

Riding the peaks

evo: How our scalable and efficient AMR solution helped evo mitigate the challenges of winter season demand



Snapshot

Company
evo

Industry
Multi-channel sports retail

Warehouse Size
165,000 sq feet

Infios Competency
Robotics

Solution(s)
Autonomous Mobile Robots

Complexity

Overcome the issues of seasonal staff recruitment, safety and productivity.

Best practice

Rapidly increase picking speeds, to drive productivity and efficiency during seasonal peaks.

Evolving demand

evo's founder began selling winter sports clothing and apparel from a dorm room in Seattle nearly twenty years ago. Since then, the company has expanded into surf, cycling, travel and more, and trades across three stores in the US and five in Whistler, Canada. It generates over 70% of its revenue through online sales.

evo moved into their new 165,000-square-foot warehouse in 2019, just before that year's holiday shopping season. To fulfill the anticipated demand, they needed 10–15 extra staff on each of two shifts to pick 11,000 orders a day. They had previously struggled to find temporary workers to meet these huge spikes, which saw peak days that were **10 times higher than its typical sales periods**.

Then the COVID-19 pandemic hit in 2020, shifting the sales focus to online and causing a sudden increase in demand. As demand for outdoor sporting goods and apparel remained strong throughout the summer, evo knew it was facing a monumental peak season that year. This put more pressure on warehouse operations and staffing requirements, especially considering the new "safe distancing" protocols.

90

units per hour
vs 35 units
pre-AMR

10-15

Reduced training
time to 10-15
minutes

Finding the right solution

evo needed a picking solution that was flexible and scalable enough to meet seasonal demand, all while driving productivity and responding to new challenges from the global pandemic. They also needed this solution to be up and running quickly before the peak season and without disruption to ongoing operations.

A number of options were considered, including conveyors and pick and pass solutions, but all, except for Autonomous Mobile Robots (AMR), were seen as too disruptive, too expensive and too slow to market. An AMR solution would allow evo to rapidly achieve its current objectives while offering opportunities for future growth.

Combining scalability with efficiency

Due to a longstanding and successful WMS partnership, evo trusted Infios to implement their AMR solution using robots from Locus Robotics. The designed solution consisted of **10 AMRs for standard periods, with an additional seven robots to increase capacity during the peak season.**



“To me, these early successes and these opportunities are exciting, because it means the solution should continue to grow with us and add more value over time.”

Spencer Earle
Supply Chain Director, evo

The picking process starts with a person loading the robot with the appropriate tote types for the order. The robot then moves through the warehouse, taking the fastest path to the closest picking location—all without operator intervention. Here, a picker meets the robot and uses information from the robot’s screen, including an image of the item to be picked, to find and pick the required item. The picker then scans the item for accuracy and drops the item into the appropriate tote, leaving the robot to continue the journey to the next picking location where it meets another picker. When all picks are completed, the robot goes to the packing area where orders are offloaded, before being loaded with more totes for the next picking mission.

evo realized a number of key benefits within just a few months of switching to AMRs:

- **Increased picking speeds:** 90 units are picked per hour, compared to the previous rate of 35
- **Reduced staff requirements:** five, rather than 12–15 staff are needed in one area

- **System scalability:** evo was able to add 7 bots for the peak season, taking advantage of the Robot-as-a-Service (RAAS) model to instantly add more capacity
- **System stability:** the system has remained virtually error free beyond standard robot maintenance
- **Simplified training:** the system is easy to use, with temporary or seasonal staff requiring just 10–15 minutes for training
- **Picking accuracy:** mixed SKUs in one bin are no longer an issue, thanks to the visual guidance on the robots’ display
- **Morale boosting:** staff see that the robots are something to help them, rather than replace them
- **Easier working flow:** fewer people picking means less congestion, making sending stock to shippers a lot smoother and faster.



The most significant benefit was the time to implementation. In just **53 days** from signing the contract, the robots were fully operational in the warehouse.

Looking ahead

By using AMRs, evo can respond to peaks in demand with fewer recruitment and COVID-19 safety challenges. But that’s just the beginning. In the future, they will be able to harness real-time data from the AMRs to provide continuous feedback to managers and teams, building efficiency and consistently improving productivity. evo sees additional opportunities to use Locus AMRs to enhance operations by optimizing bin sizes, integrating with packing solutions and implementing the robots in the putaway process. We can support businesses like evo by drawing on our warehouse and automation expertise, as well as a diverse portfolio of leading robot manufacturers.

Whether you’re introducing your first AMR or integrating a complex automated warehouse solution, we can tailor the solution precisely to your needs.

Looking for an automated solution to support the ever-changing demands of your business?

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