



Unlocking AI-driven Transformation in Container Handling Operations

www.avlino.com

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Who is Avlino?



We deliver adaptive **AI Solutions** that enhance operational systems and decision-making, to increase **Container Terminal productivity and efficiency**



Our **AICON Solutions Suite** is unique to the industry as it provides directly embedded intelligent answers that help clients realize their operational KPI's



We **combine domain knowledge and analytical thinking with innovative technology** that continually self-adjusts to the most demanding and dynamic conditions



Headquarters
New Jersey, USA

Design Centers
Bengaluru, India
Porto, Portugal

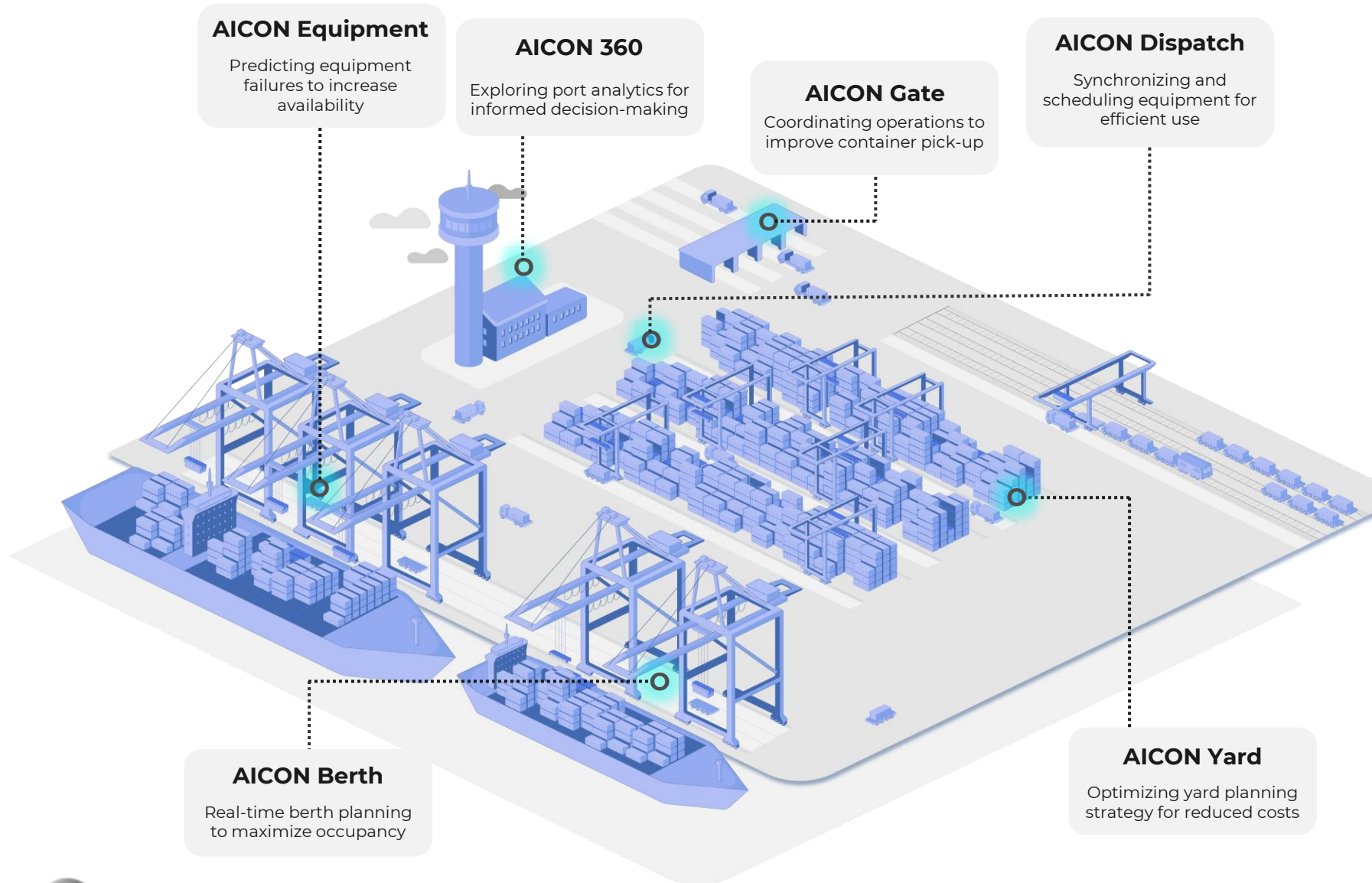
Expertise
Artificial Intelligence
Machine Learning
Operations Research
Big Data Engineering
Cloud Infrastructure

