

# robust<sup>AI</sup>

Collaborative productivity  
is within reach

Overview

May 2025





# Founding & Leadership Team - Pioneers in Robotics



**Anthony Jules**  
CEO, Co-Founder



**Rodney Brooks**  
CTO, Co-Founder



**Stasy Pasterick**  
CFO



**Benjie Holson**  
VP, Software



**Leila Takayama**  
VP, HRI & Design



**Justine Rembisz**  
VP, Hardware



**Sola Lawal**  
VP Customer Success



**Ben Gruettner**  
VP of Revenue



**Gabrielle Halberg**  
VP of Product



**Nick Costides**  
Former President of IT,  
UPS  
**ADVISOR**



**Henrik Christensen**  
Co-Founder, Leader of U.S.  
Robotics Roadmap  
**ADVISOR**



How do you raise the bar on what it means for robots to be **collaborative** with warehouse workers?



## Carter™

A novel form of mobile robot that allows for seamless collaboration with people across picking, putaway and value added service.

Fully **Autonomous.**

Truly **Collaborative.**

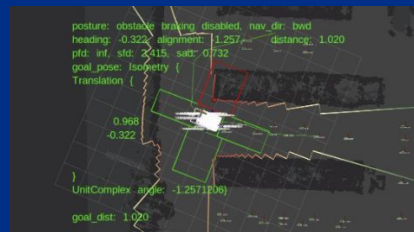
# Fully Autonomous.

The most advanced AMR on the market

- + Drop-in **high-performance** automation
- + **Rapid implementation**
- + **Eliminate** unproductive **walking**
- + Flexible workflows for **all volumes and profiles**



Advanced Visual SLAM (NO LIDAR)



Reactive autonomous navigation



Easily adaptable workflows



Neural network semantic perception

# Truly Collaborative.

Seamlessly and safely works with people to delightfully drive increased productivity.

- + Simple by design | Invisible Intelligence
- + Aware of people
- + Familiar form factors
- + UX Affordances to drive **user delight** and **high productivity**



