

Going big to build strong communities, Altorfer Cat supplies the equipment that powers billions of dollars in human and economic benefits



Customer Profile

Keeping hard working construction and agricultural crews on the job requires massive tools. With over 38 stores and counting, Altorfer Cat ensures its customers have the equipment they need by infusing its business with mobile, digital, immersive, and IoT technologies that rely on a future-ready wired and wireless network.

Vertical: Heavy Equipment **Location:** United States

Customer size: 38+ stores and growing

Vision

Support next-generation business operations with mobile, digital, immersive, and IoT solutions to help construction and agricultural customers get their jobs done.

Objectives

- Mobilize employees vast indoor and multi-acre outdoor facilities.
- Empower employees with innovative digital-first and immersive tools.
- Enable secure and productive remote and hybrid work.
- Deploy high-performance, secure wired and wireless network.
- Adopt Al-powered automation tools for network optimization.
- Gain future-ready infrastructure with built-in zero-trust capabilities.

Solution

570 & 630 Access Point Series, ClearPass Security Software, CX 6300/6400 & CX10000 Switch Series, Policy Enforcement Firewall. NetEdit. Remote Access Points.

Outcomes

- Enables transforming business operations with collaboration, IoT, and other technologies.
- Saves a third on cost versus the competing solution, with a fast 2-year ROI
- Obtains a future-ready solution that supports ongoing business and IT innovation

Keeping hard working construction and agricultural crews on the job requires massive tools. Altorfer ensures its customers have the premium heavy machinery they need by infusing its business with mobile, digital, immersive, and IoT technologies using HPE Aruba Networking ESP (Edge Services Platform), while saving a third on networking costs.

Helping dreams become reality

Residential neighborhoods, shopping malls, schools, hospitals, telecommunications systems, roads, and bridges all have something in common: they start by going big. From bulldozers and backhoes to pipelayers and asphalt pavers, construction and agriculture professionals depend upon premium heavy equipment to ensure they can build the infrastructure and grow the food that people rely on every day.

For three generations Altorfer Cat has understood the unique needs of their customers and provided hard working crews with the top brands in the business. Serving four Midwestern states, including the Chicago metro, Altorfer Cat maintains 38 locations where construction teams and agricultural clients can purchase, rent, and service the equipment they require.

"With billions of dollars in human and economic benefits dependent upon construction and agricultural productivity, it's critical that our customers have premium, reliable, equipment," says Matt Bettis, Director of Information Technology for Altorfer. "Whether they purchase or rent, our customers have trusted us to quickly and efficiently support them for over 65 years."

Mobilizing acres of operations

As a heavy equipment dealership, Altorfer operates in challenging environments. In addition to showrooms and repair shops that are thousands of square feet, Altorfer facilities also include outdoor areas spanning 25 acres, or more, for storing machinery, test driving it, and training customers to use it safely and effectively.

"When a sales or service person at the far end of an outdoor facility needs to ask a question or gain information from our internal IT systems, it's inefficient for them to walk back to a showroom or shop," says Bettis. "Further, many of our locations are in rural areas, where cellular coverage is either non-existent or spotty at best, which makes Wi-Fi a critical enabling technology for us."

A digital vision

Despite providing employees with basic mobility, Altorfer was limited by existing networking infrastructure. Its wireless was only available indoors, as the system was originally designed to only provide indoor coverage. In addition, its aging wired network was inflexible and difficult to secure, constraining innovation.

"We wanted to empower our employees with the most efficient technology tool for any given circumstance," Bettis says. "For example, we envisioned technicians doing field repairs using their iPad to video chat with our parts counter when they needed an item, rather than walking across campus."



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A digital vision (continued)

This led to a transformation journey focused on mobilizing, digitalizing, and securing operations end-to-end.

"Our strategy included adopting Microsoft Teams and powering our Caterpillar proprietary ERP solution," says Bettis. In addition, we have multiple, data-intensive equipment support systems that require high-performance connectivity for our technicians to access them efficiently."

