## **UPS Innovation:**

## Package Loading Gets Smarter



UPS uses innovative technology across its global network to drive efficiencies and benefits for employees and customers. One of the latest innovations is in the Preload Smart Scan.

## THE CHALLENGE:



UPS delivers nearly
20 million packages and
documents a day.



UPS employees make decisions every second to ensure that the right packages are loaded into the right package cars and on the right shelves within the cars.



Opportunities for misloads were high.

Beacon technology wasn't robust enough to solve the challenge because UPS® package cars are only six inches apart during the loading process. Beacon signals bled through the sides of package cars, giving incorrect locationing information.

## THE TECHNOLOGY SOLUTION:

UPS engaged a technology partner to create a micro-locationing version of an existing low-energy Bluetooth technology called the **Preload Smart Scan.** UPS's solution features **four beacons per delivery vehicle.** Package loaders wear scanners that listen for Bluetooth signals. When a loader enters a package car, the loader's scanner detects information signaling whether the package is on the correct vehicle. If the scanner detects a misloaded package, the loader will not be able to scan the next package until the error is corrected.



In 2017, 47% of U.S. package cars and 301 U.S. locations will have beacons





Expanding internationally



Anticipated 70% reduction in package misloads