

# A.I. in the Warehouse: What You Really Need to Know



Presented by:

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# Gina Chung, VP of Corporate Development @ Locus Robotics



- Based in Chicago, from New Zealand.
- Former Vice President of Innovation at DHL.
- 10+ years of global experience in evaluating, testing, and deploying automation technologies in operations.
- Currently responsible for shaping Locus Robotics' corporate strategy and executing key growth initiatives.

# AI at Scale: 125+ customers, 300+ facilities, 18 countries.





# AI in the Warehouse.

Not new...but the applications are evolving.

FULL SPECTRUM SUPPLY CHAIN





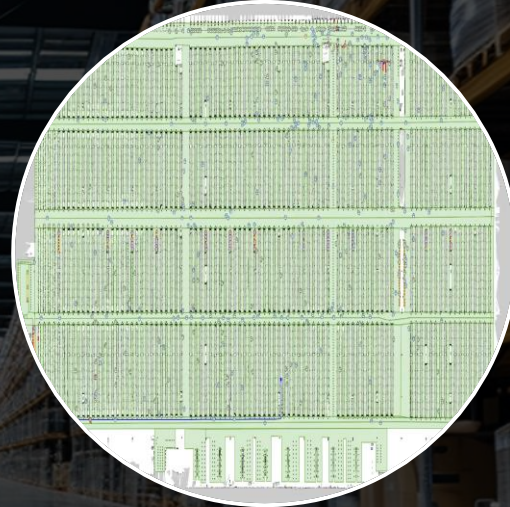
# Key areas of AI value creation in the warehouse.



1.  
Network & Warehouse  
Optimization.



2.  
Intelligent,  
AI-Powered Assets.



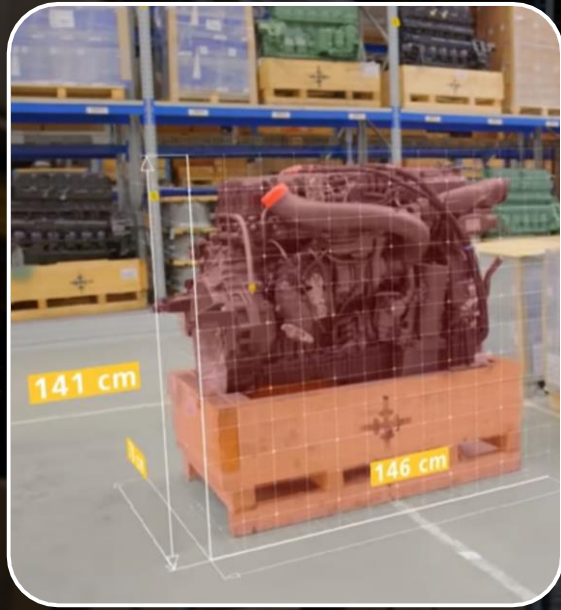
3.  
Advanced  
Simulation.



4.  
Real-time Analytics  
& Reporting.



# AI enables new kinds of logistics assets.



1.  
Stationary Computer  
Vision Systems.



2.  
Robotic Picking &  
Sortation Systems.



3.  
Autonomous Mobile  
Robots.



4.  
Humanoid  
Robotics.



# When is AI essential?

1. Environments that are constantly changing.
2. Unstructured and unpredictable movement of people and MHE.
3. Unplanned obstacles and hazards.
4. Volume fluctuations.
5. Large number of SKUs in different shapes and sizes.
6. Complex workflows.



# How we leverage AI at Locus Robotics.

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# Our robots are intelligent agents.

- ✓ Machine perception of the environment
- ✓ Create & pursue goals
- ✓ Operate autonomously
- ✓ Adapt to changes (in the environment, etc.)
- ✓ Data capture devices
- ✓ Capable of logical reasoning

*Locus Robotics provides intelligent agents that optimize warehouse operations.*



# AI enables safe, flexible, and intelligent navigation.



## LEAPFROG

Multiple robots  
in the same aisle

## TWO-WAY

Passing  
in aisles

## REDIRECT

Shortens  
distances

## MANEUVER

Around people  
and obstacles

## ADJUST

Routes due to  
blocked paths



**Smart fleet enables new bots to be added <5min.**



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# AI at Scale.