Touchscreen & barcode scanner



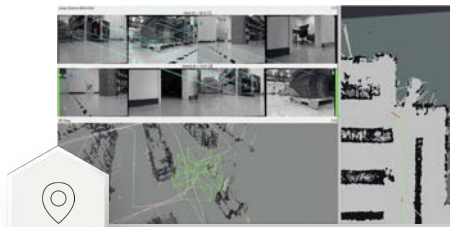
Adaptive put-to-light



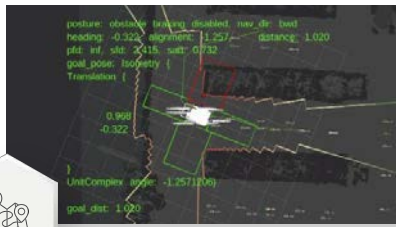
Easily adaptable workflows



Bionic handlebar



Visual (re)mapping



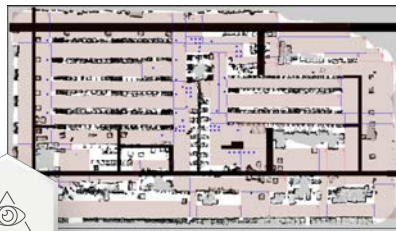
Reactive Navigation



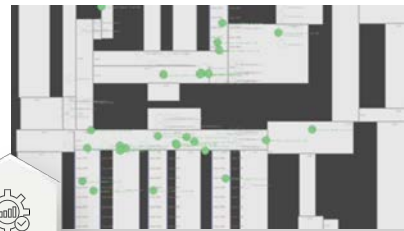
On-robot Machine Vision



Digitalized workflows



Fleet Learning & Panoptics



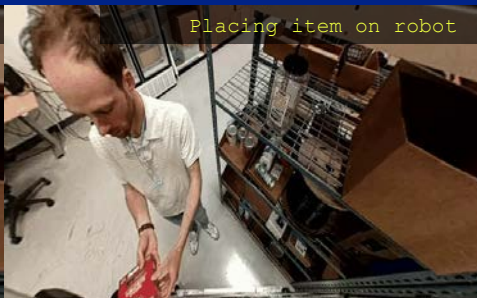
Fleet Optimization

Artificial Intelligence that is ready for robots **today.**

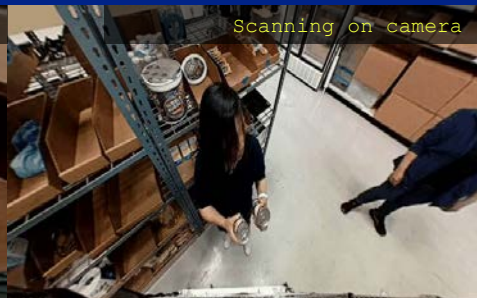
# On-robot machine vision allows for Carter™ to have a full view of the world around it



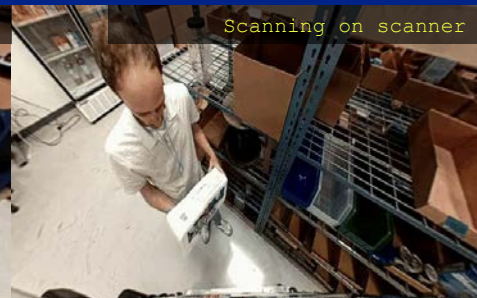
Picking from shelf



Placing item on robot



Scanning on camera



Scanning on scanner



Adjusting item on shelf



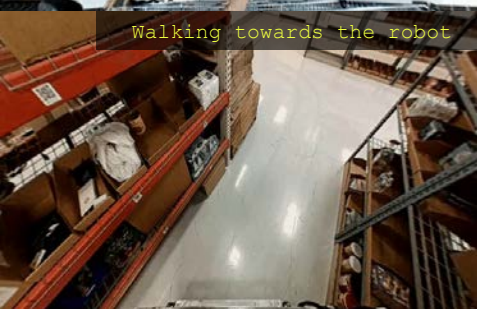
Pushing or pulling robot



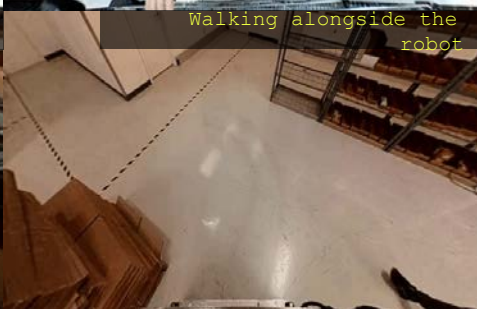
Looking at or using screen



Idle behavior



Walking towards the robot



Walking alongside the robot



Walking away from robot



Not visible

# Workflows

Robust.AI's **scalable** solution gives your warehouse the **flexibility** it needs.

## 01 Guided

Deployed for lower density and opportunistically used in fast pick areas, this manual option allows for speed, scale, and versatility across a wide customer base.

## 03 Cascade

The standard flow for most customers, Cascade is a cluster pick that allows for autonomy, speed, high pick density, and minimal travel.

