RICOH
imagine. change.

Battlefield Farms

Ricoh overhauls Battlefield Farms' IT infrastructure — eliminating IT headaches and freeing time for business transformation

"Since Ricoh took our IT headaches away, we've been able to focus on implementing a much-needed ERP solution to track everything we do — from planning to shipping to invoicing — all in the same system."

– Bob Haynes, Software/ Technology Manager at Battlefield Farms

ABOUT THE CUSTOMER

Battlefield Farms, Inc. grows and sells a wide variety of plant products on 65 acres approximately 30 miles east of the Blue Ridge Mountains in central Virginia. While its location is stunning, it's also a remote locale that enables the growing and distribution of plants year round. Its customers — including some of the biggest home improvement retailers — buy and display many of the company's products ranging from hanging baskets and bedding plants to decorative planters and holiday plants. The company has a mix of office and barn areas and 37 greenhouses onsite. Because every plant they grow has to be precisely controlled for height and width, technology is a significant part of the growing operation. For instance, Battlefield Farms uses sophisticated smart building technology that automatically opens and closes the greenhouse roofs if rain is approaching and makes other adjustments for sunlight and shade.

CHALLENGE

- Lack of backup and disaster recovery
- Insufficient network switches, old servers
- Outdated email, internet and phone infrastructure
- Slow, spotty WiFi connection hampered cart scans for bills of lading

When Bob Haynes, Software/Technology Manager at Battlefield Farms, came onboard five years ago, his mission was twofold: implement a system to know what it costs to grow every crop and keep computers running. With a background in software implementation, he knew the massive plant growing operation needed to move from pricing products based on gut feeling to an enterprise-wide ERP system that would reveal every cost that goes into growing every plant.

The IT infrastructure side of the business wasn't as clear cut. Battlefield Farms had an outsourced IT partner that was too small to meet its needs and took days to respond to questions and service requests. And problems were mounting. Shortly after joining the company, Haynes discovered the company had no working backup or disaster recovery solution. Next, current network switches weren't sufficient to handle the massive facility comprised of 20 acres of barns for storage and shipping and 45 acres of covered greenhouse space. Additionally, data storage was insufficient and servers needed to be replaced.

RICOH
imagine. change.

Also, an older email platform only provided two gigabytes of space — which wasn't nearly enough for the 50 employees who needed to communicate with colleagues and customers quickly. Internet for the farm, which is situated in a very remote area, was run on a single T-1 line and telephones used a second T-1 line. If bad weather or other outages occurred and the telephone line was inoperable, customers would either get a busy signal or the phone would endlessly ring.

Battlefield Farms was also experiencing costly problems with its hand-held WiFi technology in the shipping area. Often, there was spotty connection due to interference from metal carts containing plants ready to be shipped — leading to duplicated labor for rescans. Each cart had to be scanned via WiFi to produce the bill of lading. If the bill of lading and cart product count didn't match at the store, the store issued chargebacks to Battlefield Farms — not just at the store with the incorrect shipment, but throughout every store in the chain.

"Ricoh IT has experts across a lot of areas. Having a super deep, super technical bench helps me handle a company of this size with just one person — me."

RESULTS

- Reduced WiFi upgrade costs by 50 percent
- Eliminated chargebacks from retailers
- Drastically improved telephone and internet service
- Ability to focus on ERP implementation

By conducting a network analysis of Battlefield Farm's WiFi environment, the company reduced its expected wireless upgrade costs from $20,000 to $10,000. Now, the shipping area has reliable coverage with just three wireless access points. Bills of lading from cart scans are now accurate on the first attempt – saving time and labor costs.

Phone and internet service has been drastically improved, without costing Battlefield Farms a proposed $700,000 to install a fiber loop to the main office because of its remote location. Overall, the company has significantly improved its IT infrastructure, has a partner for navigating IT issues that occasionally arise and is able to plan for future improvements.

Most significant to Haynes, the relationship with Ricoh IT has eliminated IT headaches at Battlefield Farms and allowed him to focus on his main mission: implementing an ERP system to track everything from planning to shipping to invoicing. With the ERP system nearly finished, the company will soon be able to input all of its data into one system and know precisely what it costs to produce each plant.

RICOH
imagine. change.

HOW WE DID IT

- Installed new servers in a virtual environment
- Replaced old network switches
- Upgraded to VoIP, negotiated affordable bandwidth coverage
- Provided reliable WiFi coverage
- 24/7 monitoring and virtual CIO consultation

"We thought we needed five to six WiFi points in our massive shipping barn. But we worked with Ricoh IT to do a study first and learned we only needed three. We saved a ton of money."

There's only one time of year when Battlefield Farms can risk network downtime — during a two-week period in July when no product is being shipped. So, we strategically planned to tackle each of the company's network issues, one year at a time.

The first initiative Ricoh IT undertook to improve Battlefield Farm's infrastructure was addressing their aging servers. Ideally, we would have recommended hosting servers in the cloud, but due to the company's remote location, there wasn't enough bandwidth to support a cloud solution. As a workaround, we implemented a virtual solution for hosting servers onsite. A year later, we installed new, faster network switches to be able to transfer data from the office to the shipping area, in case an event like a fire took one building out.

Next came the phone and internet system. Battlefield Farms wanted a Voice over Internet Protocol (VoIP) system and a smartphone app to enable cell phone backup if VoIP phones went down, but bandwidth issues initially prevented that setup. And adding a fiber loop to support the technology onsite was estimated to cost $700,000. We turned to our network and partners to create a workaround sharing bandwidth with other houses in the community — allowing an affordable VoIP solution that provided more bandwidth and reliable telephone and internet coverage.

Then, we resolved the slow, spotty WiFi in the open-air shipping area. Rather than simply adding additional, new access points, we took a step back and brought in a team to conduct a network assessment. We used software to get a heat map of strong and weak signals and learned they only needed three access points to provide coverage for the entire area. Prior to the study, we estimated the area needed five or six new WiFi access points. The new WiFi points were installed while the old access points were running — making it a seamless transition at an affordable cost.

Ricoh IT also provides 24/7 monitoring of Battlefield Farms' computers to keep all of the workstations up and running. We also provide virtual CIO services where we have a scheduled call once a month with Haynes to go over any issues that arise and plan a year out for the next IT transformation. We are now talking about ways to move the backup solution that Haynes installed shortly after joining Battlefield Farms offsite. With updated switches, this is now possible and we're exploring the most affordable, cost effective solution to support the move. We're also looking to migrate to Microsoft Office® 365 to use our hosted platform and take advantage of existing licenses to reduce costs.

www.ricoh-usa.com | **Learn more about Ricoh Services and Solutions or contact us**