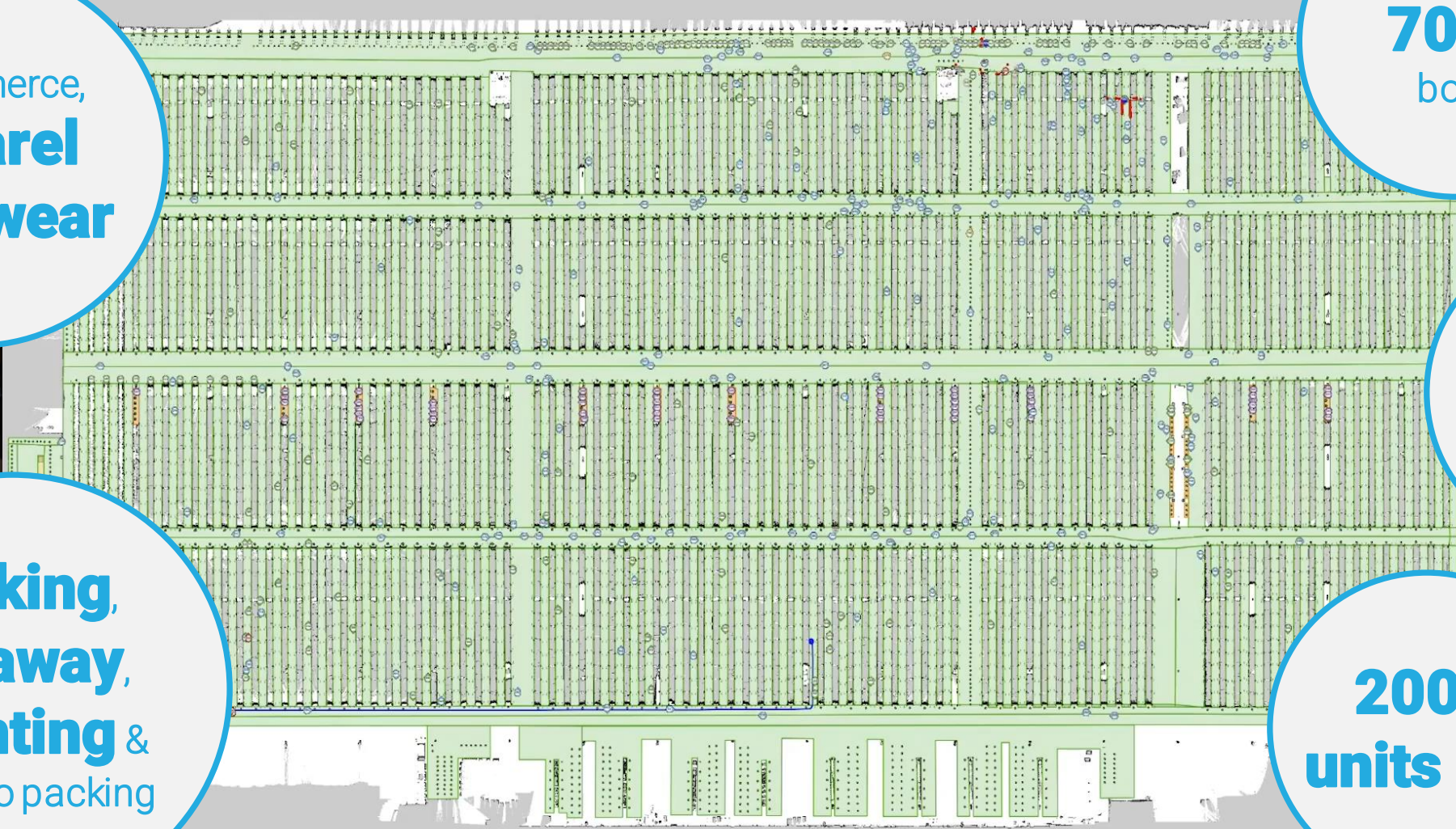
E-Commerce,  
**Apparel**  
& **Footwear**

