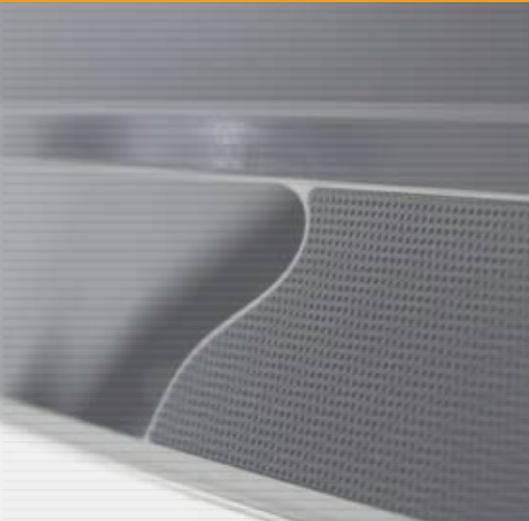


Tobii Eye Tracking Solutions

User Experience Research



Research through the eyes of the user

Eye tracking is the only research method that can reveal exactly where on an interface users are looking and, perhaps even more importantly, where they are not. It provides objective and convincing data that describes user behavior and usability problems.

By using eye tracking as a component in studies and uncovering attention attractors and distractors, you give your research a qualified edge, substantiating eye tracking as standard practice among user experience testers all over the world.

This brochure contains a few examples of how usability professionals today use eye tracking and Tobii solutions to improve a broad spectrum of user interfaces—from websites, software and games to mobile devices and airport signage—that lead to better products and business performance.

“At Eye Square, we see that eye tracking provides additional value in usability testing. Eye tracking data can unveil response biases of subjects due to an artificial testing environment, that would be undetected in conventional usability testing and therefore, results in a higher validity of usability data. Another major benefit of using eye tracking in usability testing lies in its practicability. Whereas conventional usability methods reveal data only on a descriptive level, the additional application of eye tracking provides insight into the origins of a problem. It allows detailed analysis of the stages on which a problem occurs, such as perception or comprehension.”

Michael Schiessl, Andreas Thölke & Sabrina Duda, Eye Square

Web & E-Commerce

In the fiercely competitive online marketplace, the smallest details can make the difference between business and no business. Alongside conventional usability methods, eye tracking helps target small but significant usability problems and offers guidance on how to solve them.

Microsoft conducted an extensive study when integrating Ciao, its new e-commerce acquisition, into their websites. Eye tracking was used to measure the efficiency of the login procedure which had been reconstructed to include an optional Windows Live ID login. The eye tracking tests guided developers to a solution that simplified the login procedure and highlighted the new login option, increasing Windows Live ID logins on Ciao by 253%.



These heat maps show that the Windows Live ID login option attracted more attention after the page had been redesigned to make the Windows Live ID login more obvious.

“We consistently follow up all design and process changes we make on our websites. Based on these measurements we know for sure that the studies conducted with Tobii eye trackers have had a positive impact on our overall success as a leading shopping community and consumer website in Europe.”

Sebastian Röhrich, Group, Program Manager, Ciao Commerce Division at Microsoft



Norwegian IT consultancy **Bouvet** has established a way to run several small usability tests integrated with the Scrum methodology. Eye tracking is important to engage different stakeholders in understanding the user experience.