To achieve its multiple business goals while minimizing IT overhead, Altorfer set out to modernize its wireless and wired networks. "We wanted to streamline networking infrastructure, gain zero trust cybersecurity capabilities, and provide ubiquitous high-performance connectivity indoors and out," Bettis says.

Enabling remote and hybrid work

When the pandemic sent employees home to work, Altorfer's IT staff realized it also needed a reliable solution for connecting workers remotely.

"Like so many other companies, we quickly learned how difficult it was to securely connect our workers given the wide range of home office setups," Bettis says. "Later, as it became clear that remote and hybrid work was the new normal, we added secure remote access to our networking refresh requirements, enabling us to extend the same user experience to remote workers, at the same level of security, as we provide at the office"

Tablets, smart TVs and operational IoT

Already using an older version of Wi-Fi from HPE Aruba Networking, Altorfer investigated various modern wireless networking options. The company determined that Wi-Fi 6E Access Points (APs) indoors was the best choice for multiple reasons. This included ultra tri-band filtering technology that eliminates channel interference to enable full utilization of the 6 GHz band.

"Adopting Aruba Wi-Fi 6E ensures that we can deliver high-performance mobile access to business applications while also implementing connected operational technologies, like IoT-enabled HVAC sensors, door locks, security systems, and smart TVs for digital signage," says Bettis. "Such IoT solutions decrease operating costs, which improves our profitability, while enabling us to reduce our carbon footprint." For remote workers, Altorfer selected Remote Access Points (RAPs). "With Aruba's RAPs our remote users have the same smooth and secure access as onsite," Bettis says. "The RAPs eliminate the need for VLANs and the associated complexities for IT and users." To blanket outdoor spaces, Altorfer elected to deploy Wi-Fi 6 APs pending regulatory approval for outdoor Wi-Fi 6E.

Savings quickly add up

Although traditionally a Cisco shop for wired networking, Altorfer's positive experiences with HPE Aruba Networking Wi-Fi resulted in charting a new course. The company evaluated HPE Aruba Networking's offerings and chose the CX Switching line, starting with the industry's first distributed services switch, the CX 10000, to lay the foundation in Altorfer's data center.

The solution also includes CX access and aggregation switches to provide intelligent wired networking from edge to core. The complete solution provides built-in zero trust security capabilities that streamline infrastructure architecture, automate management, utilize industry-standard administration tools, and lower costs.

"By leveraging various advances in the Aruba CX solutions, we've reduced the physical number of switches and firewalls in our environment," says Bettis. We've also significantly decreased our IT overhead. "For instance, applying a software update to our wired infrastructure previously required days of manual effort. Now it only takes minutes to initiate the process and our HPE Aruba solution takes care of the rest."

For Altorfer, the savings quickly add up. "We've significantly enhanced our security posture, reduced networking and firewall complexity, and saved a third on costs compared with a similar Cisco solution," Bettis says. "Overall, we expect a rapid 2-year ROI on a future-ready solution that will serve our needs for significantly longer than HPE Aruba's competitors."

Better security and more favorable insurance terms

From a security perspective, Altorfer's new wired and wireless infrastructure delivers multiple benefits. "Deploying Aruba CX switches enables us to unify wired and Wi-Fi management and security, including adopting Dynamic Segmentation for automatically applying consistent access policies to all device connections," says Bettis. "We not only sleep better at night, because only permitted devices are allowed on our network, but we also gain more favorable terms on our cyber insurance policy," he continues.

From no to yes

No matter which innovations the company ultimately deploys, Altorfer's network can now support continued business transformation and its IT staff can pursue higher-value initiatives in service of the business, rather than putting out fires or performing manual administrative tasks.

"Before, we frequently were unable to accommodate new business technology requests due to insufficient infrastructure," Bettis says. "With our secure, reliable, high-performance Aruba wired and wireless networks, we can provide our employees and customers with next-generation experiences because we have the flexibility and agility to say 'yes' to whatever business innovations come next."