

Becoming an Entrepreneur

Preparation, Experience Are Vital Components

By Tom Schuman

Entrepreneur – one who organizes, manages and assumes the risk of a business or enterprise.

While entrepreneurship has become a field all its own (including Ball State's nationally recognized Midwest Entrepreneurial Education Center and a number of other growing programs in the state), many entrepreneurs emerge from their work as scientists, engineers and in other technical fields.

There is no single path to starting and growing a new business, an enterprise focused on creating the high-skill, high-wage jobs so important to the state's economic future. Principals in Griffin Analytical Technologies and Arxan Technologies, introduced in the January/February *BizVoice* (see story in the *BizVoice* archives at www.indianachamber.com), are illustrations of that point.

Chemistry to commercialization

Griffin Analytical's Dennis Barket and Garth Patterson were finishing their Ph.D. work in analytical chemistry in 2001, while doing the preparations necessary to launch their company. The focus is on commercializing Purdue technology, creating a mass spectrometer that will allow for a portable laboratory or lab-to-sample approach to chemical analysis in the field.

"I've always had an entrepreneurial bent," states Barket, who started a couple of side businesses while in school and has a family history of entrepreneurial activity. "I also picked up a lot from working at Procter & Gamble. That's an organization, from top to bottom, that expects best business practices to be followed."

Graduate school proved to be a strong source of assistance for both. Each benefited from professors and advisors who emphasized technical writing, speaking and organizational skills. The two actually met in Purdue's Applied Management Principles (AMP) course.

Patterson describes AMP as a "business short course for science and technical people." Both say the experience laid the groundwork, which was supplemented by first-place finishes in three business plan competitions.

"That was forcing us to think like entrepreneurs," Barket notes. "When you combine the knowledge from AMP and the experience gained in the business plan competition, we had a good basis for moving forward."

Speaking out

Solid communication skills are essential, whether in writing business plans, making a pitch to venture clubs and other organizations or dealing with potential investors and customers on a one-on-one basis. Experience turns out to be one of the best teachers.

Barket: "Since the business plan competitions, we've been cultivating a theme for the company and why this is a viable business opportunity. Since then, it's just building on that same pitch and presentation. If you're taking it seriously, you update it (the business plan) in an ongoing fashion."

The pair says it is difficult to obtain solid feedback from speaking in front of a large audience. A typical approach is to follow your basic presentation and make adjustments during the question-and-answer period. In

Companies Moving Forward

Some of the developments at Griffin Analytical and Arxan since the January/February *BizVoice* article:

- Griffin closed on another round of angel investment, featuring a new group of individual investors from the Midwest
- Formally started Phase II work utilizing Small Business Innovation Research funding from the Department of Defense
- Patterson was the first author on the lead article in the December 15 edition of *Analytical Chemistry*, the leading research journal in the field. Two articles describe the development of the prototype instrument and uses for the technology. The work has generated inquiries and could lead to potential research contracts
- The first commercial release of Arxan's software is expected by the end the first quarter
- Davis continues to focus on business development and licensing efforts with current customers and submitted proposals on several additional government contracts
- A new employee in the West Lafayette office is on board to support the contract with Wright-Patterson Air Force Base in Dayton, Ohio.

small group settings, recognizing body language becomes important with the need for modifications much greater.

Patterson, who focuses more on the technical operations of the company, may have a slightly easier adjustment than his partner. Still, while talking to scientists and engineers from the military and academic world, he is forced to be on top of his game.

"It is a little easier in that respect, and I have a depth of confidence from doing the presentation," he says. "There's really been an evolution in how we determine what the audience wants, the level of technical vs. business information. Experience has helped us in that area."

Barket relates that the company has made great strides in proving to people that the technology is sound, and the research and development effort is in place. The shift now is toward commercialization – market sizes, dimension of markets, execution of the business plan.

Education process

Asked whether the "business side" of the equation should be taught earlier in the college process, Barket gives an unequivocal "no."

"In the sciences there needs to be such a rigor of foundation and depth to just trying to learn the basics of what you're studying," he explains. "While in theory it would be great for people to take an economics class and marketing class, I'm not sure how practical that would be."

Patterson says the AMP course, focused more on general business practices than entrepreneurship, filled that void at the proper time. Barket suggests an AMP2 course that addresses entrepreneurial topics such as technology transfer and financing.

Legal eagle

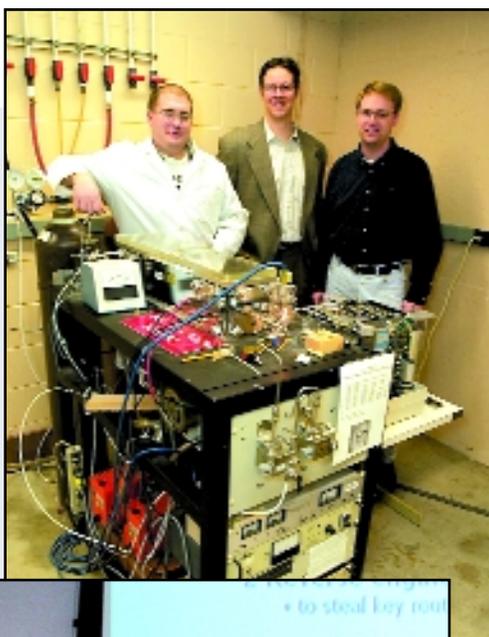
Eric Davis, vice president of Arxan Technologies (developer of advanced software security), brings a different set of attributes to his company. He earned a finance degree before going to law school. Both have been major assets.

"Going to business school as an undergrad is what gave me the (entrepreneurial) bug," he says. "And so much of starting a business is legal in nature. With that legal background, you're not afraid." In representing many small businesses during four years of practice, "I got to see a lot of things that went wrong."

While acknowledging the benefits of experience – "the more practice rounds you can have before the stakes are too high the better" – Davis says active involvement in all phases of the company is a strong teacher.

"If you have played an integral role in preparing the business

Griffin Analytical team members (from left) Garth Patterson, John Scott and Dennis Barket after winning Purdue's Burton D. Morgan Entrepreneurial Competition in April 2001.



Eric Davis of Arxan Technologies benefits from a business and legal background in making group presentations and in one-on-one meetings.

plan, the business model, participating in most aspects of starting a business, that is the best preparation. If you've played a more universal role, you know firsthand the answers to all the questions."

If that is not the case and you don't know the answer, Davis says part of the art is having something prepared to avoid those awkward moments of silence or indecisiveness.

Key points

Davis agrees with Barket and Patterson on the nature of large vs. small group meetings. He cites the need for a less formal, conversational style when sitting at the table across from investors or customers, and knowing when to bring in the top technical people. He adds that the purpose of one, however, is to get to the other.

"If you're trying to raise money or sell a product, you have to get those one-on-one meetings," he asserts. "If you're just going from venture club to venture club, you're not going to be successful. A lot of times

the one-on-ones don't come from those venture clubs, they come from leveraged relationships."

It's not just his background, but Davis also advises entrepreneurs not to go it alone. Whether it's legal or other assistance, trusted advisors play a crucial role.

"The best entrepreneurs," Davis says, "are the ones who know what they do best and get people to help do everything else."

INFORMATION LINK

Resources: Griffin Analytical Technologies at www.griffinanalytical.com

Arxan Technologies at www.arxan.com