

# Ai Order Picking Robots Faster Than Humans?

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*Product Manager*

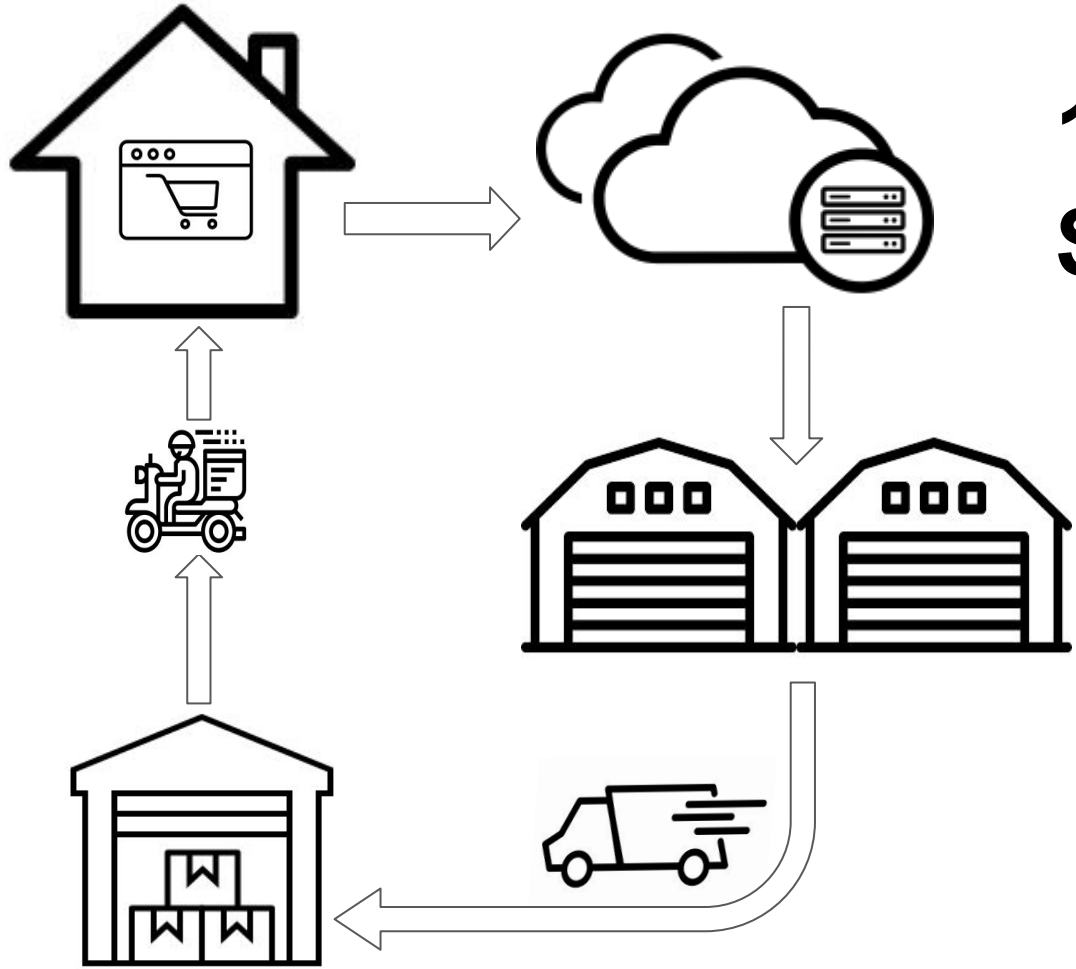




**PICKR**  
**.AI**

**Customer Expectation**

Online shopping



**1 Day Shipping**

**PICKR**  
**.AI**

# Pick List Walk

