

# Smooth sailing for new entrepreneurial enterprise

Have you ever thought about creating your own business — turning an idea into reality?

That is what Brad Russell did with three of his fellow full-time MBA students at the University of Tennessee. He is now CEO of Volantis LLC and one of the newest technology entrepreneurs in East Tennessee.

**The company:** Volantis was formed to supply a super-hydrophobic coating for ship hulls that will greatly reduce fuel costs for the shipping container industry. The product is based on a material — developed by Oak Ridge National Laboratory — that has special nanostructure, which repels water more efficiently than traditional surface coatings.

Volantis recently presented its business concept at the Global Venture Challenge international competition and won. This victory worked to validate the students' business proposition, and they received \$25,000 in seed money for their new venture.

**The team:** Students Brad Russell, William Ambrose, Danny Norman and Ned Morgan, with guidance from Pat Richardson and Glenn Swift, faculty advisers in UT's full-time MBA Innovation and Entrepreneurship program, assisted.

**The business challenge:** "It is our goal to encourage graduate students to start their own businesses while still in school," Richardson said. "One of the hidden challenges these young people face is hesitation. How can I start a business when I'm only a 25-year-old student? The full-time MBA I&E program works to overcome this obstacle."

Knoxville has a strong history of entrepreneurs in whose footsteps these students can follow: Jim Clayton, founder of Clayton Homes; Sandy Beall, founder of Ruby Tuesday; Jim Haslam, founder of Pilot; Michael Strickland, founder of Bandit Lites; John Jansheski, founder of DenTek Oral Care; Chuck Witkowski, founder of Protein Discovery; and many others. All were under 30 years old when they started their

first businesses.

**The competition:** ORNL, a world leader in energy research, hosted Global Venture Challenge 2008. The goal of the competition was to encourage students to launch new technology-based businesses that could improve the world. This year's event focused on energy, one of the world's most critical issues.

Unlike a usual business competition where students compete on the merits of a completed business plan, this competition focused on the step before the business plan is created — generating the business idea.

The team members met in class after listening to three entrepreneurs talk about starting their own businesses. The students didn't know each other previously — they were brought together by the MBA program — but each had been thinking about starting his own business venture.

"It was exciting in the beginning — brainstorming ideas and strategizing. Squeezing in time between a heavy class load to bring our company to fruition was particularly challenging," Ambrose said. "But each of our varied backgrounds helped generate ideas, and our incredible faculty support reinforced our confidence to move forward."

Finding the right technology is easy, but seeing the business opportunity associated with that technology is the hard part.

The students were introduced to ORNL Senior Laboratory Researcher John Simpson and his super-hydrophobic technology. The team looked at different industries to better understand how the technology could be utilized to solve customer problems.

Would Volantis be a manufacturer of the base material, a coatings manufacturer, an applications equipment manufacturer, or a professional services company? These were all possible business options. Whether they could license for the technology from ORNL was also a question that needed to be answered.

"Brad is into sailing, so taking this product into the shipping industry was a natural," Richardson said.

The team worked with Jansheski in perfecting its plan.

"Our 2½ hours with John Jansheski was incredible," Russell said. "He gave us a failing grade on our first approach, but provided invaluable direction and a promising perspective on the path Volantis should be pursuing."

**The presentation:** Volantis demonstrated that it had the technology to solve an energy problem. The team talked with industry experts, did secondary research and asked area entrepreneurs to challenge their assumptions.

"The team presented a solid business case that confirmed the financial impact and energy savings that their coating would

have on the shipping container industry," Richardson said.

Through their research, Volantis' founders determined that its product, if used on the 28,000 container ships currently in use around the world, would save more than \$3.2 billion in fuel costs. "This equates to about 1.5 billion gallons of fuel saved annually," Russell said.

"Collaborations involving students, entrepreneurs and researchers in the region are the wave of the future," Jansheski said. "They will enhance East Tennessee's ability to retain talented young entrepreneurs and maintain our country as a world thought-leader and job provider."

This Case Study was provided by the University of Tennessee College of Business Administration. For more information, contact Cindy Raines at [craines1@utk.edu](mailto:craines1@utk.edu) or 865-974-4359.