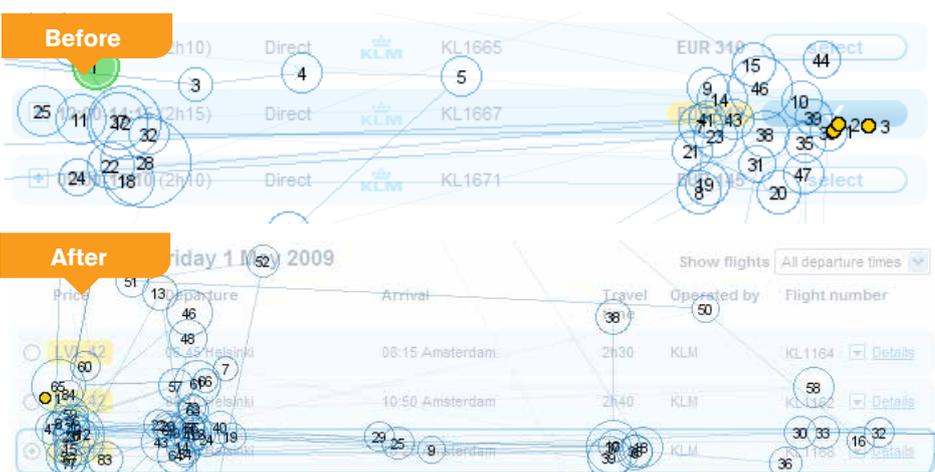
Dutch airline giant **KLM** worked with usability experts **Valsplat** to redesign their booking tool. Eye tracking was used to understand how travelers were reacting to the booking procedure. After observing how the participants' gaze flickered back and forth over the screen trying to make a trade-off between price and schedule, the designers aligned the two elements together. Improved usability and a dramatic 30% higher conversion rate in an otherwise recession-hit market was the result.

Holiday Autos consulted an eye tracking expert to conduct a series of eye tracking tests during the development of their new website and order procedure.

In addition to cutting order time by two-thirds, eye tracking helped to detect consumer choice patterns and design mistakes in the product display section. Corrections led to an improved interface for product choice, upgraded-sales and a 20% increase in conversion rate.



Live viewing is the simplest form of usability testing with eye tracking. It shows exactly what the user is looking at in real time and gives designers and developers direct feedback on their work.



These gaze plots of KLM's Select flights page show how users had an easier time making their trade-off between price and schedule in the final version.

Cloud Nine, one of the leading web agencies in Sweden, uses eye tracking to understand users in different stages of the web development process—from early sketches, wireframes and prototypes to mockups of the actual code and finished solutions. Live viewing of eye movements helps them improve and verify quality and provide better solutions to their clients.



Eye tracking provides **Mediative**, a division of the **Yellow Pages** group in Canada, a rich picture of how users interact with websites, mobile experiences, video games, and advertising. In this study of online ads on an iPad, they used Tobii's solution for mobile device testing.

Mobile Applications & Devices

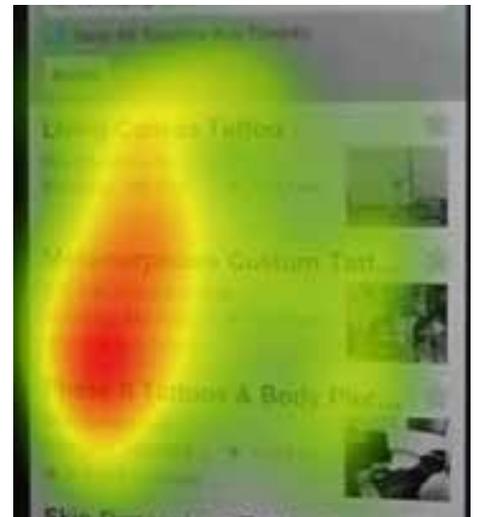
As smart phones and mobile apps explode in popularity, new design challenges emerge and highlight the need for usability testing of mobile interfaces. Eye tracking solutions provide unique and precise information about how mobile users interact with both graphical user interfaces and hardware elements.

Mediative, a division of the **Yellow Pages Group** in Canada, used eye tracking to study usability of the free Google Places app on an Apple iPhone. The study showed how users scrolled further down listings on an iPhone than in a desktop environment. Eye tracking data highlighted the importance of reviews and images.

Game developer **Motalen** used eye tracking to test the game **Infernus: Verse 2** on an iPad. Being able to see if a player was bored, focused or even confused, and to track and retrace where players were looking when sifting through the inventory or searching for clues in the game, enabled developers to improve the game in the development phase.

“The Tobii eye trackers that we use in the Mediative lab let us go beyond standard qualitative user experience to also gain insight into what captures visual attention. When we tie this with behavior, we can get a really rich picture of how users interact with websites, mobile experiences, video games, and advertising.”

Ian Everdell, Manager, UX & Research, Mediative



This heat map shows that even though the Google Places listing focused on was not in the top position, eyes were drawn to the positive reviews.