**PICKR**  
**.AI**



# Order picking



You Are here

**PICKR**  
**.AI**

# Voice Guided Picking



**PICKR**  
.AI

# Robot To Goods



**PICKR**  
**.AI**

# Goods To Person Picking

amazon.com<sup>®</sup>

PICKR  
.AI



**WARNING**  
Do NOT enter.  
KIVA active floor.  
Authorized  
maintenance  
personnel ONLY  
beyond this point.



PICK  
STATION  
4308  
↓  
PICK  
STATION  
4309  
↓



2021-05-28 15:06:05

Picker



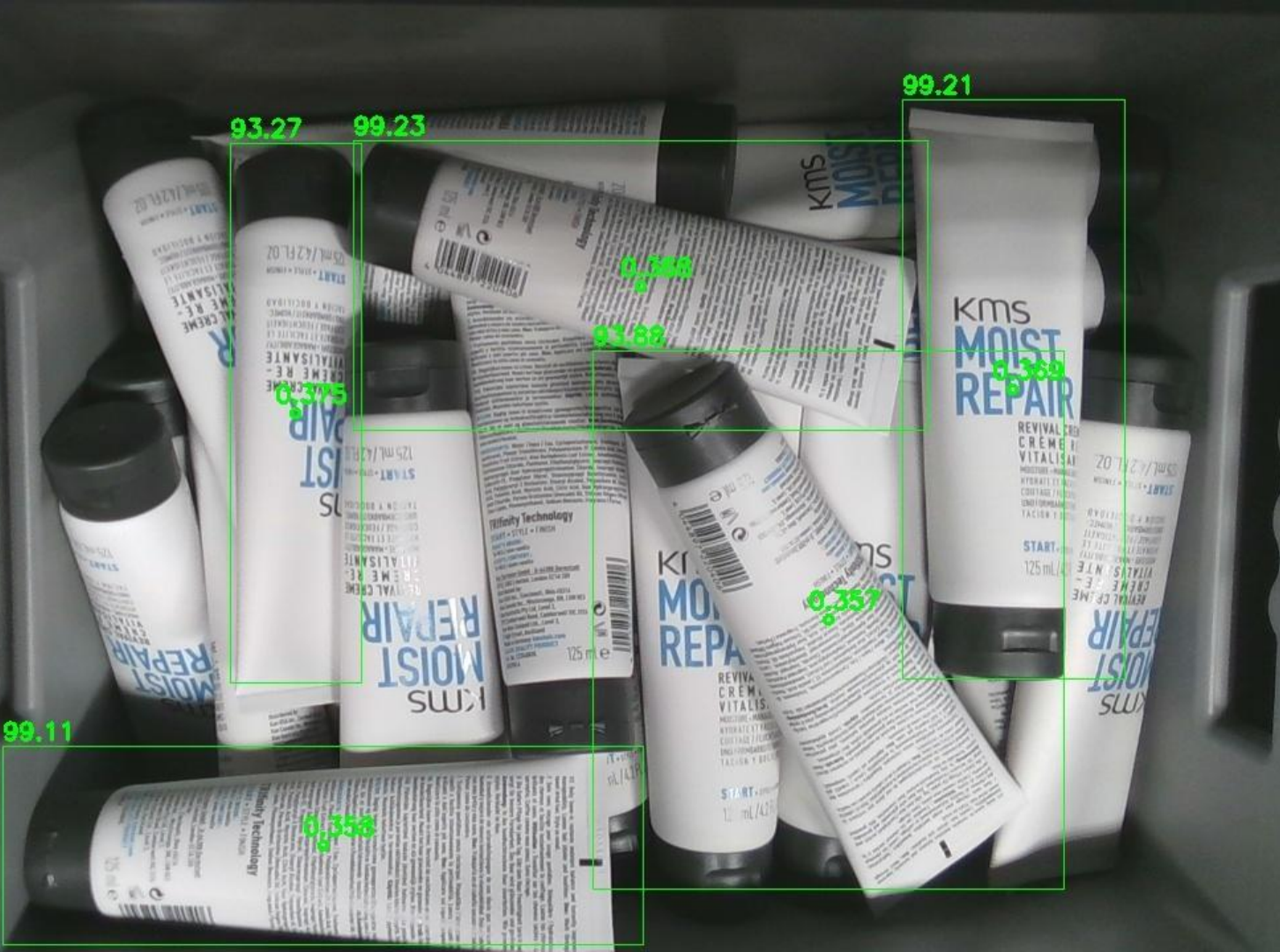
# Object Detection

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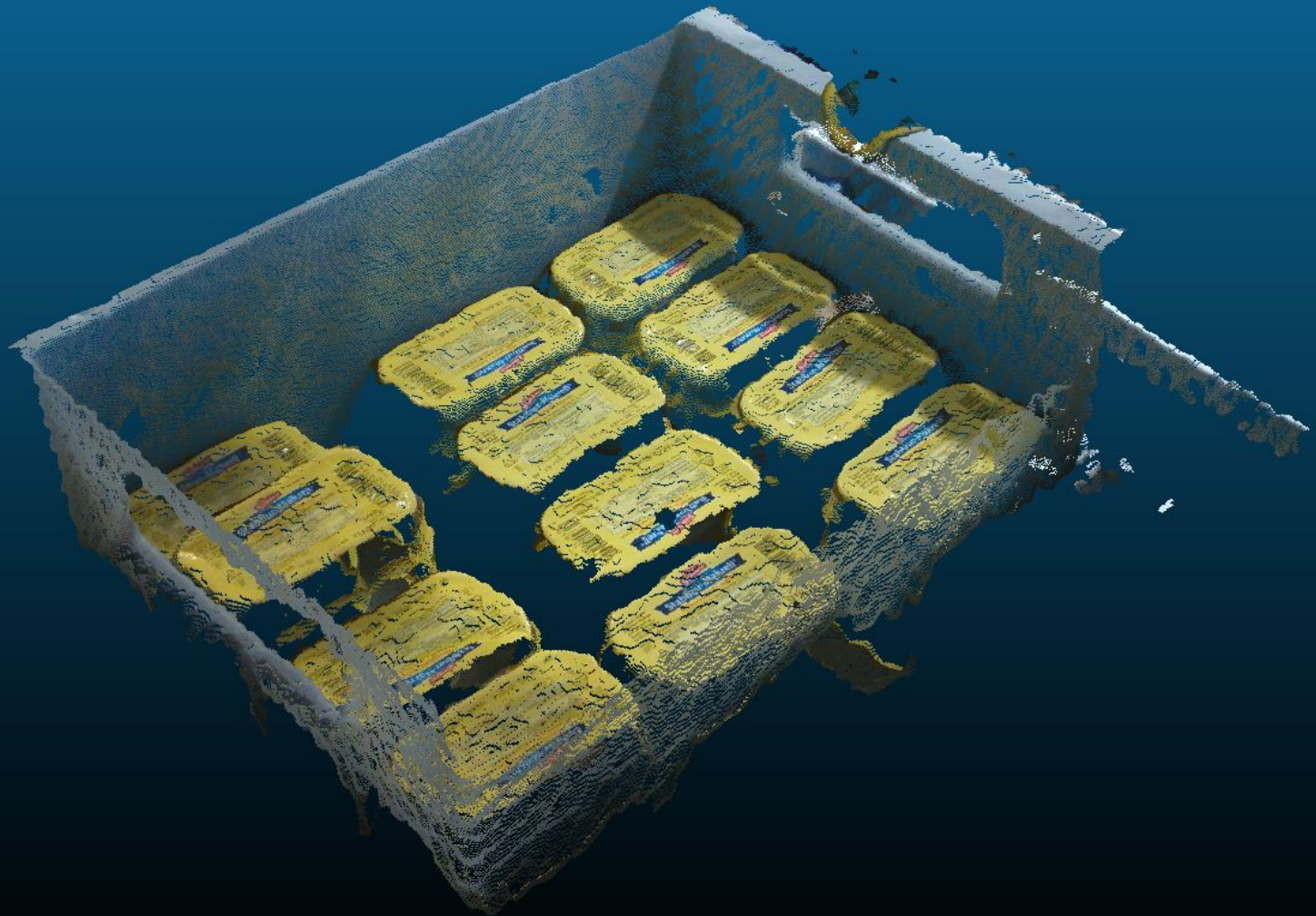


