



**Tobii Technology
Healthcare
Sweden**

Eye tracking software that helps people with disabilities communicate and lead fuller lives

Kathrin Lemler had been trapped in a virtual prison for 19 years. Stricken with cerebral palsy (CP), Kathrin was unable to do many of the things associated with everyday living in the 21st century, such as making small talk with a neighbor or completing transactions at the local bank or corner grocery store. Instead, her conversations were limited to short sentences – typically via instant messages, which made it difficult to connect with society or to fully communicate her wishes, thoughts, or feelings.

That all changed the day Kathrin first used MyTobii. The eye-tracking capabilities of the hardware- and software-based assistive technology allowed Kathrin to interact with a computer using her eyes. This gave her the freedom to live more independently and do things that previously would have been impossible for her, such as writing lengthy e-mails, “talking” on the phone or interacting with a bank teller without an interpreter. MyTobii was developed by Tobii Technology, an independent software vendor (ISV) located in Stockholm, Sweden. Combining its engineering expertise with a range of Microsoft technologies, Tobii created an eye-tracking solution that would give Kathrin -- and others who suffer from diseases such as CP, multiple sclerosis or amyotrophic lateral sclerosis—more independence.

According to Kathrin, “From the moment I got a MyTobii, my communication has run much more smoothly. It starts in the morning. I’m able to chat with my cab driver who takes me to school. For me, communication is one of the most important abilities in life. It is more than expressing your needs. Getting in contact with others and talking to them makes you a member of society. MyTobii has become my voice.”

Founded in 2001, Tobii has wasted no time in standing out as a specialist in the field of eye-tracking technology. In addition to its work in assistive technologies, the company also develops eye-tracking solutions for the market research industry, and provides its technology to other hardware and software vendors. First released in 2005, MyTobii incorporates the company’s eye-tracking technology into a computer monitor’s bezel, the portion of the monitor shell that surrounds the screen. Using a miniature camera and image sensors, MyTobii picks up reflections from the corneas of the user’s eyes and uses this information to interact with the person and to control the software.

John Elvesjö, Tobii co-founder and executive vice president, says that the company initially wasn’t sure what to do with the eye-tracking solution it had created. “In the early stages of development, we didn’t have a clear idea who would benefit most from our eye-tracking technology,” says Elvesjö. “That uncertainty disappeared when we realized that people with disabilities really had no other choices for interaction. Seeing MyTobii’s impact on the lives of people living with disabilities is both amazing and touching at the same time. People who use it can communicate much faster and accomplish tasks without attaching any cumbersome input devices to their heads. It not only allows them to sustain their lives, but also gives them greater independence and freedom to live in a comfortable manner.”

For more information, please visit www.microsoft.com/isv