Mind-reading skateboard gets cues from neuroheadset (w/ video)

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(PhysOrg.com) -- Austin, Texas-based Chaotic Moon Labs made a splash earlier this year with a high-tech Kinect-controlled skateboard moving by the rider's hand signals. Now they are showcasing another skateboard that moves beyond Kinect power and hand signals, over to a board that moves by just reading your mind. Think where you want to go and your board takes you there. From their Board of Awesomeness, their newest Board of Imagination is designed to show another twist to skateboard inventiveness and also to what travel might involve with enough technical ingenuity and creativity at play.

Rather than just calling the new skateboard Board of Awesomeness V2, the creatives decided their new invention was no mere revision, but instead a skateboard worthy of its own name.

The Board of Imagination is a skateboard that carries the same Samsung tablet with Windows 8 and the same 800 watt electric motor as the earlier skateboard, but now sports a headset. With it, the board will read the rider's mind and will move anywhere the rider imagines.

The skateboard can translate brain waves into action such that the user visualizes a point off in the distance and thinks about the speed in which to travel to get there. The skateboard does the rest.

The mind-reader for the device is the EPOC headset from Emotiv. Described as a "neuroheadset," the Emotiv company has produced a device that serves as an interface for human-computer interaction. As part of the new skateboard, the headset can control the rider's speed and braking.

According to its site, Emotiv is a "neuroengineering" company. The motto is "you think, therefore you can," which reflects on their devices, which can control objects just by thinking about them. The headset conveys brainwaves that generate signals to the tablet. The software on the tablet interacts with the skateboard and the rider moves along. When the rider wants to stop the board, no hand signals are necessary, as in the earlier Board of Awesomeness. The rider just thinks about the upcoming point of arrival.

The Chaotic Moon Labs team currently has no intentions of commercializing the skateboards. They are, though, planning to open-source the code, and also to provide information about materials and the cost of goods so that others can build such boards, "provided we get the clearance from our attorneys first," general manager Whurley told

CNET. (He goes by one name only.)

The Chaotic Moon Labs website talks about what motivated them to do another high-tech skateboard. According to the site, “Whurley likes to ride in the gorgeous Austin sunny days so the obvious thing to do was look at the Kinect sunlight problem!” The labs team instead decided to take the direction of a skateboard whose movements could be controlled via brainwaves.

More information: www.chaoticmoon.com/labs/chaot … oard-of-imagination/

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