Building Volcano

By Amy Petré Hill

On April 27, 1997, at TechCon97, BASIS will unveil a new technology strategy to BASIS customers, code-named *Volcano*. The new strategy is the culmination of more than a year's intensive strategic planning, code building, and quality control investment by the company. According to senior product manager Dan Rask, "*Volcano* will fundamentally change the direction of BASIS product strategy. It will, in effect blow the top off Business Basic."

Volcano propels BASIS in a new direction and manifests the success of the company's year-long restructuring and rebuilding. BASIS has, in effect, blown up its assumptions about itself and the way it does business by transforming itself into a tightly focused, customer-driven company.

In the Beginning

George Hight, president of BASIS, sits behind a desk stacked high with yellow pads covered with diagrams, notes, phone numbers, and suggestions generated during endless hours of conversations on the phone with customers. "Customers are the key," he says, gesturing to the pads. "We know that customers have to be the very center and driving force here at BASIS or we are not going to succeed. That is why we-everyone here at BASIS-have dedicated ourselves to becoming a customer-driven company. Last year we made significant investments to get the best people and the best resources so we could do just that. We are going to continue to invest in the resources we need to take care of our customers."

The move from an engineering-driven to a customer-driven company began in October 1995, just a few months after Hight joined the company as president. BASIS had just delivered Visual PRO/5™ to customers, and the company was excited about extending the GUI capabilities of Business Basic. But Hight and the other members of BASIS management saw that new products were not going to be enough to keep BASIS the Business Basic leader it has been for more than twelve years.

"Twelve years ago, when BASIS began, it was easy to add a feature, fix a bug, and quickly get the new software out to our customers. But over the years, the complexity of Business Basic and the environments it has to operate in has grown tremendously," says Hight. "Customer sophistication and requirements have also grown more complex. Doing development and maintenance of Business Basic the old way simply was not working. More sophisticated analysis and testing of new features, along with maintenance fixes, were required to insure that these more complex products worked in these new environments.

"We also had to provide new products, such as the BASIS ODBC Driver™, so that our customers could compete effectively. In order to create those kinds of sophisticated products and deliver them to customers, we had to change the way BASIS did business.

"At the same time, we knew we needed to reach out to our customers, and find out what they needed from us earlier and in a more structured way. It was time for us to start listening to them rather than just giving them new products and expecting them to adapt," states Hight.

In January 1996, Hight called a company meeting and asked all employees to commit to putting the customer first and transform BASIS to a customer-driven company.

Quality Assurance

By the end of January, Craig Dill was made manager of engineering support and given the task of setting up an effective Quality Assurance (QA) department as quickly as possible, while maintaining the Technical Support Department. With the assistance of Teresa Dominguez, a ten-year veteran of the company, Craig started putting the QA Department together. He hired Mike Paulsen, an experienced QA person from WordPerfect and the QA Department began. Two months later Brad Walston joined the QA department.

"It has been both exhilarating and exhausting," says Dill as he leans back in his chair, feet on his desk in his new office. "We all knew we were creating a division that was very important and we were proud forming it, but the amount of planning and the number of processes we had to put in place were just incredible. There have been mistakes, but we have made lots of progress. One of the major accomplishments with *Volcano* is to create a QA plan and specifications for tests while we create the products. Usually we developed tests for products already completed-which is not ideal and what we have been doing for most of this year. We are now in product development from the very first steps. You are never going to get bug-free software, but we do know we can move the quality level up with the new products.

Customers First

By February, George Hight, John Schroeder, at that time the director of engineering, Jayne McKenzie, manager of international sales and marketing, Phil Cowdery, domestic sales manager, and Maile Foster, director of marketing, were busy talking privately to key customers and OEMs about what they needed for the future.

"We traveled to some customer sites and talked with programmers about what they needed and also looked at what suggestions were coming to us through CIS and the Internet," says Schroeder. "This was really the first time BASIS had discussed a product at this level, before planning the new product. The information we received was very clear-customers needed reliable products that gave them easy and quick ways of migrating character-based programs to GUI interfaces and creating GUI programs from scratch. Although our

customers liked Visual PRO/5, they needed bugs fixed, and the GUI capabilities greatly extended. We took that information back with us, and started planning. When we thought we had the suggestions our customers wanted implemented in the product, we took the information back to those key customers and checked to see if we understood what they wanted in the product. Everyone we've talked to so far says *Volcano* is right on track."

