



Founded in 1981, [Quality Bicycle Products \(QBP\)](#) is North America's largest distributor of bicycles, accessories and parts, and an industry leader in distribution, education, advocacy and product innovation. As a certified B Corporation, QBP is committed to environmental protection and is working toward full carbon neutrality by 2030. The company is headquartered in Bloomington, Minnesota.

Industry

Retail

Strategic priorities

- Cloud Transformation

VMware footprint

- VMware® Cloud™ on AWS

Quality Bicycle Products Accelerates its Path to the Cloud

Quality Bicycle Products is the largest distributor of bicycle parts and accessories in North America. Already committed to modernizing its development stack in the cloud, Quality Bicycle Products faced the impending closure of its on-premises data center by accelerating its move to the cloud, completing the migration to VMware Cloud on AWS in just three months.

Adapting to market changes sustainably

Since its founding in 1981 by Steve Flagg and Mary Henrickson, Quality Bicycle Products (QBP) has grown over four decades from its humble origins as a small mom-and-pop outfit in a tiny office in St. Paul, Minnesota, to become a manufacturer of more than 19 brands and the largest distributor of bicycles, accessories and parts in North America. "We make business-to-business sales, and your local bike shop is our number one customer," says Joe Van Ert, systems architect, Quality Bicycle Products. The company offers more than 430 brands and 50,000 unique products to its retail customers and operates from four locations in Minnesota, Colorado, Nevada and Pennsylvania.

"The bike industry is changing in many ways, from manufacturing and supply line issues to COVID-19 to the availability of raw materials like steel, titanium and other items for our high-end bicycles," says Van Ert. The pandemic drove higher demand for bicycles, pushed by enthusiasts recreating outdoors, commuters who preferred bicycling over public transportation, and a dramatic rise in the popularity of e-bikes.

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Joe Van Ert, Systems Architect, Quality Bicycle Products



Business is booming for QBP, but predicting the behavior of new entrants to the market can be challenging. “Will those riders stay on their bikes or return to public transport? Will they change the way of using a bicycle in their daily life?” asks Van Ert.

While QBP is well-positioned to capitalize on these trends, it confronts different challenges with the e-bike business. “When we sold a bike 10 years ago, all we had to worry about was, when its life was over, recycling it properly,” says Van Ert. “There’s steel, aluminum and other raw materials in that bicycle, but now we’re dealing with electronics and batteries as well.”

Sustainability is core to the business, and QBP earned the rigorous B Corporation Certification in April 2021. “Our goal is to be carbon neutral by 2030 and all our warehouse and distribution centers use solar power.” The company plans to double and triple its use of solar energy over the next few years.

Creating opportunities for change without disruption

Managing an expansive distribution enterprise across four states requires robust IT resources. For years, QBP invested in and managed its infrastructure, with one eye toward moving to the cloud. And after a recent hardware purchase, the company received the news that its colocation provider had decided to close. With a recent investment in a substantial on-premises IT solution, the company had only 14 months to move its entire production environment to a new location.

“We knew we needed the hardware we bought the year before to keep our traditional stack running. But we really wanted to modernize our stack in the cloud,” says Van Ert. This looming deadline pushed QBP to accelerate its move to the cloud.

Embracing the inevitable migration, QBP looked forward to the advantages that a modern application stack could provide. But large obstacles remained: engineering its workhorse enterprise resource planning (ERP), warehouse management systems and e-commerce applications for a cloud native environment.

“I like to say that our environment lives on a tripod, with our ERP system as one leg, our warehouse management system as another and our e-commerce sites as the third. They all need to work together for us to stay operational,” says Van Ert.

“VMware Cloud on AWS was the perfect way to accelerate our move to the cloud. We could move existing applications without refactoring or rearchitecting them and have native cloud services live on the same infrastructure. Being able to offer our developers those cutting-edge tools and keep our traditional apps was a huge win for us.”

Joe Van Ert, Systems Architect, Quality Bicycle Products

Initially, the QBP team considered turning to another colocation facility to lease hardware and services to support these business-critical applications. But Van Ert knew staying tied to extended contracts with untested service providers would only delay the ability to work with the agility and flexibility needed to stay competitive.

“Modernizing something like an ERP application for a native cloud is a huge project involving many people across the organization and throughout the application stack,” says Van Ert. “Those platforms needed to work together and so a huge, big bang approach of changes all at once would’ve been challenging, but also potentially disastrous.”

Embracing the challenge as an opportunity, QBP decided to migrate to the cloud using VMware Cloud on AWS, which allowed the company to move both its cloud native, and non-native apps, into the cloud.



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A cloud-smart solution with room to grow

With a non-negotiable deadline of 14 months, QBP managed the transition to VMware Cloud on AWS in only three.

“We really wanted our move to VMware Cloud on AWS to be as smooth as possible for our developers,” says Van Ert.

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Over his dozen years at QBP, Van Ert has seen the myriad benefits of working in tandem with VMware. “In many ways, being a small- to mid-size company allows us to be agile with the technology choices we make. If we see something good, we can get and implement it. VMware has been that stable building block for us the entire time I’ve been at QBP,” Van Ert says.

Optimizing resources to improve innovation and delivery time

The move to VMware Cloud on AWS unleashed a range of opportunities for QBP. One of the most significant of these has reshaped the IT team’s relationship with the rest of the business. “The biggest benefit to our IT department is probably being able to say yes, we can,” says Van Ert.

“Moving to the cloud means we now do more pilot projects.”

In the past, executing these pilots would have demanded as many as six months. Now Van Ert and his team can launch new projects much faster. And VMware Cloud on AWS provides greater flexibility within the QBP IT environment, allowing virtual machines (VMs) to be provisioned on one cloud and backed up to another.

Over 14 months, the team at QBP consistently increased the virtual machine load on their VMware Cloud on AWS environment, beginning with 60 VMs and ending with 300 VMs.

“We needed the environment to run stably for our operations. And now we’re at a point where we’re able to optimize our applications in a way that we couldn’t have done before,” says Van Ert. “Now we’re able to scale resources up and down as needed, depending on seasonal business fluctuations.”

“Traditional apps often take years to migrate. Knowing that we have a solid platform that our environments can live on in the cloud securely, while our development teams chip away at that big problem, is crucial to our success.”

Joe Van Ert, Systems Architect, Quality Bicycle Products

As an environmentally conscious company, shifting between vendors gives QBP the power to choose providers with genuine green commitments. “If a company that we’re working with doesn’t have a carbon neutral policy, or they’re not making efforts toward that, we want the ability to move. As a certified B Corporation, we don’t want that tarnishing our record. That’s one reason we chose VMware.”

The ability to develop cloud native solutions yields competitive advantages and considerable cost savings. “A big business impact for us moving to VMware Cloud on AWS is clarity on costs. We can produce reports and graphs to show our CFOs the reasons we’ve done things and their costs means we’re now in a position where we can optimize,” says Van Ert.

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