**700+**  
bots

**1M**  
square  
feet

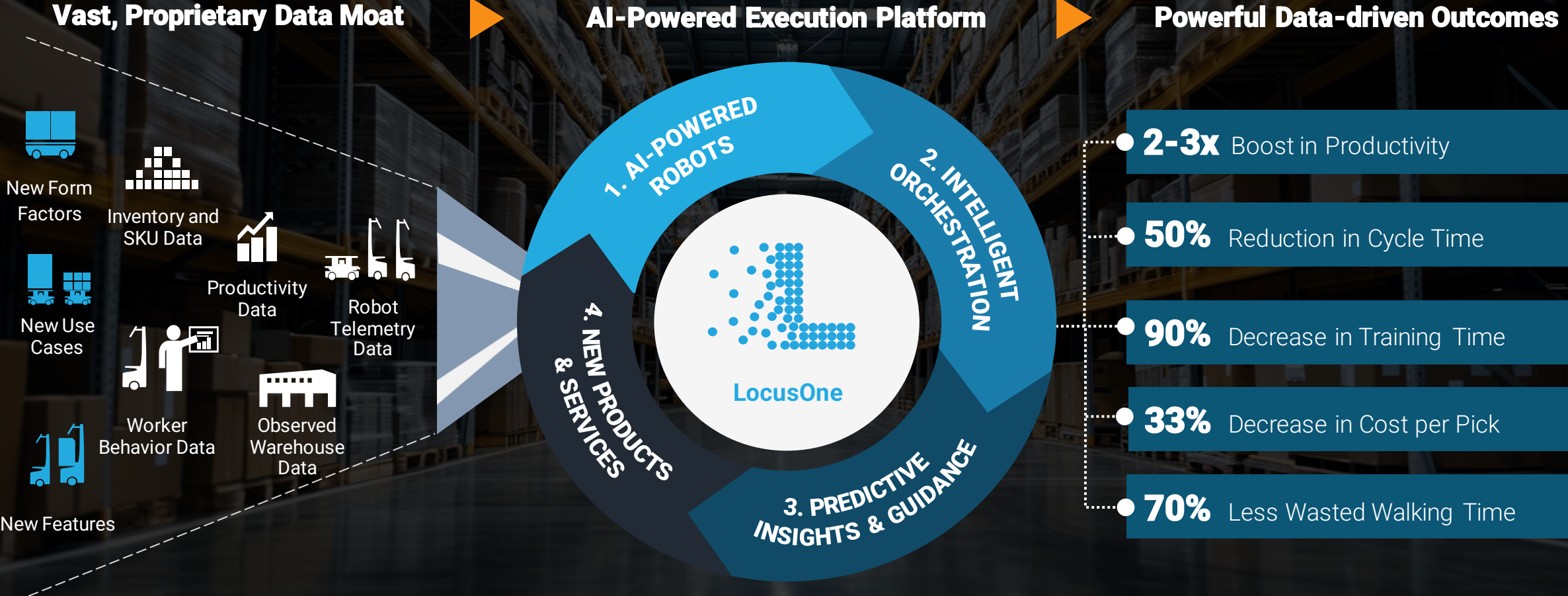
**Picking,**  
**putaway,**  
**counting** &  
direct to packing

**200K**  
**units** a day





# Driving customer value through AI.





# Closing Thoughts

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# Closing thoughts...

1. When will we have fully automated “lights-out” warehouses?
2. Will AI automate jobs for the worse?
3. What are the key ethical and safety considerations with AI in the context of warehousing operations?
4. Where/how should I start leveraging AI in my warehouse?





**Thank you.**  
Questions?

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*For more information:*



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