Providing Proactive Support with Intelligent Smart Services

Gerber® Technology

Gerber Technology, a business unit of Gerber Scientific, Inc., develops and manufactures the world’s leading brands of integrated software and hardware automation systems for the sewn products and flexible materials industries.

These systems automate and significantly improve the efficiency of information management, product design and development, and pre-production and production processes. The company offers specialized solutions to a variety of end-user markets including apparel, aerospace, transportation interiors, furniture, composites, and industrial fabrics.
The challenge

Gerber Technology provides integrated automation solutions for intelligent product, design, manufacturing, and quality control. The company has maintained market leadership by enabling its customers to lower their total cost of ownership by requiring less labor content, reducing waste, improving the quality and repeatability of their output, and increasing throughput.

Gerber’s service and support team is integral to delivering high levels of customer satisfaction by addressing technical issues quickly with its products. However, with increased adoption among emerging markets—particularly in China—and increasing customer expectations, Gerber needed to transform its service model from reactive to proactive.

“For us to maintain low costs and high customer satisfaction while providing improved response times, we need a better, faster way to resolve issues beyond dispatching onsite technicians,” explains Mark Hessinger, Executive Director of Worldwide Service at Gerber Scientific.

Gerber faces a continuous need to train new personnel as they are brought into the service organization. A change in strategy for service allows Gerber to build a stronger technical support organization and a more efficient process to bring new field service engineers up to speed.

“We have a lot of tenured employees in North America and Europe,” observes Hessinger. “In seven years, the loss of man years will accelerate, so we need to retain product knowledge before it becomes a greater issue and impacts our customers.”

Hessinger and his team realized that they needed a solution to remotely connect to their products and identify, diagnose, and resolve issues. Ideally this would happen before their customers even become aware of a problem, reducing the dispatch of onsite technicians or improving first-time fix rates when onsite visits are required.

By collecting data from their products deployed in production, the company could begin addressing the aging workforce issue by capturing and retaining information. Collecting information on consumables and parts could automate consumable resupply, optimize spare parts inventory, and enable Gerber to provide true preventive maintenance.

“We do not have mean time between failure data because we don’t know how many hours our customers are actually using our products,” says Hessinger. “Some customers use our products a few hours a day, while others use them 24/7. Obtaining actual usage data will help us better plan our spare parts and the consumables required for run times.”
Other capabilities identified to help build a business case for their initiative included minimizing product downtime, automating software patch distribution, offering value-added services, providing engineering with product usage data, and delivering remote training on product capabilities for distributors and new technicians.

The solution

To get to market quicker, Hessinger and his team decided to buy a solution rather than build one. By choosing PTC® Axeda® software, Gerber was able to quickly implement their smart solutions. “We chose PTC Axeda because their Software-as-a-Service (SaaS) solution would get us to market fast,” says Hessinger. “We felt confident that we could connect to a range of products while ensuring safety, security, and compliance.”

Gerber Scientific uses PTC Axeda software to drive its next-generation service delivery model, branded as GERBERconnect™. Gerber Technology is the first to offer the GERBERconnect solution, initially rolling out the offering to customers of their GERBERcutter® XLc7000 and Z7 automated cutting machines. GERBERconnect enables Hessinger’s team to monitor its customers’ machines and detect problems before they interrupt production. GERBERconnect enables Gerber’s cutters to “call home” when potential errors are sensed. Gerber technicians then remotely and securely access a customer’s system for further proactive fault detection and troubleshooting.

Jack Cendros, President of Bernard Cap Company and a Gerber customer, has experienced the connectivity benefits: “GERBERconnect has served as a valuable addition to our GERBERcutter. The system alerts me before I’m even aware there are any issues and, in some cases, Gerber service is able to respond to these errors before my operations personnel even know something is wrong.” The system indicates the health of the cutting machines and generates warnings and creates log files in real time if the machine slips from its prescribed data ranges.

As for global implementation, Hessinger explains: “I thought that deploying GERBERconnect in China would be extremely difficult since the systems in their factories are often on a network that cannot connect to the Internet. However, the value in our solution there was recognized with individuals using their cell phones to make the initial connections and then implementing the networking cable for connectivity. As a result, China has the most end-user deployments worldwide.”

