Whirlscape, Inc.

ABOUT WHIRLSCAPE

Company Timeline

Date	Milestone
Late 2010	Development of Minuum keyboard technology commences based on rotational text entry
Mid-2012	End of initial research phase; proof of concept prototypes built
June 25, 2012	Whirlscape incorporated
August 1, 2012	First patent filing: U.S. Provisional Patent Application No. 61/678,331
January 2013	Beta testing of the Minuum virtual keyboard
March 18, 2013	Launch of Indiegogo crowdfunding campaign for fully functional Android version of the Minuum project

Foundation

Minuum was inspired by a University of Toronto research project to invent a better sight-free text entry technique for touchscreen mobile phones. This encouraged one of the researchers, Will Walmsley, to investigate various device tilting techniques relying on user motion. Working with fellow researcher Xavier Snelgrove and Professor Khai Truong, they continued the research and took the following steps to bring the technology to life:

- Designed a new alphabet layout
- Developed the disambiguation algorithm
- Ran user studies with various device tilting techniques, finding that people could type at up to 37 words per minute, using carefully designed audio feedback, without any visual feedback or looking at their phones

Recognizing that their technology had uses beyond the new rotational text entry method, Walmsley and Truong pivoted to focus on creating a better touchscreen keypad, founding Whirlscape in June, 2012 to commercialize the technology. All the company's planning has been directed to addressing the touchscreen market while positioning itself to enable a new wave of typing with wearable computing—for which Whirlscape's technology is extremely adaptable.

Company Approach

Throughout its history, Whirlscape has adopted a philosophy of simplified mobile interaction, present in its Minuum keyboard—which takes the first step toward a wearable computing future. Existing technologies have been built on the assumption that sticking a virtual typewriter into a touchscreen device is the best way to enter text, resulting in keyboards that have more physical bulk than necessary. Conventional-style keyboards are reaching their size limit in touchscreen phones, with no way to incorporate anything smaller. In making a simpler, one-dimensional, keyboard that doesn't rely on precarious touchscreen navigation, and that simultaneously satisfies the quest for speed and precision of text entry, Whirlscape has been able to prototype and test an array of new text entry techniques, some with potential in wearable computing.

Funding

Whirlscape has received seed funding from the following sources:

- University of Toronto Early Stage Technology (UTEST) program
- MaRS Innovation

Intellectual Property

On the intellectual property (IP) front, Whirlscape has begun developing a patent portfolio to protect IP in the following areas:

- Text entry method
- Alphabet layout
- Disambiguation algorithm
- Interface design

Whirlscape's patent portfolio includes a U.S. provisional patent to protect the design and implementation of all varieties of one-dimensional virtual keyboard, encompassing a wide range of possible input methods that could be used to take advantage of such a simplified keyboard.