as the site contacts the server and the server thinks about what it's going to send back to you.



There is a reason for the 'new' sites being faster and nicer to use. It's called AJAX.

Not the cleaner invented in 1947 nor the mythical Greek hero but a web development technique.

AJAX is not new technology but a combination of existing mature technologies. It's an abbreviation for 'Asynchronous JavaScript and XML' and a web development technique to make web pages feel more responsive. It does this by exchanging small amounts of data with the server behind the scenes and displays it without re-fetching the entire page at the same time, hence the term 'Asynchronous'.

In case you are not entirely clear what asynchronous means, synchronous means that processes are dependent upon other processes 1 >> 2 >> 3 etc whereas asynchronous is the ability to handle processes independently from other processes.

It might seem that adding a layer to any application will make it less responsive, but because the browser first loads an AJAX engine responsible for both providing the interface the user sees and communicating with the server on the user's behalf the user is very rarely staring at an hourglass icon waiting around for the server to do something.

Every user action that normally would generate work on the server goes to the AJAX engine instead. Any response to a user action that doesn't require a trip back to the server the engine handles on its own. If the engine needs something from the server in order to respond it makes those requests asynchronously without affecting a user's interaction with the application.

All of this means AJAX is 'sexy' just now - a bit like Flash has been. It might be very tempting to use AJAX simply because "AJAX is cool" or "my boss told me to".

But when you're building any site you should think of your customers first. What do they need this application to do? What will make it easier to use?



A good rule of thumb as to whether or not to use AJAX IS: AJAX is for action not content.

If you are not accessing data that changes then you might want to think again. The point of the asynchronous request is that it makes requests to the server for information that has changed faster - because it's happening while the reader is doing something else. Then when they click a link or button data shows up right away. If your content or data never or rarely changes, then you probably shouldn't use Ajax to access it.

Then there are other issues:

### **Page changes**

When an entirely new page is produced there is a brief moment of re-adjustment when the content changes. Because this doesn't happen with smaller portions of the screen this becomes more apparent. This can leave people wondering.

### **Search engine optimization**

Search engines do not generally read the JavaScript code required for AJAX. This can mean AJAX 'pages' remain un-indexed unless a static page is provided.

### **JavaScript**



As AJAX relies on JavaScript, which is implemented differently by different browsers or even different versions of the same browser the JavaScript may have to be rewritten for several browser(s) type(s) though background libraries are resolving this, but an issue still arises if the user has switched off JavaScript support in the browser.

### **Web analytics**

Many web analytics solutions are based on a new page being loaded whenever new or updated content is displayed to the user or to track a process such as a check-out. Since Ajax alters this care must be taken to account for how to ensure a page or a portion of a page can be accurately tracked.

Having written everything above, Google has made a huge investment in developing AJAX sites. All of the major products Google has introduced such as



Orkut, Gmail, Google Groups, Google Suggest and Google Maps are AJAX applications.

Then again AJAX [and other terms such as Rich Internet Applications or RIA for tools such as Flash] are just new terms for a technologies and technology combinations that have been around for years.

Given the hype for these terms, it is sensible not to get carried away. Careful evaluation of when and how to use AJAX is essential.

Don't forget that Flash and other applications still do not form the basis of most sites and users want usability first. If AJAX enhances the users' experience whether via design or speed then it's worth considering – carefully.