# Object Detection

PICKR  
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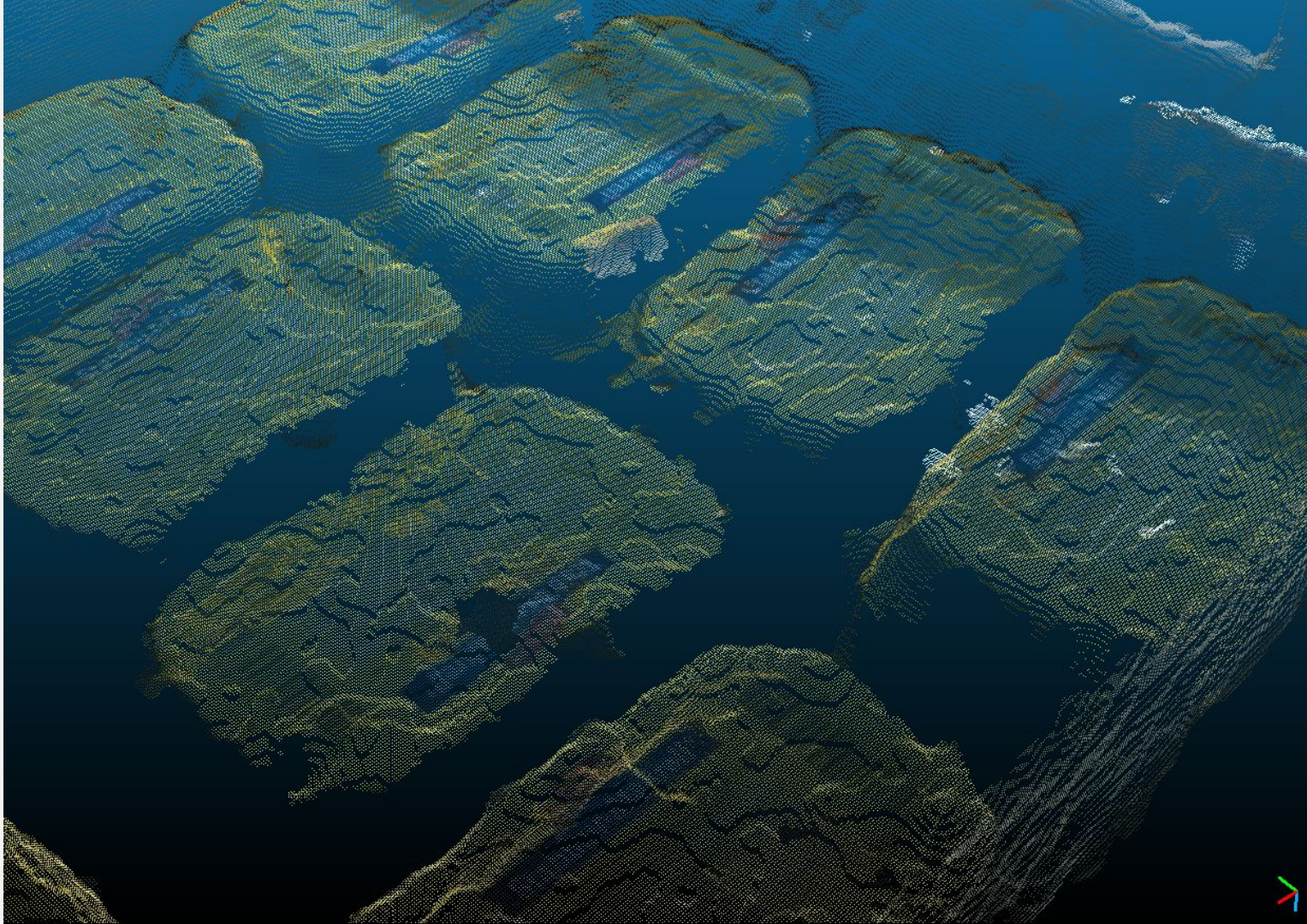


# Point Cloud Depth Perception



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**PICKR**  
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# Object Feature Extraction



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Picking  
Raw food  
is Hard