## 02 Batch & Sort

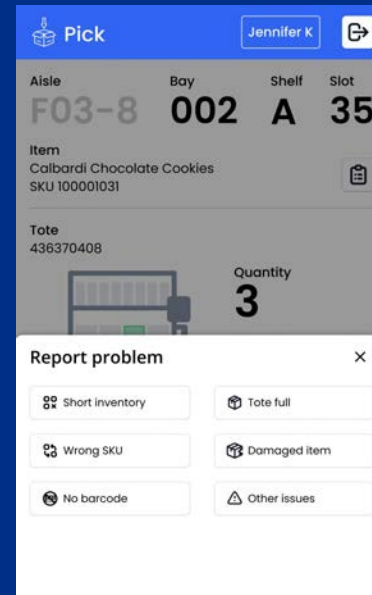
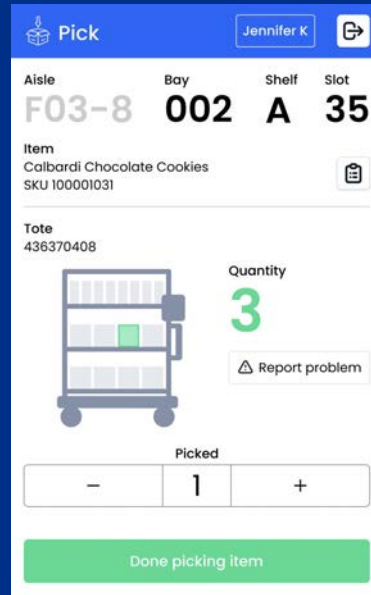
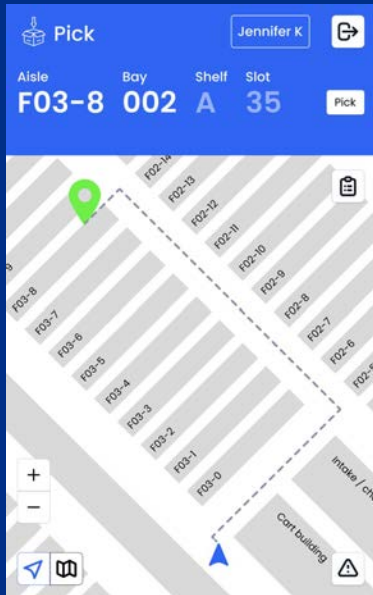
Used advantageously for the right operation, the Carter hardware serves not only as the pick engine, but also the sorting infrastructure bringing tremendous efficiency with great flexibility.

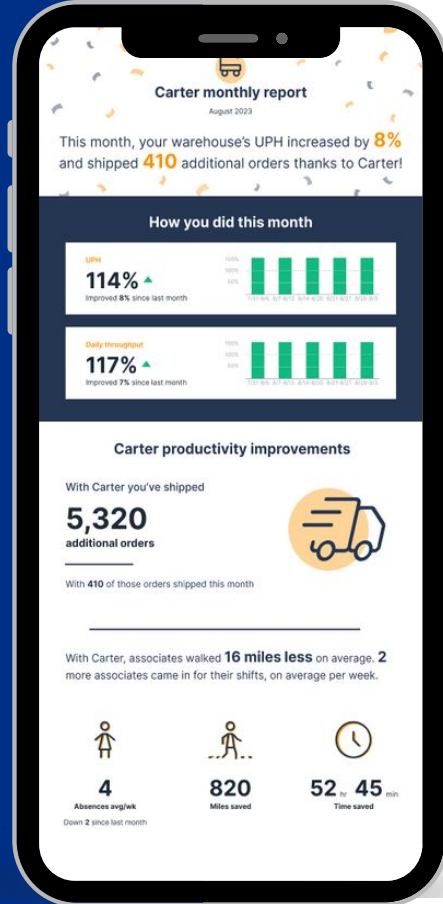
## 04 Point to Point

Similar to the Cascade option, Carters and pickers move in similar manners, but here pickers are allocated to a zone. This can be advantageous for large footprint layouts.



**Simple and user friendly** on-robot guidance minimizes employee training and optimizes picking productivity.





# Day-1 Efficiency Improvement Results

## What it means for your business

50%

Productivity Gains  
In highly optimized  
environments

2-3x

Productivity Gains  
In less optimized  
environments



## Accuracy & Speed: Leveraging Put-to-Light



### Increased Order Per Cart

Light directed putting allows removes the concern of misplacement, allowing a denser pick cart to drive efficiency gains



