

BLINK TWICE TANGO!

Challenge

For people living with communication challenges, a simple conversation continues to be one of the most difficult activities in which to participate. Self-expression can be extremely frustrating, especially when using the complicated and unintuitive tools currently on the market. Blink Twice set out to address the issue, partnering with frog to create tango!, a new speech-generating device that supports multiple forms of communication within a single, easy to use interface.

Discover: The Value of Simplicity

The daily life of an Augmentative and Alternative Communication (AAC) user is already filled with numerous complex assistive devices, so frog focused on simplicity and ergonomics in the new design. Competitors' products were both visually and functionally confusing, their structures emotionless and awkward to use. frog and Blink Twice sought to develop a device that would better enable real-time conversations for AAC users, enhancing their ability to build personal relationships and gain broad social acceptance.

Design: Intuitive Expression

The design leverages years of user research and competitive product analysis. Once frog was immersed in the culture and lifestyle of an AAC user, the exterior's iconic design appeared almost immediately. The breakthrough came to life as a simple napkin sketch during a brainstorming session with Richard Ellenson, founder of Blink Twice. Over months of extensive tweaking and testing, the design team refined all surfaces, button actuation, light, and sound. A mix of soft and hard buttons were required to meet the different styles of usage: drag, pound, or peck.

A totally new language structure was developed to provide quick access to topics and relevant vocabulary. Users can switch from nearly 2,500 intuitively organized and customizable phrases to word selection or spelling keyboards for more specific communication. The interface is so intuitive that a sentence that would take minutes of hunting-and-pecking to program on other devices can now be spoken at the push of a button. This is achieved through novel scanning patterns and dozens of scripts that promote social interaction, created expressly for tango! by industry experts Caroline Musselwhite and Linda Burkhart.

Deliver: A Complete New Voice

The variety of auditory attributes sets tango! worlds apart from the robotic voices used on other devices. Voice morphing allows users to better express their emotions through a



ABOVE

The intuitive interface of the Blink Twice tango! facilitates verbal interaction for those with communication challenges.

whisper, shout, or whine. The holistic experience of this device is augmented through peripheral features, such as the industry's first camera/photo album, high-fidelity speakers, and variously aged voices. tango! is a consumer electronic product, for a very unique group of consumers.

The tango! device became a reality through working collaboratively with the product development team at Flextronics, a worldwide contract manufacturer. The combined teams worked through thousands of functional details from electronic and physical components, materials, prototyping, and tooling.

Results

tango! is the first speech-generating device to combine a variety of communication methods and incorporate a built-in digital camera. With an intuitive interface that anyone can start using immediately, tango! enables people to experience the power of communication without navigating the complexities.

The device promises to advance the way manufacturers think about and develop assistive technologies, setting a new bar for product elegance and usability. Its form, interface, and features have all been sculpted specifically to allow users to communicate freely in today's society. The tango! is proof that emotional and thoughtful design not only makes the world a more beautiful place, but can enable people to do the things that most of us take for granted — communicate and forge relationships with one another.