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**.AI**

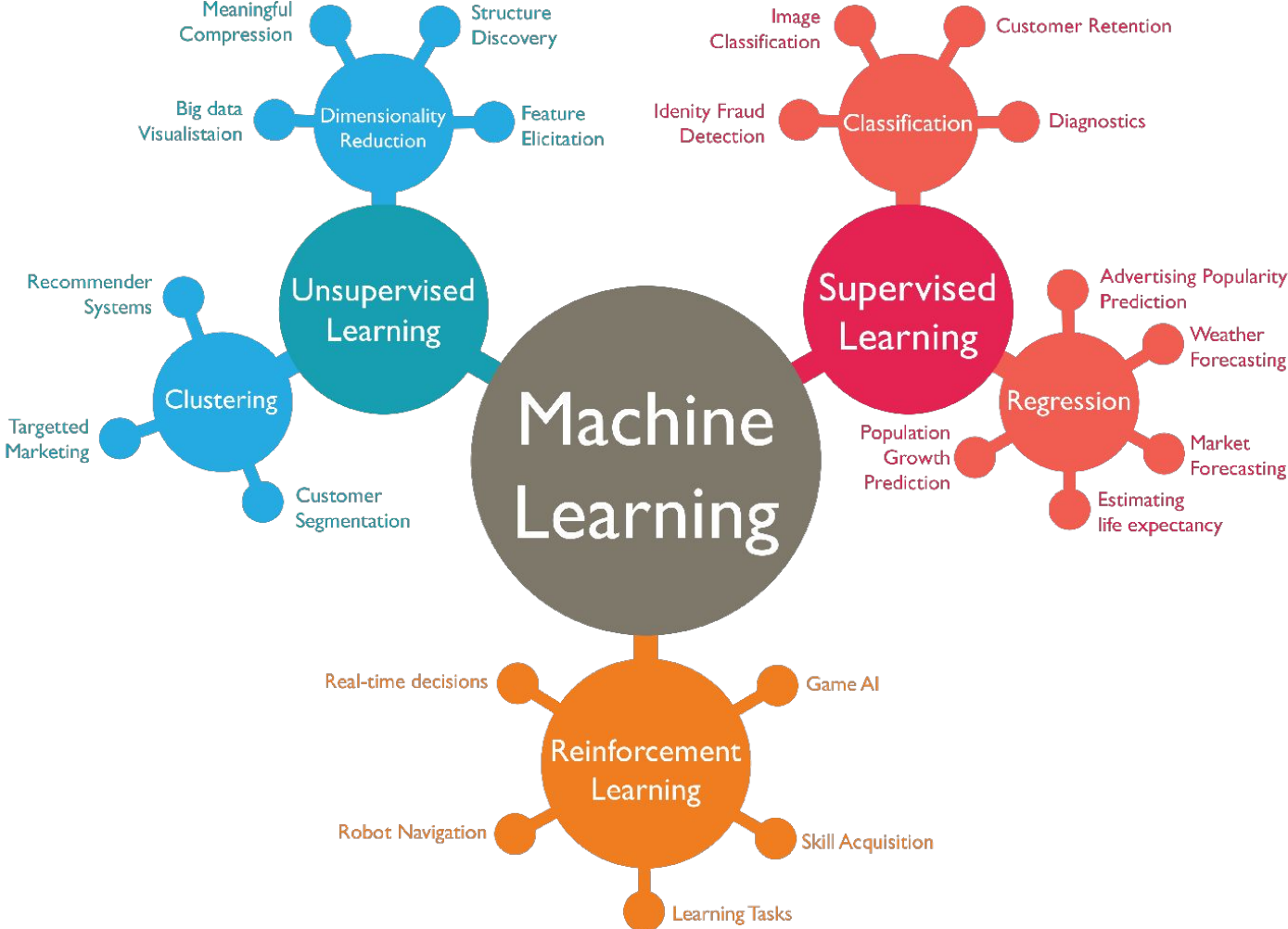




Linked profile

Thank You  
Q&A

# Disruptive Tech





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**.AI**

<https://robohub.org/deep-learning-in-robotics/>

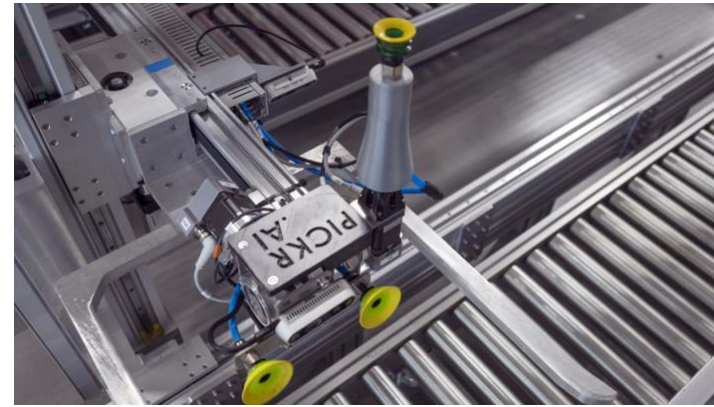



# The Solution

Fulfilling customer orders 24/7 without human interaction



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## Warehouse Automation Market