### Reduced Seek Time

Reduce the amount of time spent searching for the right order tote



### Industry Leading Accuracy

Reduce picking errors by ensuring the right product lands in the right tote

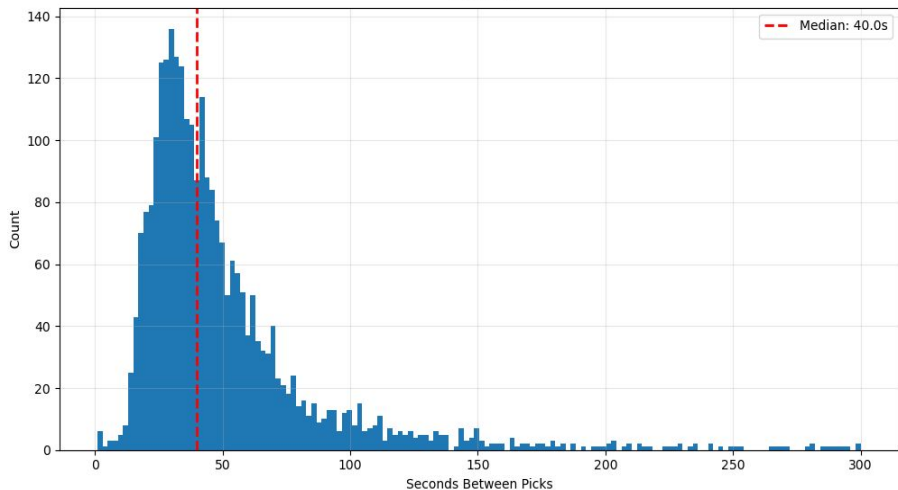


### Intuitive UI Guiding Actions

Large, robot mounted screen directs the picker through every step, as well as highlighting the right tote to place into

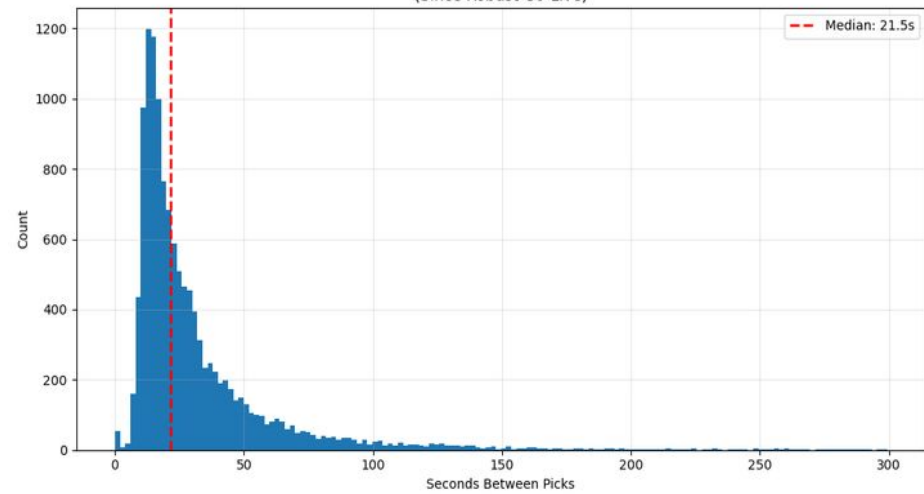
Through an enhanced UI, dynamic PTL, intuitive robot positioning, and an on robot scanner, Carter has **improved picking** actions by nearly **100%**

Time Between Picks by Same Picker in Same Aisle/Bay  
Feb 2024



Current state: 40s median pick time

Time Between Picks by Same Picker in Same Aisle/Bay  
(Since Robust Go-Live)



Robust.AI: 21s median pick time

## Robust.AI RaaS

Guaranteed productivity with **Day One ROI**

A single all-inclusive monthly fee.  
No hidden costs. No surprises.



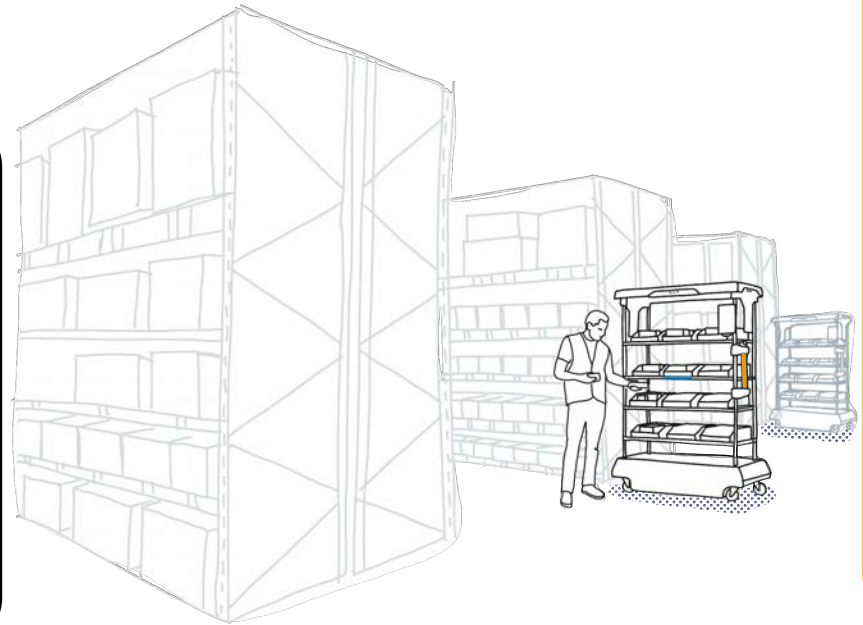
**Day One ROI:** No financial commitment until it works



