

FORESIGHT



Creating a New Generation of Research Parks

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TWO CEOs REFLECT

ON THE ROAD TO TECHNOLOGY COMMERCIALIZATION

What makes a technology company successful?
What does it really take to move technology from the laboratory to the marketplace?



Books have been written on the subject, but no one knows better than those who toil in the trenches every day. Recently, *Foresight* spoke with CEOs of two very different Southern Arizona technology companies to discuss what they've learned as they've moved their companies' technology towards commercialization.

Pat Edsell is Chief Executive Officer of NP Photonics, Inc., a University of Arizona spin-off creating optical light sources for sensing research, medical materials

processing, defense and telecommunications applications. NP Photonics has been located at the University of Arizona Science and Technology Park since 1998 and is one of the inaugural tenants of the Center for Technology Commercialization.



Top: Robert Green. Bottom: Pat Edsell

Robert Green is Chief Executive Officer of Integrated Biomolecule Corporation (IBC). IBC has two operating divisions – IBC Labs, a full-service analytical laboratory, and IBC Organics, which conducts research, development and synthesis of biologically active compounds for the pharmaceutical and diagnostic industries. IBC was one of the first tenants of the Science and Technology Park when it opened in 1996, and the first to “graduate” and move into its own facility in January 2004.

Here's what they told us:

Both of your companies have taken unique technologies and moved them into the global

marketplace. From your perspective, what has been the key to your company's success?

Edsell: I hate to call us “successful” because I don't think we're there yet. To me, a successful company has developed technology, has achieved market acceptance of its technology, and is completely self-sufficient – you don't need venture capital to help you survive. We've accomplished a great deal...but we haven't reached the criteria for “success” yet. We still have more to do.

Green: We attribute IBC's success to a very simple principal – even though we have the aura of a biotechnology company we are, quite simply, a commercial enterprise. Everything we do has a simple goal – to help build a stable and profitable business. We stick to the basics. We do not waste time or money, and we do not over-expand.

What is the greatest challenge you've faced as you've moved towards commercialization?

Edsell: Moving from being a technology-driven company to a market-driven company. Most companies have good technology, but knowing markets, grabbing opportunities, and meeting the needs of your customers is what really makes the difference.

Green: The greatest challenge was attracting business at the beginning. We started from ground zero – no customers, no reputation and few resources. With this, we went after business from the largest pharmaceutical companies in the world. Luckily, we were both gutsy and naive. The first three years were brutal, but eventually we found our footing.

What are some of the accomplishments that

you're most proud of?

Edsell: Although we're a young company, we have several accomplishments that we're proud of. We've taken UA-developed technology and commercialized it. We've obtained \$10 million in government funding to further develop our technology, and we've successfully completed many government contracts – something that doesn't always happen in our business.

We're currently shipping 40 different product lines that are well-received by our customers – universities, research labs, government agencies, the defense industry, the oil and gas industry and the medical market.

And perhaps, most important – we've got great people. Our management team has over 70 years of combined experience. Ultimately, all organizations are successful because of their people.

Green: IBC has two operating divisions at the top of their fields. IBC Labs came from nowhere to dominate the analysis of nutritional supplements. Building on this, we expanded our services to

include the analysis of pharmaceuticals, biological fluids collected in clinical trials, research samples and other materials.

In December we started our new venture, Rx Analytical, which will analyze custom pharmaceuticals prepared nationwide by compound pharmacists. We continually seek new services to provide. On the synthesis side, we have built a reputation for being able to complete projects that others will not undertake, or having started, cannot complete.

We built unique laboratories, which operate 24/7. This enables us to provide precise results in two to three days when the industry norm is ten to twelve.

We combine all this with great customer service. We developed the Analytical Service Reporting System™, which provides online sample tracking and report downloading – if you can track a package with FedEx you should be able to track a sample at IBC – and next month we eliminate the faxing of analytical results and instead will send them electronically. We continually re-invent the

way we conduct our business.

What advice would you give to new technology companies?

Edsell: Don't underestimate how hard it is to develop markets. Developing the technology is not that tough – it's convincing others that they need to use it that's really difficult.

You need to build that culture into your company from the outset. The best technology in the world won't make you successful if you're not customer-driven.

Green: The best advice we can give is don't overextend. Many new entrepreneurs spend their initial funding on non-essentials – fancy offices, the latest equipment, and a large staff. This early spending could mean that funds run out before the company is ready to begin commercialization. The result is layoffs and heartache.

Anyone can spend money. The real triumph is to use the available resources to build an enduring business.



Integrated Biomolecule Corporation's 18,000 square foot laboratory facility in Oro Valley, Arizona.