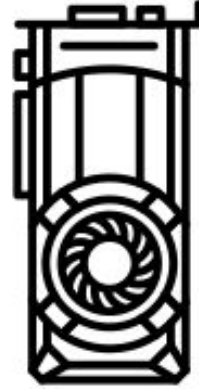
Warehouse Automation Market: Post Covid-19 Opportunities worth \$30B by 2026

- **Automation is must for customer fulfilment:** Meeting customer demands within e-commerce requires increased adoption of warehouse automation solutions to keep costs and operational complexity in check. Online retailing is fundamentally a logistics business driven by margin improvement from cost reduction in inventory management, order fulfilment and delivery capabilities.

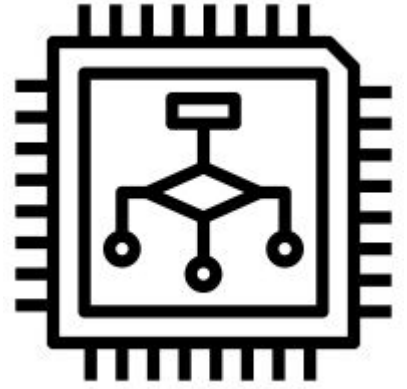
Disruptive  
Tech



Vision



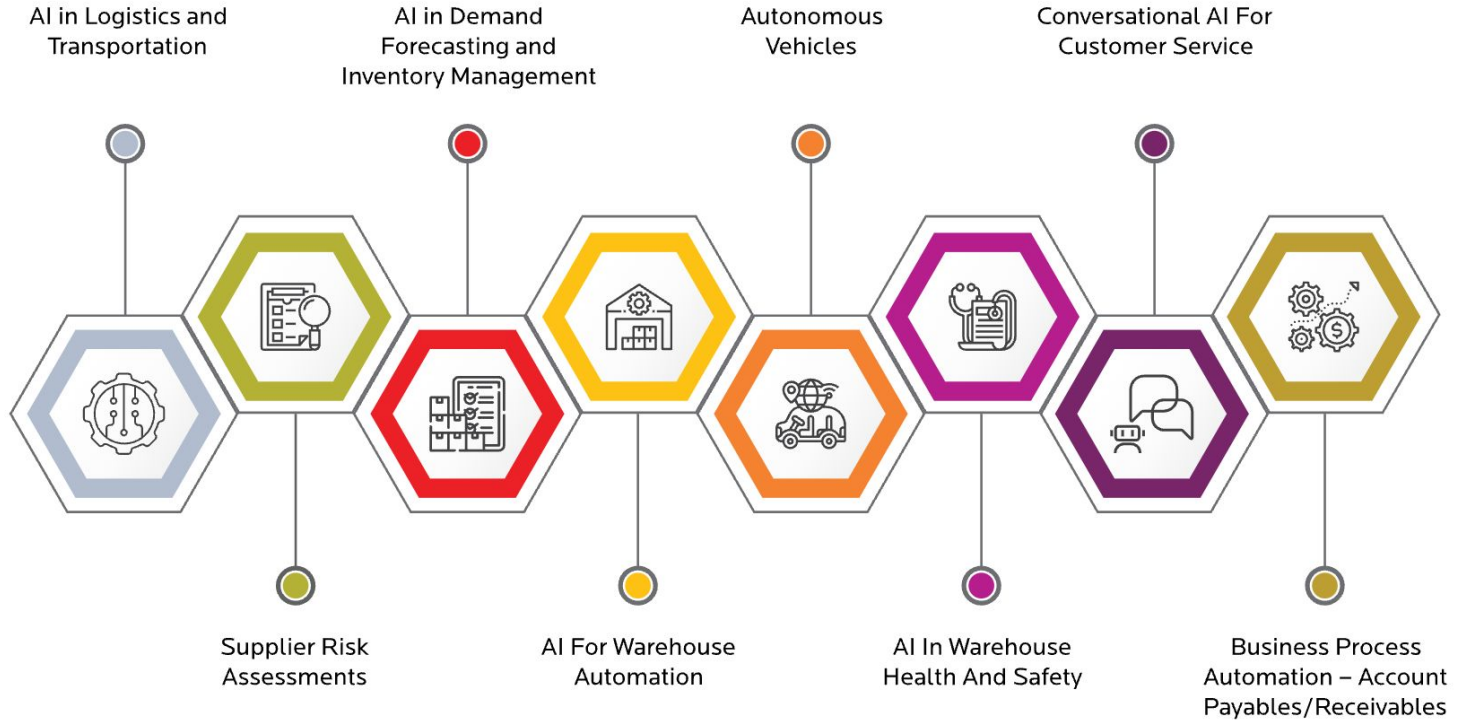
GPU



ML Algo



Edge & Cloud computing



The Big Read Ecommerce

+ Add to myFT

