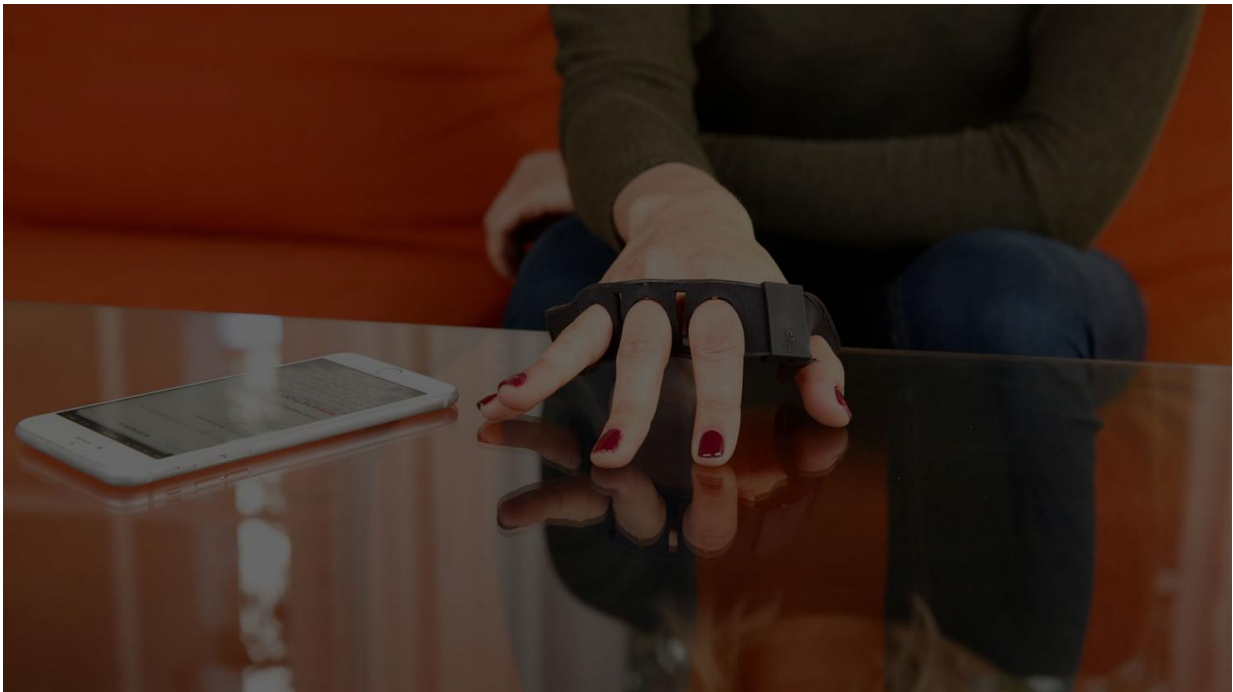# Hand strap makes use of taps to get the message out

May 18 2016, by Nancy Owano

Credit: Tap Systems, Inc.

(Tech Xplore)—We need to send information including words and numbers across the wires but researchers are thinking about alternatives as to how we do so, and are pondering the future of the keyboard and mouse.

Well, what about an alternative as a wearable Bluetooth keyboard of

sorts that can turn anything you touch into a typing surface? Why not kill the need to tote a [physical keyboard](#) if it is too cumbersome? The alternative being proposed is that you make use of your own hand as a keyboard, typing anywhere on anything flat.

Tap Systems has come up with its Tap Strap, a wearable Bluetooth keyboard that will enable you to send messages, texts and emails by tapping on the nearest surface—using a one-handed wearable to tap away. Wearable? Yes, a strap wearable, which can be paired with a device.

You can do this with right or left hand; you make sure the strap is at the top of the finger near the knuckles. you tap your thumb on a flat surface. (Gwen Ackerman in Bloomberg said you're looking at a foam strap that slips on to the hand almost like a brass knuckle.) You can open something called theTapGenius app to get up to speed fast.

Uh-oh. Consumers looking for easy keyboard concepts generally do not like the words learning curves. You need to learn how to tap? Bloomberg said, "Tap's possible drawback" may be that users need to learn to tap, but the company has moved to overcome the hurdle with the learning game. It serves to improve memory retention for finger combinations.

One of the company founders said it takes most people no more than an hour to adjust, according to the report from Bloomberg.

Andy Boxall in *Digital Trends* said, "Tapping with each finger will see a character or number appear on the screen, and it's possible to punctuate and insert special characters using [different](#) gestures."

There are 31 possible finger taps and the process is supposed to pay off with a accuracy level of 99%.

Bloomberg noted that what is tapped out is transmitted by Bluetooth to mobile devices such as phones and tablets.

It can be charged via a standard micro USB cable. Tap works with any device supporting Bluetooth keyboards. This includes iOS and Android phones and tablets, and Mac and Windows PCs, and most smart TVs. The strap comes in different sizes, large, medium, small.

The technology that makes this work: The Tap Strap has a series of embedded sensors that go to work to monitor mechanical information of hand and fingers. This information is processed by an MCU in the Strap, which decodes the raw data into finger-tap combinations and transmits the resulting characters or commands via a Bluetooth radio.

What's next? The website says people interested in the strap are invited to join a sign-up list to become a user. The Tap Strap is supposed to go on sale later in 2016. A news release said "Tap is being made available immediately to select beta users - initially in the San Francisco Bay area. Tap is expected to ship commercially before the end of 2016."

Also, said the company, a Tap development kit will be available to developers for harnessing the capabilities of Tap into applications including gaming, AR and VR.

How likely is it that the Tap Strap will enjoy impressive adoption numbers? *PhoneArena* is not so sure about smartphone users but "can see how VR headset enthusiasts and owners of autonomous wearables with small screens can improve their typing experience."

Gwen Ackerman in Bloomberg reported what Ran Poliakine, Tap cofounder, sees happening. "With Tap the need is absolutely there, and is going to be greater and greater, from wearable devices all the way to virtual reality and augmented reality, all of those devices in urgent need

for a [sophisticated](#) input method."

More information: www.tapwithus.com/

[www.prnewswire.com/news-releas … board-300266876.html](http://www.prnewswire.com/news-releas)

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