Pitt, CMU students work on projects for big businesses

BY MALIA SPENCER

Latrobe-based Kennametal Inc. could be headed into the world of social media as a way to better collect the voice of the customer. Using these existing tools, plus other technology, the global manufacturer could hear from its customers through its sales force.

That is just one solution to an internal challenge that the $2 billion company received when it turned its problem over to a group of Katz Graduate School of Business students in the fall.

Kennametal is part of a growing number of companies that have opted to work with graduate students at the University of Pittsburgh or Carnegie Mellon University. Both schools have programs that partner with businesses to give students a hands-on environment to deploy the business management skills they are learning in the classroom.

Students receive class credit plus invaluable experience working within an organization, and the businesses receive a perspective they may not otherwise find. The businesses that participate pay a fee to the schools in order to gain access to the classes.

“It’s a very strong dose in learning through problem solving, in the real sense,” Smith said. “In the classroom, it’s artificial.”

Smith’s program works on 32 projects a year with varying companies. The current term has 16 projects with 80 students. The students are broken into groups and are given an unstructured challenge for which they must decipher the problem and then propose a solution. The solution, in turn, is pitched to the client company.

A good project candidate for the class is a problem that has a solution and one that can be resolved within the three to four months of the semester, Smith said. He also works to ensure that executives involved understand that the main focus of the exercise is the students’ education.

Projects cut across all disciplines, he said, and have included marketing, information technology and supply chain. Some of the client companies, in addition to Kennametal, have been American Eagle Outfitters Inc., Bank of New York Mellon Corp. and Westinghouse Electric Co.

At Carnegie Mellon, students in the Tepper School of Business can apply for one of the 35 slots in the Integrated Product Development Project, which teams up business, engineering and design graduate students with a company for a semester-long project.

Nissan Motor Co. is the partner for the current semester, said Peter Boatwright, associate professor of marketing, and one of the three instructors for the class.

The class is designed to help students work within an organization on a team with diverse disciplines. The class is broken into groups of six or seven people and the entire class works with one company on a few different projects.

Jay Sizemore, a 29-year-old MBA student, was part of last year’s Tepper class that worked with Mine Safety Appliances Co. of O’Hara Township.

“The big part was the process — learning a market need versus just trying to figure out what would make money,” Sizemore said of his class experience.

Teams are forced to look at a problem from different perspectives, which can have competing priorities, such as profit vs. design vs. engineering, Sizemore said.

“It’s the management of that friction that creates a product strong in all those areas,” he said, adding that the class “is trial by fire.”

In the end, Sizemore’s team created a product called Worksight, a RFID-powered radar that can be placed inside a bulldozer or excavator that can help the operator see if other workers are standing nearby. The project included making a working prototype.

“Frequently, garage inventors have an idea and need to convince people they need it,” Boatwright said. “This is the opposite: Create a solution based on a need.”

In addition to Mine Safety Appliances, CMU students have worked with New Balance Athletic Shoe Inc., Navistar International Corp. and Dormont Manufacturing Co.

Similar to what happens at Katz, Boatwright said CMU works to ensure the educational value of the project is priority. He also noted the school is diligent in protecting students’ interests in any contracts that are signed.

“We don’t want our classes to be cheap labor,” he said. “Education is critical, and the interest and the rights of the students is held.”

mspencer@bizjournals.com | (412) 208-3829 | @PBT_Malia