### Why supermarkets are struggling to profit from the online grocery boom

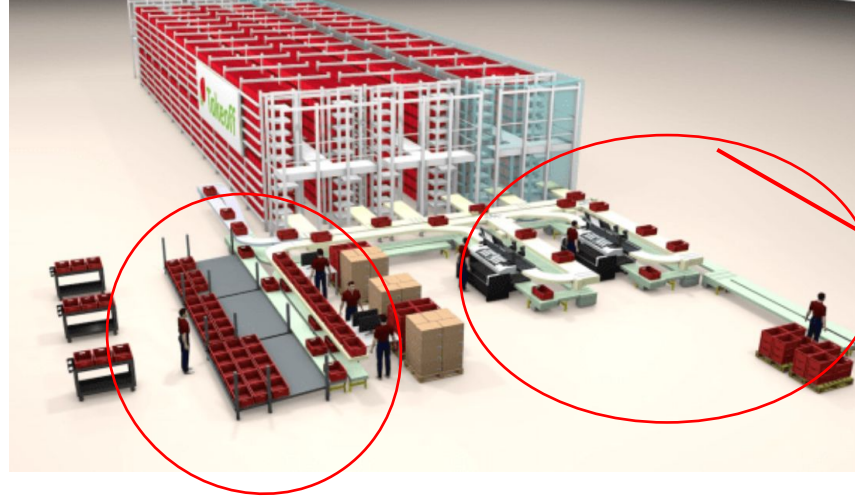
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Covid-19 has led to an ecommerce surge but the costs of running a delivery network are high

According to CSR, retailers incur a pure loss of \$5 to \$15 on every manually picked online grocery order. The loss gets gets worse when the number of online orders increases.

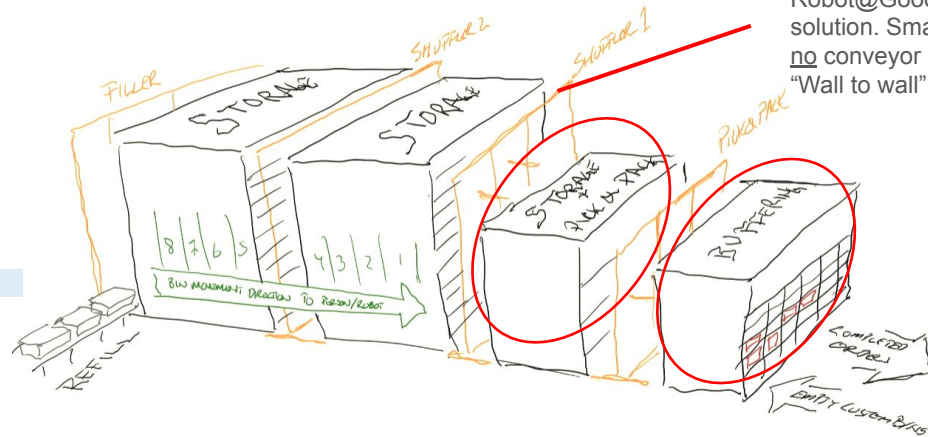


# Competition & External Forces



Good-to-human pick&pack solution. Large footprint & conveyor system.  
“Bin to bin” pick&pack

vs



Robot@Goods pick & pack solution. Small footprint & no conveyor system.  
“Wall to wall” pick pack

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.AI