Revenue Model
Software-as-a-Service



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AI-enabled Modules

Integrating with TOS and sub-systems to generate visibility

Adapting quickly and continuously to changing conditions

Delivering value to the C-Level while helping analysts, managers and planners across the terminal



Case Study #1

TM TEU Manual RTG Terminal

Customer Pain Point

Yard and Equipment Productivity

Business Objectives

- Reduce Overhead Moves
 - Import/Export Rehandles
- Optimize Equipment Usage
- Improve Truck Turnaround Time

Solution

AICON Yard

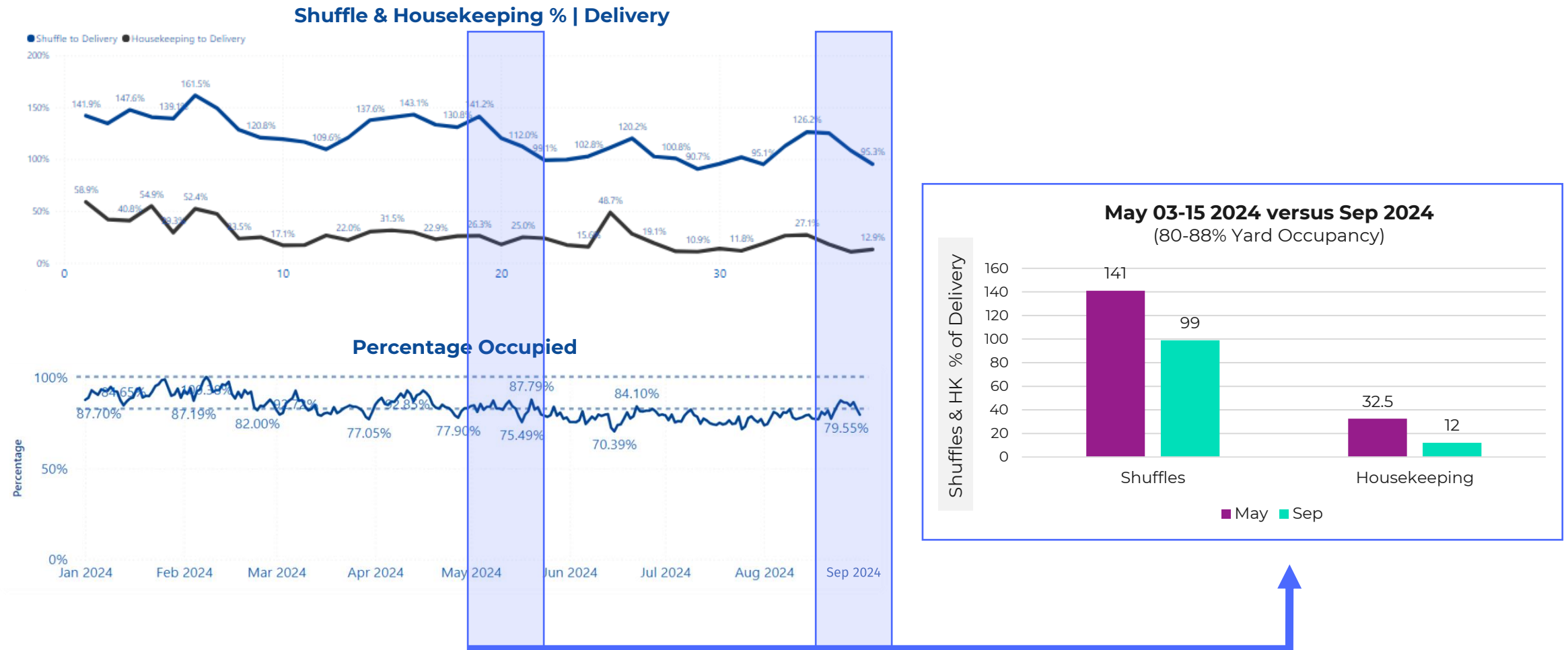
Use AICON Yard stacking strategy and housekeeping to balance current and future CHE load, improve yard stacking quality and reduce overheads for export and transship containers.

