

# Adapting to Changing Markets Ignites Explosive Growth

BY TOM CRESANTE

**21** How did Special Devices, Inc. (SDI) grow from a tiny company helping Hollywood producers create special effects in the 1950's to a \$200 million corporation helping revolutionize automobile passenger safety into the new millennium? By following the right roadmap, anticipating market changes, recognizing new market opportunities, and leveraging technology to respond quickly and effectively. The crucial ingredients for successful innovation include strong market research, cutting edge product design, building new facilities that streamline production and increase capacity, and the ability to pull the trigger in a timely fashion. Gateway computers in research and development, internet connectivity, and for desktop applications give our managers, engineers and designers a powerful arsenal to successfully meet these challenges.

In the 1950's, my predecessors founded a company called Special Effects Incorporated (SEI) to provide pyrotechnics to the entertainment industry. They quickly discovered the same lesson that drives most of today's successful entrepreneurs: golden opportunities aren't always where you expect to find them, but they're always out there. They noted the skyrocketing demand for pyrotechnic devices for military applications, and recognized that their existing expertise could be easily adapted. In 1960 SEI became SDI. They built new manufacturing facilities and became a leading provider of pyrotechnics for the aerospace industry. As rapid technological advances changed the aerospace market, SDI grew by constantly improving its products to stay ahead of the technological curve.

As the 1980's ended, changing market forces challenged us to continue adapting. The diminishing threat of global war and significant reductions in defense spending foreshadowed what could have been a substantial business downturn. But SDI rapidly adapted existing technology to meet the pyrotechnic demands of the exploding commercial satellite market, and continued to grow its aerospace division.

The largest and fastest growing segment of SDI's business today, however, is the result of recognizing the tremendous potential to adapt 30 years of experience and technology to the emerging automobile airbag industry, and our ability to react quickly, and with substantial capital, to develop a high-quality, cost-effective airbag initiator. When an automobile impact occurs, the initiator gets a signal from a sensor and ignites the system that inflates the airbag and saves lives. Following the first discussions of federally mandated airbags, SDI created an

Automotive Products division in 1989, took the company public, and raised substantial capital. This enabled us to ramp up R&D and build a state-of-the-art facility to manufacture the necessary volume to become a major supplier of air bag initiators. Today SDI is the leading supplier of initiators in North America.

Since the airbag market began, it hasn't stopped innovating and growing. So SDI is constantly innovating along with it. Systems that began simply as a driver-side airbag have grown to incorporate passenger-side airbags, side airbags and seatbelt pretensioning systems that use micro gas generators to reduce slack in a seat belt during an accident. SDI engineers and designers are continually challenged to make initiators smarter, more effective and more efficient.

#### How does a company predict the future?

Predicting the future and then preparing for it is critical to any business' success. Too often companies introduce products and services that tell customers what they need, rather than listening and providing customers what they want. Several strategies can help you anticipate the future and leapfrog your competition.

#### Know your industry

It's vital to know the key players, trends and news in your industry. We subscribe to our industry's trade journals and review them regularly. This helps us stay abreast of current issues such as regulatory changes, demographic information and production volumes. We also attend as many trade shows as possible both to prospect new clients and to see what our competition is doing. And by using our Gateway computers to mine the wealth of information available over the Internet, we can access critical real-time information to enhance decision-making.

#### Stay in touch with your customers

Developing strong one-to-one and on-going relationships with each customer is crucial to running a successful business. This ensures that your customers stay satisfied, which is what every smart businessman should be concerned about. It also turns your customers into a source for invaluable information. SDI does this by matching each customer with a highly skilled program manager, well versed in SDI's products and that customer's particular needs. Our latest breakthrough, the Advanced Glass Initiator (AGI), is the result of listening to our customers. By streamlining the design and manufacturing process, we've dramatically reduced the number of things that can go wrong. The result, a more robust, better performing initiator at a highly competitive price. And AGI allows us to offer the European market a product that meets the more stringent American quality standards at an attractive price when compared to the lesser quality products that have been the European norm.



#### Spot the emerging trends

Use the information you gather from customers, trade publications, trade shows and on-line research to discover where the next hot trends will come from. We found that next up for our industry are smart systems. These will give airbags the ability to instantaneously assess a situation (e.g. size and position of drivers and passengers) and react accordingly. So, for example, the airbag won't deploy if there's a baby or a very small adult sitting in its path.

SDI's success depends on our continuing ability to deliver the right product at the right time to meet our customers' evolving needs. That's why we stay current on Gateway technology. And that's why we never stop studying ways to use what we've already learned to develop the next breakthrough. In some ways we've come almost full circle. These days our engineers are busy leveraging technology developed over the last 10 years in our Automotive Division to create better products and new opportunities for our Aerospace Division. Can a return to Hollywood be far behind?

*About the author: Tom Cresante is President & CEO of Special Devices Incorporated (SDI) of Moorpark, California. He can be reached at autosales@specialdevices.com.*