PTC Axeda software also provides Gerber with a benchmark of optimal machine operation. The best practice benchmark can be offered as a value-added service that helps customers optimize their production from plant to plant.

“A customer in China wanted to get benchmark data from their 23 cutters,” explains Hessinger. “When I told them that this was on our roadmap, they were quite excited. Usage reports will help them determine which cutters are most efficient and which
systems aren’t used as often. Once this data is provided, they can shift jobs to the right factory and increase production.”

Gerber software products for the design of apparel will be added in phase two of GERBERconnect. This will enable Gerber Technology to automate the software patch and distribution process while providing service and support with improved data for determining which software versions and patches are installed on each system.

“Today, our customers can download software patches from our website and install their own updates,” notes Hessinger. “With GERBERconnect, we can validate whether or not they installed service packs and capture current information on our operating systems.”

With this system information, Gerber service technicians no longer require customers to provide system information, such as installed software versions. This will save hours of time annually and improve Gerber’s customer productivity with decreased call volumes of software inquiries. With this knowledge they can confidently retire outdated, unused software versions.

“One large customer with 200 to 300 sites has an internal policy to install all systems with the same software version, but there’s no way today to monitor that,” explains Hessinger. “When I told the manager that we can provide a weekly and monthly report to indicate which systems do not have the latest software installed, he was very interested. This capability will save the customer hours of time and frustration.”

Gerber also plans to integrate product data from PTC Axeda software with SAP® to automate customer orders for consumable resupply. “One of our key service tenets is making the life of our customers easier,” says Hessinger. “Automating their ordering process will make their planning easier.”

The results

Gerber Technology is taking control of three primary pieces of the aftermarket service puzzle: increasing customer satisfaction through proactive support, optimizing spare parts inventory across global distribution centers, and preparing the succession of a highly skilled workforce approaching retirement age.

“Our field service team supports a very large and globally dispersed customer base,” says Hessinger. “The PTC Axeda software solution allows us to extend the reach and expertise of our technicians to manufacturing facilities in more than 120 countries, providing faster and more accurate resolution to product issues. It also enables us to retain the knowledge of our most capable workers as they start to retire.”
Gerber Technology is reducing truck rolls by resolving issues remotely; ensuring first-time fixes when an on-site visit is required. Overall inventory levels are regionalized and reduced while standards on next-day parts delivery are maintained.

“By reviewing our customer satisfaction surveys, we focused on improving the first-time fix rate in becoming more proactive,” explains Hessinger. “That will improve customer satisfaction by getting them higher uptime and, in return, reduce our service costs with fewer repeat visits.”

An added benefit of GERBERconnect is that it provides Gerber with a faster way to train distributors and newly hired technicians. “One-third of our customers are supported by distributors,” notes Hessinger. “Those support teams are not always at the same level of technical proficiency as our direct service technicians. By adding remote service to those customers, we are leveraging our technical support team in helping our distributors to support our customers.”

In just a short time, GERBERconnect has helped Gerber to begin addressing the aging workforce issue and save the potential loss of tacit knowledge. “The expertise on how to solve equipment problems lives with people in the field,” emphasizes Hessinger. “Now we can capture their knowledge and turn it into procedure. Then, we use that expertise on a global basis, ensuring the continuation of service delivery at a high level to our customers in future years.”

Gerber has discovered that the appeal of GERBERconnect is not only limited to its service and support organization; it is company-wide. “Engineering is very excited about this project because they will obtain more information on the products out in the field to help develop features and products that match customer needs.”

In addition to manufacturing products that help reduce waste, GERBERconnect contributes to the company’s green initiative by reducing carbon emissions with fewer onsite visits. Future goals for Gerber Technology are to increase the amount of resolutions remotely and to increase the efficiency of field service visits. The company’s overall deployment goal is to remotely service more than 40,000 products.
In 2007, we chose Gerber because it provided appropriate service to our needs. In 2008, we decided to continue with Gerber because of the service that we received. Now, thanks to GERBERconnect, service is able to prevent situations that could lead to downtime, thus reducing production downtime and increasing performance of our systems. For a company like ours, where respect of planning is very important, GERBERconnect is the tool that was missing.”

Mr. Pantoni Vinicio, Owner, Centro Taglio Val Vibrata