

## Virtual training helps companies prep on the go



**"We are impacting real people and real circumstances,"** said Neil Wadhawan, left, with Heartwood co-founder and CEO Raj Raheja.

### SNAPSHOT:

#### Heartwood Inc.

**What it does:** Produces elements for 3-D virtual and interactive training, games and marketing on mobile and web devices.

**HQ:** San Mateo.

**CEO:** Raj Raheja.

**Founders:** Raj Raheja and Neil Wadhawan, vice president of sales and marketing.

**Employees:** 12.

**Founded:** 2007.

**Funding:** Self-funded.

**2011 projected revenues:** \$2.8 million.

**2010 revenue:** \$2.1 million.

**2009 revenue:** \$890,000.

**Website:** hwd3D.com

**Hiring:** 10 people over the next year (two in 3-D game engine programming, five as 3-D artists and three sales executives).

PHOTOS / SPENCER BROWN

## Heartwood's technology takes off in mobile devices

BY KRISTAL PEAK  
San Francisco Business Times

**T**raining new technicians on heavy machinery can be costly, time consuming and a logistical headache for most companies.

Heartwood Studios has made things a little easier by taking training virtual, and it's paying off. The four-year-old San Mateo company is on its way to more than tripling revenue from 2009 to the close of this year.

CEO and co-founder Raj Raheja, who came from an architecture background, marveled at the great computer tools used to visualize a product in the creation stage and wanted to bring this concept to other fields.

"Essentially, if you have a physical product to build, use or repair, then our 3-D applications are great for marketing the product or training on it virtually," he said. Heartwood standardizes training processes and offers mobility, since its 3-D games and models can be viewed on any computer, tablet or mobile device.

When Raheja and his business partner Neil Wadhawan started the company, they were taking all types of 3-D jobs, from forensic animation of auto accidents to commercial animation of celebrities such as Whoopi Goldberg, but now they have found a focus in the heavy machinery industry.

Wadhawan said that Heartwood was finding it too easy to get pulled in various directions, but the areas that excited them the most were in aerospace, manufacturing, government and energy.

"These are the jobs that require serious skill training

and can be so expensive to conduct," said Wadhawan. "So we are impacting real people and real circumstances in industries that need to use the same technology they build their products with to market and train users."

Many programs and videos Heartwood creates are not so different from a gaming app you would find on any iPad. Heartwood prides itself on recreating very detailed procedures and machinery and making them seem as lifelike and familiar as possible.

The company has created everything from marketing videos for defense machinery and interactive "games" that teach medical procedures for a hospital, to real-time car or airplane repair instruction.

While there were challenges getting in the door with defense and aerospace machinery contractors, Wadhawan said that these are some of the best growth areas since Heartwood isn't competing against other technology companies, but rather against the traditional methods of training or marketing.

Pete Alexander, director of business development and strategic planning with L-3 Communication Holdings Inc.,

a \$16 billion defense contractor based in New York servicing several branches of the U.S. government, has been working with Heartwood for almost two years.

Alexander was challenged with marketing streamlined versions of tactical gear to the armed forces. But bringing in physical versions of each model and attachment is less than ideal for trade-shows and meetings.

"We worked together to create a marketing video that was all 3-D but remarkably lifelike and helpful at these shows," said Alexander, who also uses Heartwood applications in the form of tutorials to help his clients train users once they've bought the product. "My clients can see all the specifications they need and see every element and angle, which captures the imagination of the user immediately — as if suddenly they are a soldier."

Alexander is also excited about the tablet versions of tutorials, which can be on the ground for troops and customized for missions, allowing practice beforehand.

Heartwood is planning new offerings, such as "just-in-time" tutorials and more Kinect for Xbox360 integration. "Just-in-time" allows a person to load a tutorial and point their mobile device over the area they are working on to provide augmented reality on the camera video feed that prompts them on what to do next. Heartwood has plans to use this technology for the energy market, such as in nuclear plants and with solar technology.

Heartwood has integrated Kinect for Xbox360 technology in air traffic control training and simulations.

Raheja says that Heartwood is still in the early stages of growth and is poised to at least double revenue by the end of 2012. "Once we are able to show (clients) the possibilities of virtual training and marketing," said Raheja, "then they can't deny the productivity, convenience and lowered risk involved in using our technology."

