

Better kiosks through intelligent design...

Nearly four years ago Olea was approached by a division of NIKE called SPARQ with a skunkworks type program to develop a vision testing system for premier athletes. For many years NIKE has been working behind the scenes with NIKE athletes to improve their abilities on everything from basic strength training to vision skills. An example would be a wide receiver that might look great on paper but keeps fumbling passes when the ball makes contact with his hands. For many years NIKE has worked with Dr. Al Reichow, the Michael Jordan of the vision world. Dr. Al was able to diagnose (through analog testing), precisely what was wrong with an athlete's vision and in most cases was able to correct it. SPARQ's mandate within NIKE was to create a digital version of this testing that could be replicated over and over.

After vetting numerous potential partners, NIKE decided that Olea was the innovative type of company they wanted to work with to create this revolutionary machine. After a few iterations and testing, the final result was a machine unlike anything else. Many of the tests that run on the machine are designed to test an athlete's reaction time and hand-eye coordination. To correctly perform the diagnostic test, the main monitor must be positioned at the athlete's eye level and is tapped hard and fast as their speed and accuracy improves. The varying height of the athletes meant the



"Olea's out of the box thinking and Kiosk background allowed us to create a machine unlike anything ever before it."

— Jon Ervin, Project Manager
Nike Sparq Sensory Performance

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Manufacturing Phase



Implementation

Machine Specifications:

- 7.5' tall, 950lbs
- 42" LCD Touch can travel 36" to adjust for athletes height
- 24" 3D Monitor exposed when 42" Monitor is lowered down
- iPod Touch connected via private WiFi network
- High end Dell Gaming PC system
- Custom formulated Powder coat paint finishes
- Bose Speaker system

main 42" monitor needed to be adjustable and travel up and down the column body on a motorized conveyance device. Given the nature of many of the tests, the main monitor is also reinforced to withstand the rigorous day to day tests the athletes are expected to perform.

The Kiosk also features a 24" 3D monitor that interfaces wirelessly in with an iPod touch and 3D glasses to test a user's depth perception and ability to adjust their vision quickly from near to far (imagine a quarter back receiving a snap and then looking up for a pass). When this ability can happen quicker, it puts an athlete one step ahead.



"The challenge of making a machine that could adjust for a 7'+ person and be physically beat on by a 350lb NFL Line Backer was one of the most gratifying projects we've done."

— Frank Olea, CEO
Olea Kiosks[®] Inc.

Once an athlete has run through the 12 step testing process with an eye care professional, they are "prescribed" a workout regimen to improve their weak areas. This is where the proprietary NIKE vapor strobe goggles and glasses come into the picture. These specialized glasses are essentially LCD screens that flicker at various rates to remove frames of vision. Imagine running out to receive a pass but only being allowed to see for one second at a time. You might see the ball two or three times before it's supposed to be in your hands. This forces the brain to speed up and anticipate the trajectory of the ball. The machine doesn't diagnose vision itself; but works to determine what the brain is choosing to see based on what the eyes are feeding it. This is where an athlete's sensory performance lies— since 80% of sensory is through vision.

Olea produces the Kiosk for NIKE as an OEM manufacturer and is responsible for deployment, installation and field service worldwide. Machines are installed in the U.S. and in Europe with NBA, MLB, NFL, Premier League Soccer, and elite universities and elite training centers.