Dynavision Trains The Neurological Condition Of Athletes To Improve Their Decision Making

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One of the greatest skillsets an athlete can have is the ability to make swift, precise movements in the heat of the moment. These skillsets are often natural athletic gifts, but they can also be learned and honed. This is where a company called Dynavision operates. For over 20 years, Dynavision has worked to be at the forefront of sports visual technologies to improve human development and an athlete's performance under pressure.

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Founder and president of **Dynavision International** Phil Jones is thrilled about the immense opportunity that his company can offer people to facilitate improvement in cognitive performance, be it on or off the field.

"(Dynavision) is all about human performance. It's all about measurements," Jones said. "No matter what your level is; elderly, a child, superstar athlete, or a driver with a neurological condition, anything no matter what, Dynavision wants to measure, motivate, challenge and provide a stimulating result that really shows people how they're doing, and how much they have improved."

When it began, Dynavision's mainstay product came in the form of the Dynavsion 2000 which has evolved into the D2 training board offered today. A black square board with panels organized in a five-

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layered circular pattern enclosing a small blue LED screen around the midsection, the D2 invites users to test and improve their reaction times.

When turned on, the user looks straight ahead at the blue LED tachistoscope (t-scope) as one of the 64 panels lights up, indicating the target that needs to be hit. This process starts out simple enough, but depending on one's regiment, the machine slowly adds layers to the process, increasing cognitive demand.

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- Dynavision (@DynavisionIntl) April 11, 2016

From flashing its panels faster to the t-scope displaying images, words, math equations, and even playbook information, the D2 wants to push the user's neurological capabilities to increase their visual performance.

"When you do that you get a really unique, neurological training through the visual system. It really translates into every sport where you have to make decisions about what you're doing at the same time being aware of everything around you," Jones said.

The application of the machine was initially fully-geared toward athletic endeavors, but the team at Dynavision soon saw that the medical realm could benefit from the board's application. Jones recalls the early days of Dynavision, when he was approached with the opportunity to expand his product outside of the sporting world.

"A rehabilitation guru named Mary Warren told me that this device would be perfect for her clientele, which were people that had a stroke and lost portions of their visual field," Jones said.

Warren, among many things, a licensed and registered occupational therapists, found that many deficiencies her stroke victims had were addressed by what the D2 already offered. She found that the D2 could help "to address visual, cognitive and motor impairment in persons with acquired brain injuries."

The company began with a goal to provide players with a unique training regimen that would enhance reaction times on the field, but as it grew, it quickly realized the potential that their products, like the D2, have in preventing injuries.

"We do have evidence now that the University of Cincinnati has reduced its concussion rates from the national average of over 9 to just over 1. And they're using our device as part of a cornerstone of physician training. The hypothesis is that the reaction times are speeding up, so (they're avoiding last minute hits due to the improvement of their periphery awareness)," said Jones.

With years of product refinement under its belt, Dynavision has produced a fun and engaging way for patients and athletes to test their visual and motor reactions, all while improving their cognitive abilities.

"I was not a scientist, I was not a researcher, I was not a doctor. I was an athlete and because of that, I understand competition. I understand fun, motivation, and challenge. I think that that part of it, in conjunction with the optometrist that designed this, gives the product an edge. It's motivational and fun to use," Jones said.

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The entertaining aspects of the D2 will keep athletes engaged and committed to their regiments. And although Jones loves how well Dynavision and its products have been received, he wants his company to play a role in relieving problems that might arise in the future.

"With (the issues of an aging population, concussions, and neurological conditions)," Jones said. "I think we have a great group who are actively finding solutions to helping people, (and make them) better than they are today."