Go Teams

If you go into Maile Foster's office at any time, you will usually find her and at least two people standing at a white board, scrawling marketing plans and referring to *objectives* written in bright red across the top of the board. Foster's office is one of the key teamwork hubs at BASIS. Foster explains, "If you look at all the software industry leaders-Microsoft, Novell, SCO, IBM-all of them create their software in teams. We knew that if BASIS wanted to stay the industry leader in Business Basic, teamwork was a working style BASIS was going to have to adapt and get very efficient at. So we brought in a specialist on teams and team management and got her involved with everyone in the company. The results have been very positive."

By April, several cross-functional teams made up of people from Engineering, QA, Technical Support, Sales, Marketing, and Operations were established and starting developing product plans. The team concept helped everyone stay in focus, think carefully through all the details and kept customer needs at the forefront from the very first steps of product planning. QA people brought questions about product testing and quality to the table, and questions about how the company was going to implement and then test certain features. Technical Support contributed problems they were hearing from customers. Documentation writers asked how the changes to the products would affect the manuals. Sales and Marketing people constantly checked to see if the product plans were addressing customers' needs by continually consulting them.

By the end of 1996, teamwork was the way BASIS did business, but according to Foster, the change was not always easy. "It usually takes companies up to five years to make significant changes in the working structure of the company. I was at IBM during their move to the teamwork environment and it took them years to get the teams up and running. BASIS was able to change gears and start working in teams in a year. At times it has been incredibly painful but we have been able to get things moving and we can see improvements. The *Volcano* product line will really benefit from our continued commitment to teamwork."

New Processes

Mark Sommer, the new manager of engineering, and Dan Rask, senior product manager, walk through the engineering section of the company. About every three minutes they stop, and talk to an engineer about how their project is going. Both are working hard to keep communication between all members of the cross- functional product development teams open and on track.

"We have a new procedure here at BASIS," says Sommer. "We are now creating specifications for each product before even a line of coding is written and we will stick with the specification for each product feature or enhancement all the way through to the general release of the product.

"Some customer would call with a problem that looked like it would take a couple of hours to fix, and I'd have them send the information to me," continues Sommer. "Sometimes these problems could be very complex and take days to fix, and the problem might not even have been with our products," Sommer continues. "When we were a smaller company with a smaller customer base, this worked fine, but last year we realized we were really shooting both ourselves and our customers in the foot by operating this way. We were missing release dates and we didn't have consistent products out on the market. People were making changes to code at the request of customers without being sure they were needed by all users. Then when the changes made it into QA, no one tested the undocumented changes, and after we sent it out to customers we would find bugs in features QA had no idea were there. By creating a specification and sticking to this process, and having the customers call Tech Support and officially document their problems, rather than talking directly to me, we're improving the quality of our products."

Rask adds, "Working from specifications not only improves the overall quality of the product, but it also lets you get your software out faster, and the improvements work with future releases. What BASIS is doing with *Volcano* is mapping out two years of new products that give our customers what they have asked for-an IDE, bigger files, grid control, reliable advisory locking-to name a few of the new features. Each of the products will offer customers new robust and progressive development abilities, that come out of a strategic technology plan that is well mapped out and predictable. When you go off on tangents, even if you are doing them with the best intentions, you end up sacrificing speed of development and you make changes to the products that don't fit into the overall evolution of the product line. When we've talked to customers, they have constantly told us that they would rather have high quality products that are part of a plan they can depend on rather than quick small fixes."

Customer Engineers are Standing By

At the end of 1996, BASIS changed the way it developed software, but decided that was not enough. If BASIS was to complete its transformation into a customer-driven company, changes would also have to be made in the way products were sold to customers.

"After speaking with customers it became clear they needed more technical sales support from us," says John Schroeder as he rearranges his new desk in the Sales Department. "Customers needed a technical contact in the company that could help them see the technical implications of their purchases and how they clearly fit into the overall technology strategy BASIS is providing. We filled this need by creating three new positions in the Sales Department."

The first position was created for Schroeder, who moved from his position as director of engineering to the position of chief technical officer. Two longtime BASIS employees, Larry Eads and Michael Martinez, were brought in as customer engineers. All together the members of the Technical Sales group can offer more than 50 years of combined Business Basic experience.

"Our goal," says Schroeder, "is to both inform and listen to customers. We are going to be an additional personal contact customers can have at BASIS. We will make sure that Business Basic programmers have the knowledge they need to use BASIS products to their fullest and see exactly what this new *Volcano* technology is and the opportunities it is going to bring to the business application developers. I think customers are going to be amazed with what they see from BASIS in 1997."