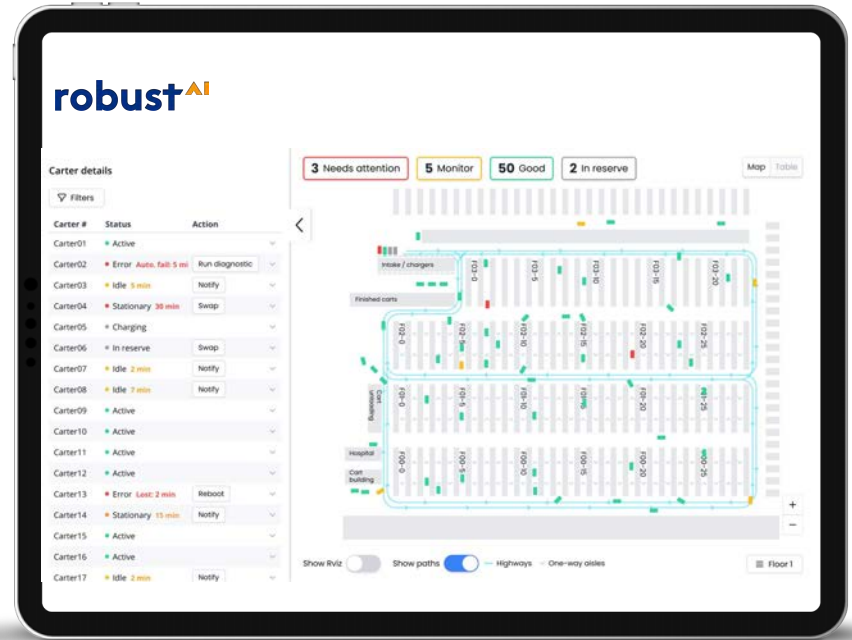
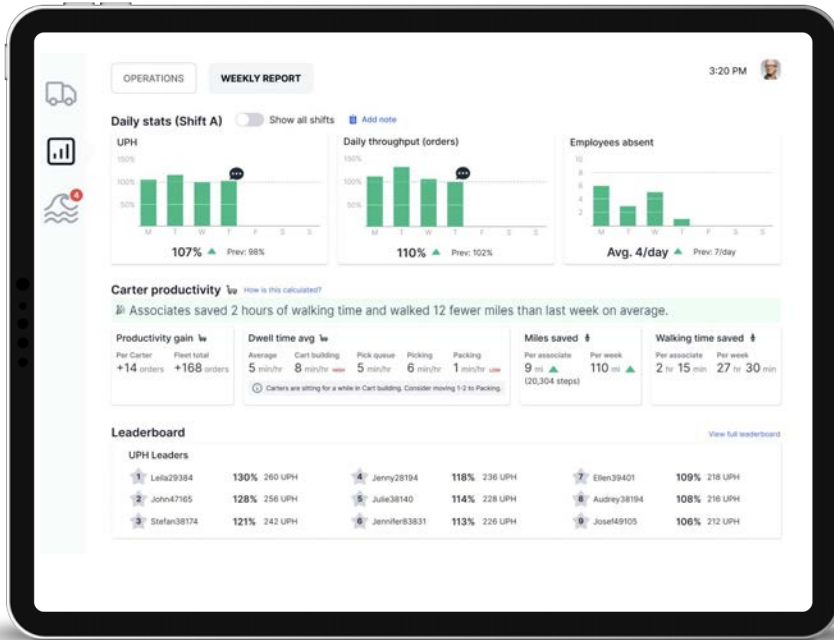
**Performance-focused:**  
Contractually guaranteed productivity



