SMART WI-FI SUPERCHARGES PERFORMANCE

Premier RC Car Manufacturer Deploys Ruckus to Speed Up Warehouse

AB&R
identify. track. manage.

"The overall productivity of Redcat employees has improved by reducing downtime in their daily activities. The enhanced wireless infrastructure has the team more focused which brings better performance with a higher accuracy rate and increased customer satisfaction." - Dan Sloan, Redcat Racing

BACKGROUND

Established in 2005, Redcat Racing is the premier source for quality radio-controlled (RC) Gas Cars, Nitro Cars, and Electric cars. They sell a full range of 1/5, 1/8, 1/10 & 1/16 scale RC Cars, Buggies and Trucks and offer over 3,500 different parts, tools and accessories.

Redcat serves a large customer and dealer audience, processing as many as 1,600 orders for cars and parts, which may be for a single $2 part or a shipment of 20 new cars for a new dealer stocking inventory. A year ago, Redcat implemented OzLINK's NetSuite Mobile solution with Motorola MC9190 mobile computers to receive orders, track inventory, and improve the speed and accuracy of order picking accurately. However, despite being a business entirely based on RF products, Redcat suffered from little or no wireless capability to actually support operations in their 50,000 sq ft warehouse. There were many dead spots and the Motorola scanners often lost connectivity to the warehouse management system, causing staff to walk to a better signal, hold the scanners towards the signal, and wait to get or submit a new order.

These deadspots resulted in incremental costs and slower service, and inventory accuracy issues as some updates were never transmitted. Worse the long waits and stop/start processing resulted in a loss of staff productivity and overall slower work   processes.

"If it takes more than 20-30 seconds for a response, a worker may set their gun down" said Dan Sloan, Chief Operating Officer for Redcat. "They get distracted and it gives them a reason to be non-productive."

COMPANY PROFILE

RedCat Racing, Phoenix, Arizona

INDUSTRY

Manufacturing

AB&R'S SOLUTION

- AirMagnet Site Survey
- Deployment of 7372 two Stream AP's from Ruckus Wireless

BENEFITS

- Increase in overall productivity and efficiency
- Reduction in starting, stopping, and waiting time
- Increase in accuracy of processes including shipping and receiving
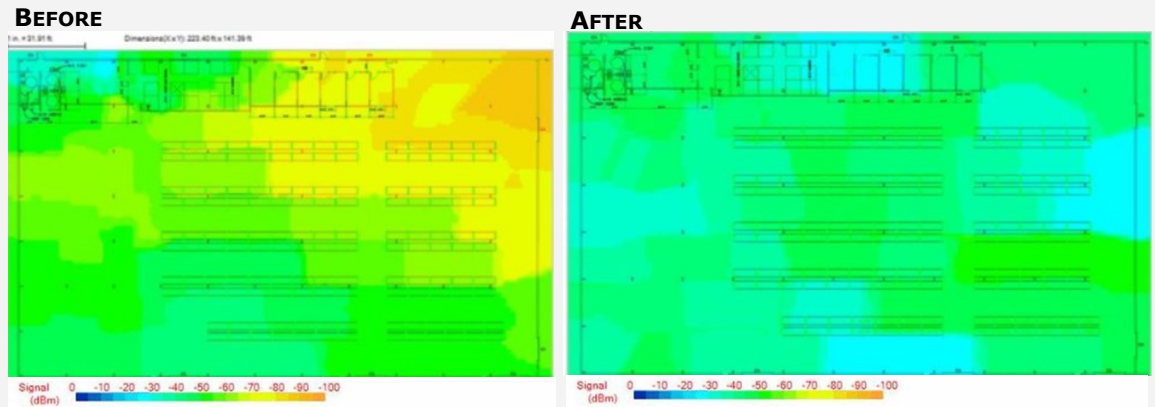
SOLUTION

After seeing Redcat lose wireless connectivity while demonstrating their system during a meeting, Dino Farfante, President and COO of AB&R (American Barcode and RFID), a Phoenix-based supply chain solutions integrator, suggested they deploy new wireless infrastructure to better support their WMS system. As part of their standard warehouse and DC service, AB&R performed a complimentary predictive AirMagnet site survey of the existing warehouse coverage to document what was really happening and ensure that they designed a successful new RF solution. The site survey documented very low signal strength across most of the warehouse.

AirMagnet Heat Map

The large sections of -60 or lower dBm translated to little or no effective signal as the warehouse.

AB&R deployed Ruckus 7372 two stream APs with an antenna design ideally suited for the 35 foot ceilings in the Redcat warehouse. The results were dramatic.

BEFORE

AFTER

"We've recently started using Ruckus Wi-Fi whenever possible in warehouse installations. Their Beamflex antenna capabilities deliver the best wireless performance we've ever seen in warehouse and distribution center environments, since the APs are constantly selecting the best signal path to each connected device," said Gary Randall, Vice President of Solution Marketing at AB&R. "Easier installation and operations also made Ruckus a great solution for a warehouse environment, and helped influence Redcat to move forward."

Better yet, the actual response time for downloading an order shrank significantly. Single line item orders come through in under 9 seconds, versus 13 seconds previously, and 200 line orders download in under 25 seconds versus over 90 seconds before. These extra seconds added up to over 6-7 minutes per worker per day in direct time savings. But the real impact is that they enable a faster overall workflow by eliminating stops and starts and keeping workers moving on productive tasks. "The overall productivity of Redcat employees has improved by reducing downtime in their daily activities. The enhanced wireless infrastructure has the team more focused which brings better performance with a higher accuracy rate and increased customer satisfaction." Sloan explained.

Redcat's warehouse operations are now nearly as speedy as their RC cars and trucks, and both staff and customers have noticed the change. Deliveries are processed and shipped more quickly and with higher accuracy, and staff morale is improved as they are able to focus on getting things done versus waiting for a good connection.

Get started with a seamless, secure wireless solution, www.abr.com/commercial-wifi or Contact an AB&R Representative 800-281-3056

ABOUT AB&R (AMERICAN BARCODE AND RFID)

Since 1980, AB&R (American Barcode and RFID) has been a nationally-recognized integrator of proven solutions that drive efficiency and productivity in the supply chain. Those solutions include asset tracking, inventory management, work force mobilization, wireless networking, and the managed services to support them all.

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