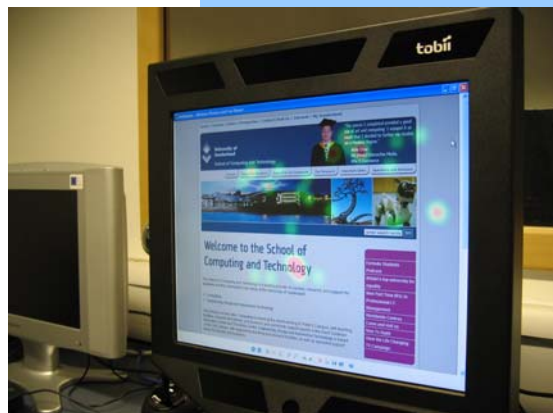


Eye Tracking Services



June 29th 2007



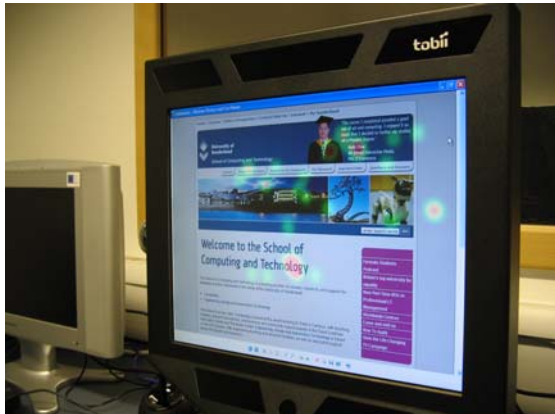
Introduction

Eye tracking in usability is a leading edge technology. Although eye tracking itself is not new, the current generation of eye tracking systems are at the cutting edge of technology. Eye tracking is a unique way to evaluate user experiences and usability. It gives you the opportunity to experience a software application or website through the eyes of your users. It helps you to understand their behaviour in a unique new way.

Eye tracking can tell you so much more about the design, layout and usage of your product in ways you could never imagine. What's more, the data produced by our eye tracking system is in a variety of easy to understand formats such as heat maps and AVI movies of sessions.

How Does it Work?

The system is a relatively simple combination of hardware and software. In the picture you can see what looks an ordinary monitor. And in many ways it is, except for the built in sensors that do the actual tracking of the user's eyes as they look around the screen! There are no distracting cameras or moving objects, so to all intents and purposes the user is just sitting in front of an ordinary computer screen. The software is installed on the observers laptop and once we are ready to conduct a session the user is put through quick and simple calibration procedure and away we go. Everything the user looks at in the session is recorded for analysis!



What can it do?

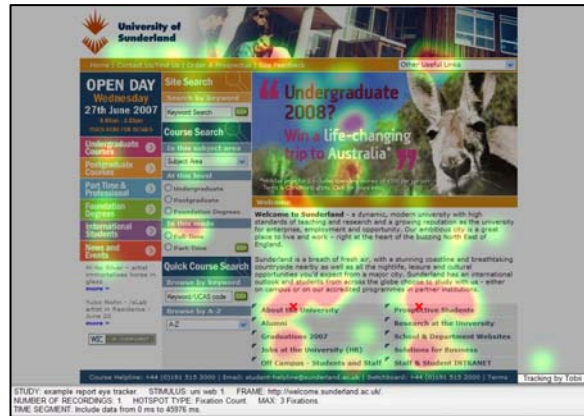
In short, eye tracking can help to; optimise the placement of navigation elements, identify link label ambiguities, maximise the efficiency of a design layout, display promotional information for maximum impact.

What can it be used on?

Eye tracking is very flexible and can be used on a range of media including; web sites, advertisements, interactive television, software applications and computer games.

Easy to Understand Data Formats

As mentioned previously, data from eye tracking sessions is provided in a variety of easy to understand formats. The most popular format is the heat map or 'hot spot' format. Heat maps (individual user and aggregate of all users) are recorded for each web page visited. Without being an expert, there is lots to be learned from this data about what attracts users, as well as what doesn't! The system produces the heat map by recording the number of fixations¹ on a page.