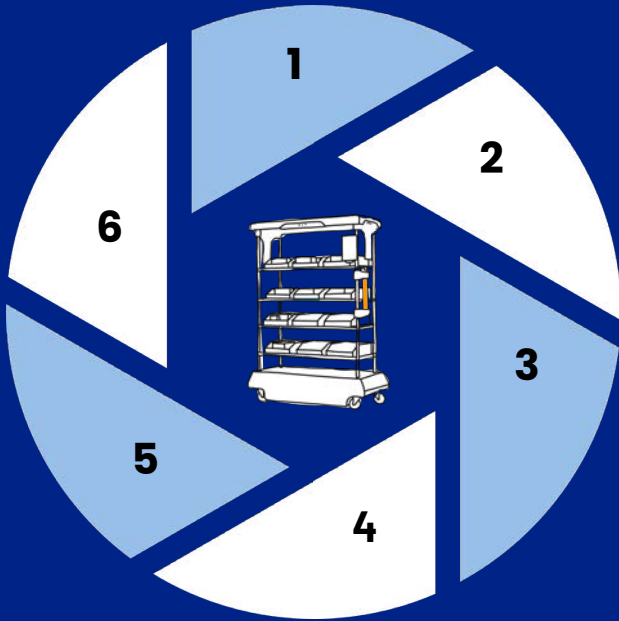
**Flexible:** Grow, evolve, or stop using as your automation needs change



Robust.AI's **reporting** and **dashboards** will give access to the information you need on your operations, when you need it.

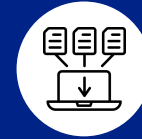


# Customer Focused Solutioning Process



## Initial Discovery

Introduction to the Robust.AI solution and discovery of current operations to determine fit and timeline.



## Data Gathering

High-level to start and then orderline level detail containing pick date, pick time, order id, sku, qty, etc...



## Data Analysis Review

Review full analysis with team to confirm accuracy and align on our understanding of your operations. Also begin to validate overall ROI and business case.



## Site Visits

Robust team to visit viable sites to validate assumptions and refine workflow options. Additional discussions with on site team on what additional factors need to be considered



## Confirmation & Alignment

Discuss and agree on design parameters and current state performance metrics.



## Proposal

Deliver final proposal with detailed workflows and guaranteed productivity improvements that support a strong day-1 ROI.



## Use Case: DHL Supply Chain



## DHL Supply Chain Partners With Robust.AI to Drive the Future of Warehouse Automation

Press Release: WESTERVILLE, OHIO (February 1, 2024)



Sally Miller • 1st  
CIO | Advisor | Supply Chain IT Executive  
1w • Edited •

Today, I had the pleasure of watching the Carter amr prototype at one of our [DHL Supply Chain](#) locations in Columbus, OH. The feedback from the associates was "can I have a turn?"

# What Do Customers Say about Robust.AI?



“

It's a very, very easy process

“

Being user friendly is incredibly important, enabling users to help themselves

“

We'd rather bring another robot onboard than another employee

“

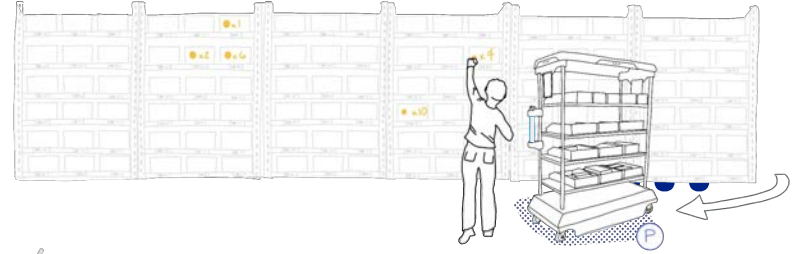
Having a system that works right out of the box, without integration, is extremely important to us



“

The feedback from the associates was “can I have a turn?” I am very excited about the progress of the co-product development and the potential to improve the associate experience in our facilities.

