

Strategy created for maker of medical imaging system

A University of Tennessee class completed 12 weeks of go-to-market research for Knoxville-based 4D Medical Systems Inc. as part of UT's full-time MBA Entrepreneurship and Innovation curriculum. The course is designed to allow students to "walk in the footsteps" of entrepreneurs to learn best practices for successful implementation of strategies.

The company: 4D Medical Systems Inc. was founded in 2007 to develop and market medical, digital-imaging systems that capture, organize, annotate and communicate of high-quality photo images. The technology shows changes in skin over time or document's the "before and after" of cosmetic and medical procedures. The company's systems enable dermatologists, plastic surgeons, cancer centers, melanoma centers and other providers to offer the service at their sites.

Scope of work: The purpose of the engagement with the students was to provide 4D Medical Systems Inc. a baseline of its operations and develop a go-to-market strategy. At the time, the company was carrying out market research and product development for its first dermal imaging system.

The students applied a proven problem-solving framework of engagement, conducting research, benchmarking best practices and making recommendations with predictable outcomes.

Joseph L. Ortiz, president and CEO of 4D Medical Systems, said the team brought a fresh perspective to the company's strategy.

"We examined our initial assumptions from new directions, allowing us to refine our go-to-market approach," he said. "This synergistic approach helped 4D successfully launch our first system, The PhotoStation, during first quarter 2009."

Students: David Forbes, project manager, Martin Vargas, Chris Walker and Garrett Arms collaborated with Shawn Carson from Tech 2020 and Pat Richardson, faculty adviser at UT's College of Business Administration.

Key findings and recommendations: The student team identified three areas in which the company should focus:

■ 4D Medical Systems Inc. is not just a hardware or software developer; the company is a systems integrator that uses both imaging devices and its proprietary software to provide a new capability in the

4D MEDICAL SYSTEMS INC.

President/CEO: Joe Ortiz

Offices: 1020 Commerce Park Drive B, Oak Ridge, TN 37830-8099

Phone: 865-483-5145

Web site:

www.4D-Medical.com

photo-imaging of skin over time.

■ The company's key is its PhotoStation PhotoManager software, which enables the practitioner to automate the workflow of clinical photography. The UT team recommended that 4D expand its value to customers by offering the ability to convert dermal images previously taken into the PhotoManager software.

■ Demand must be created among end-users — patients and health-care providers. The students recommended a two-tier marketing strategy. For example, the company's Web site should include sections for consumer/patients and doctors/imaging clinic administrators.

The students believed that patients will drive demand as they understand how the technology can be used to better detect skin cancers, particularly melanoma. Also, doctors and clinic administrators will be able to better sell the service as they understand the value for patients' well-being and the practitioners' ability to deliver quality care.

Lessons learned: The students learned, first, it's critical for entrepreneurs to focus on satisfying market needs. If they are wed too closely to their technology, they may miss a basic market that can be quickly satisfied.

Secondly, entrepreneurs should build their company's focus around things they can control, and outsource those things outside of their core competency or out of their direct control. This will allow better responses to market changes.

"The MBA team helped us understand the complexity of our customer base, with patients demanding the service, doctors providing the service, and insurance companies paying for the service," Carson said. "Each of these 'customer segments' has to be researched and thoroughly understood."

For more information on Case Study by the University of Tennessee College of Business Administration, contact Cindy Raines at craines1@utk.edu.