Video Games

Eye tracking is being used by the gaming industry to optimize usability and ensure a rich gaming experience.

Dutch usability testers **Valsplat** conducted extensive user experience testing throughout the entire development of **Killzone 3, Guerrilla Game's** latest shooter. Eye tracking was used in fine-tuning wayfinding, HUD-displays and boss-fights. Developers at Guerrilla Games, a subsidiary to Sony Computer Entertainment, saw the vast potential of using eye tracking to better allocate the development budget, especially for wayfinding and measuring theatre-of-war elements.

UK usability testers **UserVision** used Tobii Glasses to explore the in-game experience for players using motion control console add-on **Microsoft Kinect** for the Xbox. The study identified a number of vital issues, in particular poorly communicated instructions that lead to dissatisfaction with the game and the console itself. Having identified these issues, it was possible to perfect the design and positioning of in-game help.



Poorly communicated instructions caused significant problems for users of motion control console add-on Microsoft Kinect for the Xbox. This gaze plot shows how one player looked between the avatar and the instruction at the top of the screen sixteen times before starting the game accidentally.

“The eye tracking glasses gave us real insights into how people interact with the game, what works and what doesn't. Eye tracking is an important tool for designers and should be used to improve communication and interaction with players.”

Simon Duke, Senior User Experience Consultant, User Vision

Integrate eye tracking to complement your current methods

Eye tracking augments traditional usability methods, providing additional information that the researcher cannot observe and the participant cannot report. It successfully complements and supports a variety of research methods, including observations, interviews and the retrospective think aloud (RTA) method. In addition, it is a very powerful presentation tool.

Live viewing of participants' eye movements, comments, facial expressions and interactions gives instant insight into participants' experiences and behavior. It's ideal for controlling and moderating a session from a separate monitor in the same room, or for delivering live presentations to colleagues or clients in another room.

A number of studies have shown that RTA, supported by eye tracking gaze replay as a memory cue during post-interview sessions, will uncover significantly more usability problems than using other usability methods alone. Moreover, a significantly higher task-completion rate is achieved when using this method, compared to applying conventional concurrent think aloud (CTA). This supports the notion that standard think aloud methodology alters natural user behavior, thereby biasing results.

“SirValUse has been using eye tracking for several years and Tobii eye trackers are now standard equipment in all our facilities. Since we integrated eye tracking into our method mix, we have become much more accurate and efficient in illustrating user experiences and proving usability problems.”

Tim Bosenick
CEO, GfK SirValUse Consulting

Real-World Environments

Wearable eye tracking solutions enable a new range of usability applications in real-world environments.

Some leading global car manufacturers use eye tracking to assess aesthetics and drivability. Tobii Glasses help car testers understand what part of the industrial design users notice and appreciate, along with simplicity of displays, user assessment of interior construction and other interaction features.

Attitudes—a social initiative by Audi in Spain—used eye tracking to measure attention among drivers in an extensive study to increase knowledge about subconscious driving. Eye tracking helped project researchers to identify situations and external factors that favor the appearance of subconscious driving.



Tobii Glasses was used to study the attention path of drivers in a study performed by Attitudes—a social initiative by Audi in Spain.

Eye tracking gives insight into differences between novice and expert operators and identifies additional training needs to reach higher levels of process compliance and quality of operations.

Researchers from the **University of Birmingham, UK**, used Tobii Glasses to study how operators at the Direction Centre-Est deal with routine incidents when providing traffic information to the public. Based on analysis of the patterns of attention, the researchers will develop models of decision making by the operators which will be used to optimize the screen designs for the centre.



Evaluate performance in control room operations or in training sessions using a simulator.



Test the usability of different content on mobile phones and tablets in real-world environments.



Measure gaze patterns and user friendliness of signage at airports and other places, where visitors logistics and navigation is critical.

Our Offering

Tobii offers a broad range of eye tracking products and services to meet the needs of different user experience studies and competence levels.

Our product range provides you with the tools you need to perform a wide variety of user experience studies. Complete eye tracking solutions, including hardware and software, are available for either purchase or rental.

