

Web Browsing

Website navigation

Information architecture

Website design guidelines

Mathematical modelling

Age-related Differences in Web Browsing

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The Investigation

Objectives

How web information is categorised, labelled and presented and how navigation is facilitated determines not only whether users will and can find what they need, but also affects user satisfaction and it does influence return visits.

This project will investigate age-related differences in web browsing and will attempt to develop predictive mathematical models that describe them.

Plan

Websites with different 'information architectures' – for example deep and shallow hierarchies – will be tested by younger people and older people.

These observations will then be compared with 'optimum browsing paths' predicted by latent semantic analysis (LSA) and the data captured will be used to develop mathematical models of web browsing behaviour.

Potential Benefits

For older people

The world wide web is becoming more and more important in everyday life – for finding information, shopping and communication. Optimising website design for older people will enable them to continue to use the web in the same way as the general population rather than excluding them from this resource.

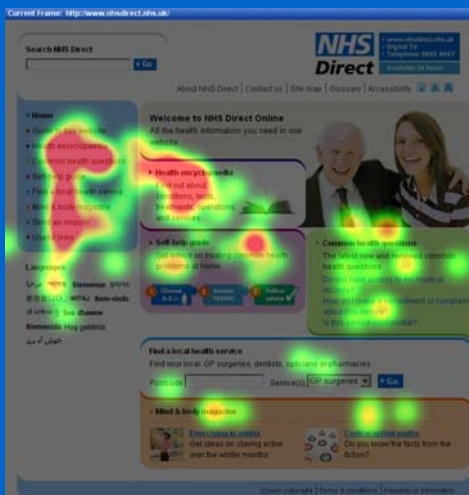


For society

Ensuring that older people remain able to access information via the web stops older people from becoming isolated from the mainstream of society. Access to the web could enable people to remain in control of their lives and participate in society fully.

Eye tracking software and hardware

Eye tracking software and hardware will be used to investigate how participants perceive different website architectures.



Eye-tracking software shows participants' gaze fixation as 'hotspots'

References

1. Lee, E., & McGregor, J. (1985). Minimizing User Search Time in Menu Retrieval Systems. *Human Factors*, 27, 157-162.
2. McDonald, S., & Stevenson, R.J. (1996). Disorientation in hypertext: The effects of three text structures on navigation performance. *Applied Ergonomics* 27, 61-68.



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