Gaze plots allow paths around the screen to be observed. From this data format we can see where the user first looked at the page and which elements were observed and in what order, effectively telling us in which order the various elements of the screen attracted the user (and which ones don't!).

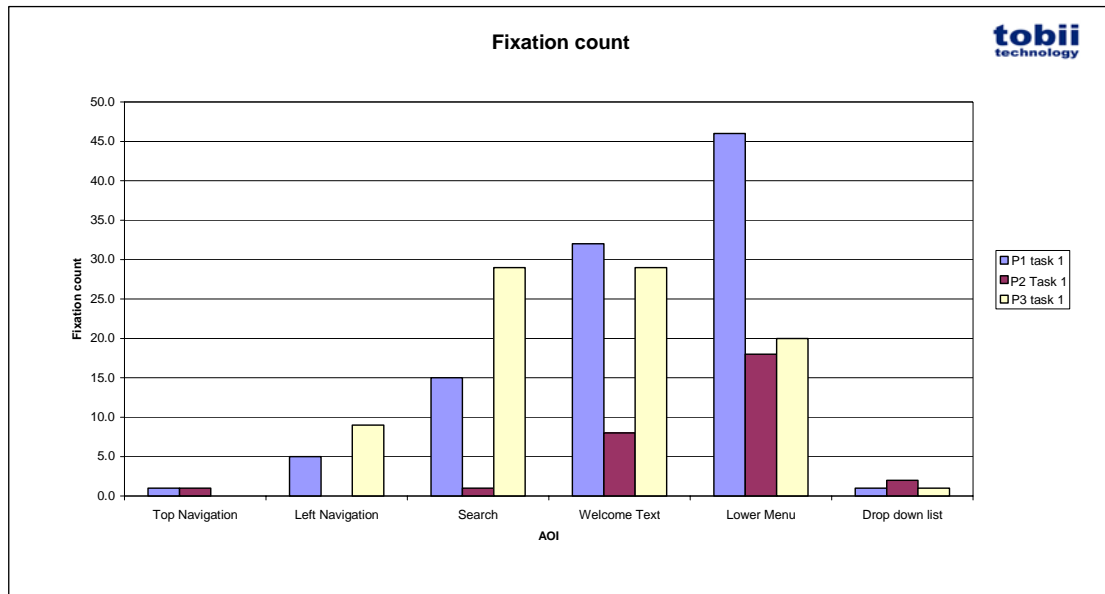
Areas of Interest (AOIs)

Areas of the screen can also be designated as Areas of Interest (AOIs). Put simply, you can decide which areas of a design you feel are important and you want your users to be looking at.

In the example on the next page there are 6 designated areas of interest:

- Top Navigation
- Left Menu
- Search Facility
- Welcome Text
- Lower Menu
- Drop Down Menu

¹ The focus and position of the eyes on an object



The data from the eye tracker will then calculate just how much time your users actually spend looking at these areas compared to other elements in the design! Interesting how the ‘top navigation’ attracts little attention from users!

More than just an eye tracker

Whilst collecting all this data from user eye movements, the eye tracking system doesn’t stop there. Every session, every user key press, mouse click and page is also recorded, and the precise time during the session for each event is also recorded. So for example, when the user clicks the mouse button (left and right), the time during the session, the position (in x,y co-ordinates), and whichever left or right button is clicked are all recorded! The same applies to every key press, which key and when it is pressed are all recorded in the session event data. Just imagine the how much more you can learn about how users use your design with all this information!

How much will it cost?

Not as much as you would expect! We have two basic ways of conducting eye tracking sessions. We can simply carry out the sessions with agreement with clients on what they would like users to do and pass on all of the above mentioned data for thee own analysis. Or if the client prefers, we can assist with the analysis and provide advice and recommendations.

At the IDE@S group we are flexible in our approach to all usability studies. We are happy to discuss your requirements and can accommodate studies form basic audits to comprehensive usability consultancy. We charge at a very competitive daily rate, so our costs are based on the amount of effort required for any project which is always agreed with the client before we commence any project.

If you have any questions or would like to see our facilities and a demonstration of our eye tracking system email us at:

ideas@sunderland.ac.uk or alternatively call us on: 0191 515 3332

<http://www.theideasgroup.co.uk/>