Tobii's extensive eye tracking knowledge base helps you get up to speed quickly. A broad range of training and consulting services are available to teach and help you perform different kinds of studies. Opportunities to share experiences within the large community of Tobii users are provided through activities such as user conferences and online webinars.

Our global network of Tobii offices and resellers guarantees good support from your local Tobii representative. Tobii's **technical support offices in North America, Europe and Asia** provide timely support for customers in all regional time zones.

“*Tobii eye-tracking tools have allowed us to get an inside view of the customer experience, providing us with important insight into the design of our financial products.*”

John Manwaring,
Head of Design, Financial & Risk,
Thomson Reuters

Tobii's range of eye trackers fulfills the requirements of different user experience studies. Characteristically easy to use, unobtrusive, highly accurate and precise, they enable you to efficiently obtain valid and reliable research results.

Tobii Studio software provides comprehensive support throughout the entire study process, from preparation and data collection to analysis and presentation of the results.



Tobii X2-30 & X2-60 Eye Tracker

- Versatile modular eye tracker for a broad spectrum of studies.
- Flush mount on laptops or monitors for studies of web and software.
- Dedicated solution for studies of mobile devices.
- Studies of TV, projections, industrial design, virtual environments, video games and in-field info kiosks.
- Small and portable for efficient testing of respondents in the field.



Tobii Glasses 2 Eye Tracker

- Wearable eye tracker for research in real-world environments.
- Studies of simulators or any training situation, control panels, mobile devices, signage and navigation.
- Discreet, ultra-lightweight design.
- Live view for instant insights.
- Flexible mapping tool.



Tobii T60XL Eye Tracker

- Widescreen eye tracker for display of large and detailed screen stimuli.
- Studies of computer games, magazine spreads, manuals and websites.
- Integrated into a high-resolution 24-inch TFT monitor.



Tobii TX300 Eye Tracker

- 300-Hz eye tracker for studies that require extra high sampling rate.
- For studies combining biometrics such as EEG, heart rate or skin conductance measurements with gaze data.
- Supports both screen and real-world stimuli.



Tobii Studio™

- Comprehensive eye tracking software for analysis and visualization.
- For test design and to record, observe, and replay test sessions.
- Create heat maps and gaze plots, and calculate eye tracking metrics.
- Works with all Tobii eye trackers.

Read more about Tobii products at www.tobii.com.

As a supplement to the Tobii product range, we provide training, consulting and opportunities to share experiences within the large community of Tobii users to support and ensure your competence build-up.



Training

Tobii provides training in a variety of formats, including startup training at the clients' premises, training videos, webinars, and open courses through our Eye Tracking Academy initiative.

Trainings

Our standard face-to-face training programs enhance your in-house eye tracking competence, both in relation to how to operate the equipment and how to begin with eye tracking as a research method. Training is arranged at a location of your choice, such as your office, or online.

Webinars

Our free webinars are one hour online presentations, which you can participate in from your own computer. They cover a broad range of topics and knowledge levels on eye tracking as a method in specific research fields, and in basic eye tracking software and hardware usage.

Courses - Tobii Eye Tracking Academy

Eye Tracking Academy courses are typically one- or two-day, face-to-face sessions held regularly in strategic locations around the world. They span a wide range of topics and knowledge levels, ranging from basic eye tracking software and hardware usage to how eye tracking can be used as a method in specific research fields.



Consulting

Tobii Insight specializes in eye tracking-centered consumer studies, designed to improve visibility and communication. Our talented team has conducted hundreds of projects worldwide with a focus on delivering actionable value to our customers.

Our areas of expertise include usability and communications and we offer different types of studies of websites. Tobii's consulting service also gives you access to eye tracking experts for your very specific needs and projects. We can support you in building up your lab, help you get a project started, or provide you with expertise on how to set up a specific study.



User Community

Become part of the large community of researchers already using Tobii products. Tobii runs online webinars together with customers and international user conferences every year. By bringing together

leading practitioners and researchers from the user experience research industry and academia, these activities serve as a platform for knowledge and experience sharing.

Read more about Tobii services at www.tobii.com

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