

# LXE's Flexible Wireless Computers Improve Productivity for Dayco Distribution

## CASE STUDY

**DAYCO.** - Dayco is a leading manufacturer of timing belts, tensioners, hoses and related parts for the automotive industry, and also serves as the aftermarket distribution arm for its parent company, Mark IV Automotive. Dayco's customers are the *Who's Who* of the automotive aftermarket, including Advance Auto Parts, AutoZone, Pep Boys and other leading retailers. About 90% of shipments to North American customers flow through Dayco's distribution center in Fayetteville, NC, which prepares approximately 300 to 400 small parcel shipments, 50 to 60 less-than-load (LTL) shipments and five to six full truckloads daily.



*When Dayco Products, a leading aftermarket auto parts supplier was celebrating its 100th anniversary, its wireless computer system for distribution center operations was in its eighth year of service. The company's anniversary was cause for celebration, but the wireless system was cause for concern. Its limitations threatened customer responsiveness and placed a burden on distribution center operators. Dayco now serves its customers more efficiently than ever with a new wireless computing system from LXE, Cisco Systems and PEAK Technologies that increased efficiency more than 10 percent and put the company on a strong technological foundation for the future.*

"We have to make sure that our customers don't have any interruptions to their supply chains," said Jim Richter, distribution center manager. "We had so much data collection terminal failure that it impacted our ability to ship orders to meet our customer commitments. We were always able to meet our customers' requested ship dates, but we had to jump through hoops and run up a lot of overtime to do it." Dayco incurred about \$10,000 to \$15,000 in expenses each time it needed overtime to get customer orders out on time.

## Revving Up Productivity

Dayco upgraded its proprietary mobile devices and 900 MHz wireless LAN in Fayetteville to LXE's innovative MX3X mobile computers running on a Cisco 802.11-standard wireless network integrated by PEAK. The new system fit seamlessly with Dayco's legacy warehouse management systems and business operations, with virtually no business disruption or software redevelopment. Essentially, the only things that changed were the mobile computers and wireless network. But the change was powerful. Dayco reports total productiv-



ity in the DC, including, picking, putaway, cycle counts, inventory management and shipping operations, has increased between 10 and 15 percent since the LXE and Cisco equipment was installed.

"The improvements we've made are solely because our mobile computing and networking equipment is better," said Richter. "We haven't changed our legacy software yet, but we've still increased our throughput. That's a testament to the power of the MX3X units. We didn't change our processes either. When we make those changes, our productivity should be even better."

Richter had monitored mobile computing developments and evaluated potential replacement units for several years. Legacy factors made a transition difficult. Dayco runs a home-grown warehouse management system from an AS/400, and was using full-screen mobile computers with a proprietary operating system. The company didn't want to redevelop its legacy systems to be compatible with the 1/4 VGA screen, Microsoft Windows-based mobile devices that currently dominate the market. Because of excellent performance at other company facilities, Dayco wanted a Cisco wireless backbone, making strong Cisco support in the mobile computers a requirement.

PEAK worked with Dayco to design a wireless infrastructure and evaluate equipment that would best suit the company's requirements. After years of monitoring mobile developments and months of systematically narrowing its choices, Richter quickly made up his mind after a site visit to another PEAK customer.

"The site visit was what really sold us on the MX3X. When we saw how easy the units were to work with, and how they could be used in so many different ways it was clear that they were the best mobile computers for us," said Richter.



## A Convertible Computer?

The MX3X has a 1/2 VGA display and provides 5250 terminal emulation, which Dayco took advantage of to run its legacy applications without software redevelopment. The MX3X can be carried by hand, worn on a strap, or used in a secure, convenient vehicle mount for material handling equipment operators. The innovative MX3X design meant Dayco could use one model for all its picking, putaway and inventory management applications. More than 40 MX3X computers are in simultaneous use throughout the DC. Other potential vendors proposed a mix of products to meet Dayco's application needs, which would have resulted in increased training and support costs. PEAK teamed with LXE and Cisco to provide an easily deployed, low risk solution that led to improved efficiency with little or no disruption to the day-to-day operations of the distribution center.



"Our associates love the new devices because they're so much faster. When they scan a U.P.C. number, they get instant confirmation," said Richter. "They also love the fact that if they're walking around and get a low battery alert, they can just switch batteries with someone who's working on a forklift, which has a plug-in power source for the computers. Operators don't have to walk all the way through the distribution center to the office to get a new battery anymore."

Because legacy applications were ported to the MX3X, and business processes didn't change, the new system implementation went smoothly and operators quickly accepted the new computers.

## Training in the Fast Lane

"It helped that we only had to train our users on one device," said Richter. "That really helped keep our implementation costs down and was a big factor in us

completing the project eight days ahead of schedule. We will eventually revise our legacy applications to take better advantage of the MX3X. When we do, we'll save even more money, because we'll only have to do software development for one device."

A smooth transition was crucial to project success. Because Dayco already had a wireless computing system in place, it wasn't counting on major new cost savings or productivity gains to offset the cost of the new system. The upgrade was considered a quality initiative intended to improve customer service. Work slowdowns caused by integration problems would have severely undermined the effort.

"We wanted a system that would enable us to increase our throughput and productivity. We wanted something that was more robust, in terms of durability and strength. The new system needed the ability to grow with us because our customers are always asking us to provide new capabilities," said Richter. "When our president saw how the new system could help us meet our customer commitments, he approved the project pretty quickly."

## PARTNER HIGHLIGHTS



PEAK Technologies, a Platinum Equity company, is an international provider of automatic identification and data collection (AIDC) systems, enterprise mobility solutions and ongoing service and support. PEAK's primary applications include solutions for warehousing, manufacturing, distribution and field-based operations. PEAK's market leadership and strong financial management provide stability and assurance that solutions are delivered with long-term support. Headquartered in Columbia, Maryland (USA), PEAK Technologies has more than 800 employees with locations throughout the United States, Canada, Mexico and Europe. For more information, visit [www.peaktech.com](http://www.peaktech.com), email [info@peaktech.com](mailto:info@peaktech.com), or call PEAK at (888) 275-7325.

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**About LXE Inc.** LXE Inc. improves supply chain performance by applying over 36 years' experience developing wireless products and solutions. From wireless computers, advanced auto-ID technologies, and wireless network infrastructure, to our award-winning customer support - LXE's easy-to-use products are as reliable as the people who install and support them.

Based in Norcross, Georgia, LXE also offers a full range of turnkey services, including radio integration, project and installation management, network design, technical support, and repair services. LXE is a wholly-owned subsidiary of EMS Technologies, Inc. (NASDAQ: ELMG), and has offices worldwide. For more information, visit [www.lxe.com](http://www.lxe.com).