# Why Robust.AI?



## Day One Results

Immediate ROI with a no Capex, all-inclusive solution

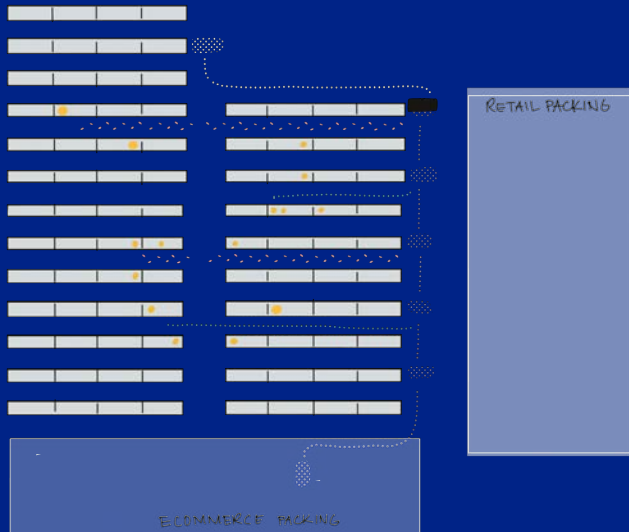
## Scalable & Flexible

Start small and easily scale up as successful milestones are hit. Seamlessly switch between workflows as your business needs evolve.

## Robot's Designed for People

The most advanced AMR with a human-centered design that is effortless to adopt, allowing you to empower and enhance your workforce.

# Next Steps Together



## Data sharing & analysis

A detailed understanding your current operations will allow for our team to provide initial feedback and analysis.

## Photo and video sharing



Seeing is believing! Sharing photos and videos of process, and items to be picked allow our team to dial in sizing for our detailed simulations.

## Site Visit



The Robust.AI team will come onsite for a full review of current process, footprint & use case validation.

# Carter

## Spatial sensing and perception

Camera-based vSLAM (no LIDAR)  
360° machine-vision system  
Optimized for AI data collection

Field configurable shelving with  
**put-to-light LED** system and other  
powered accessories

**Patented holonomic drive** allows  
instant movement in any direction

- Max payload: 100 kg (220 lbs)
- Max speed: 1.5 m/s
- 18-hour battery life
- 6-hour charge time
- Flexible shelving with 100s of configurations



High visibility marquees

Touch screen with barcode scanner

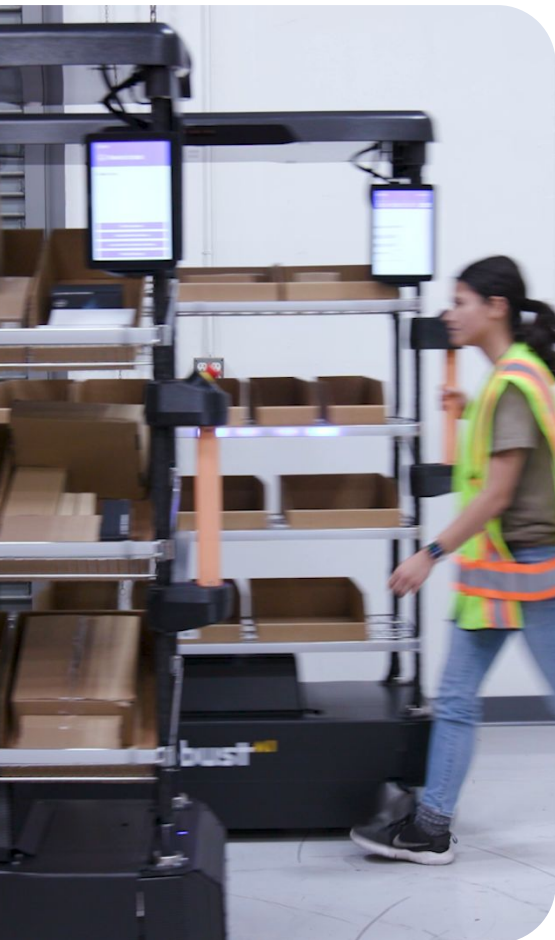
**Force-sensing handlebar** for  
single-handed operation

**Whole-robot force sensing** allows  
operation anywhere

Autonomous & collaborative workflows

- Autonomous mode**
- User-guided mode**
- Robot-guided mode**

0.72m x 1.4m x 1.94m



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Collaborative productivity  
is within reach

THANK YOU



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