Blitab Technology develops tablet for the blind and visually impaired

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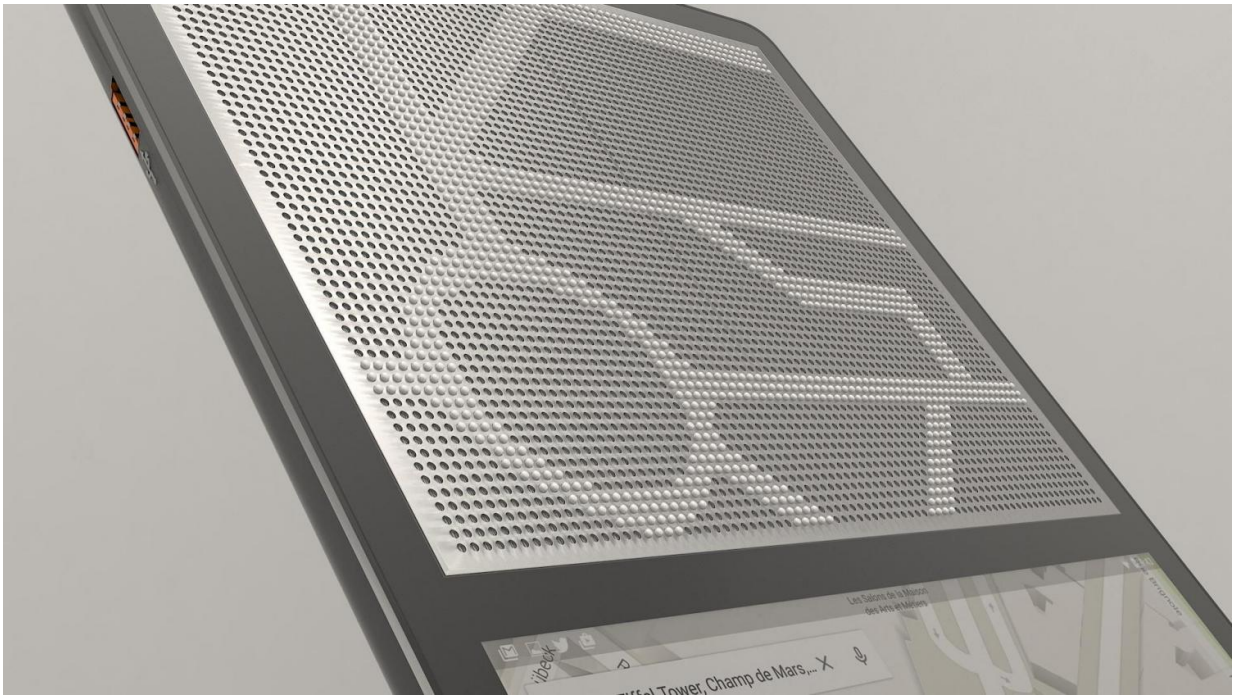

Credit: Blitab

(Tech Xplore)—Blitab, a tablet with a Braille interface, looks like a promising step up for blind and low vision people who want to be part of the educational, working and entertainment worlds of digital life.

A video of the Blitab Technology founder, Kristina Tsvetanova, said the idea for such a tablet came to her during her studies as an industrial

engineer. At the time, a blind colleague of hers asked her to sign him for an online course and a question nagged her: How could technology help him better?

Worldwide, she said, there are more than 285 million blind and visually impaired people.

She was aware that in general blind and low vision people were coping with old, bulky technology, contributing to low literacy rates among blind children. She and her team have been wanting to change that.

There was ample room for improvements. The conventional interfaces for the blind, she said, have been slow and expensive. She said the keyboard can range from about $5000 to $8000. Also, she said, they are limited to what the blind person can read, just a few words at a time. Imagine, she said, reading Moby Dick, five words at a time.

They have engineered a tablet device with a 14-line Braille display on the top and a touch screen on the bottom.

Part of their technology involves a high performance membrane, and their press statement said the tablet uses smart micro fluids to develop small physical bubbles instead of a screen display.

They have produced a tactile tablet, she said, where people with sight loss can learn, work and play using that device.

The user can control the tablet with voice-over if the person wants to listen to an ebook or by pressing one button, dots will be activated on the screen and the surface of the screen will change.

Romain Dillet, in *TechCrunch*: "The magic happens when you press the button on the side of the device. The top half of the device turns into a

Braille reader. You can load a document, a web page—anything really—and then read the content using Braille."

Tsvetanova told Dillet, "We're not excluding voice over; we combine both of these things." She said they offer both "the tactile experience and the voice over experience."

Rachel Metz reported in *MIT Technology Review*: "The Blitab's Braille display includes 14 rows, each made up of 23 cells with six dots per cell. Every cell can present one letter of the Braille alphabet. Underneath the grid are numerous layers of fluids and a special kind of membrane," she wrote.

Credit: Blitab

At heart, it's an Android tablet, Dillet said, "so it has Wi-Fi and Bluetooth and can run all sorts of Android apps."

Metz said that with eight hours of use per day, it's estimated to last for five days on one battery charge.

The tablet team have set a price to this device, at $500.

How they will proceed: First, she said they will sell directly from their web site, then scale through global distributors, and distribute to less developed world.

What's next? Dillet said in the Jan.6 article that "the team of 10 plans to ship the tablet in six months with pre-orders starting later this month."

Blitab Technology recently took first place in the Digital Wellbeing category of the 2016 EIT Digital Challenge. EIT Digital is described as a European open innovation organization. They seek to foster digital technology innovation and entrepreneurial talent.

More information: blitab.com/