

Using eye tracking to evaluate usability of user interfaces: Is it warranted?

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Abstract: The evaluation of the usability of user interfaces is a crucial element in the design of computer software and other products with user interfaces. Owing to the availability of good and affordable eye tracking equipment and the arguable visual nature of interacting with user interfaces, the use of this methodology in usability evaluation is increasing. However, recent studies indicate that the relationship between eye movements and task performance is not straightforward. It was found that careful alterations in the design of user interfaces did not lead to the expected improvement in task performance. This calls into question whether the use of eye tracking as a tool to assess usability is warranted.

Keywords: User interfaces, usability evaluation, eye tracking, eye movements, task performance.