Success metrics

- Rehandle Count
- RTG Gantry Travel
- Improve QC GMPH

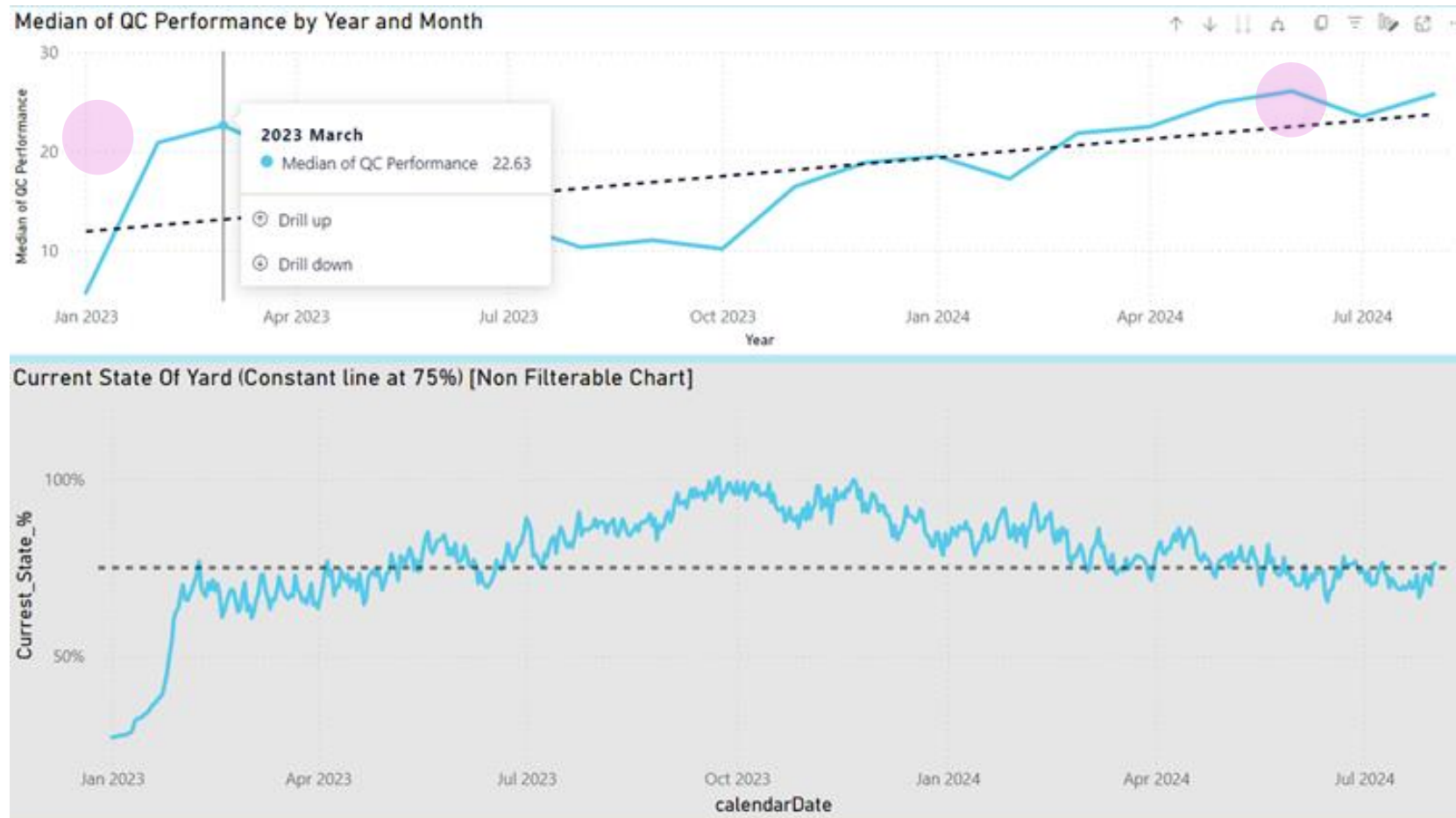
Import Rehandle Metrics

May 2024 versus Sep 2024: 30% reduction



QC GMPH Comparison

Apr-May versus Jul-Aug: 3 GMPH Increase (15% improvement)



HOW?



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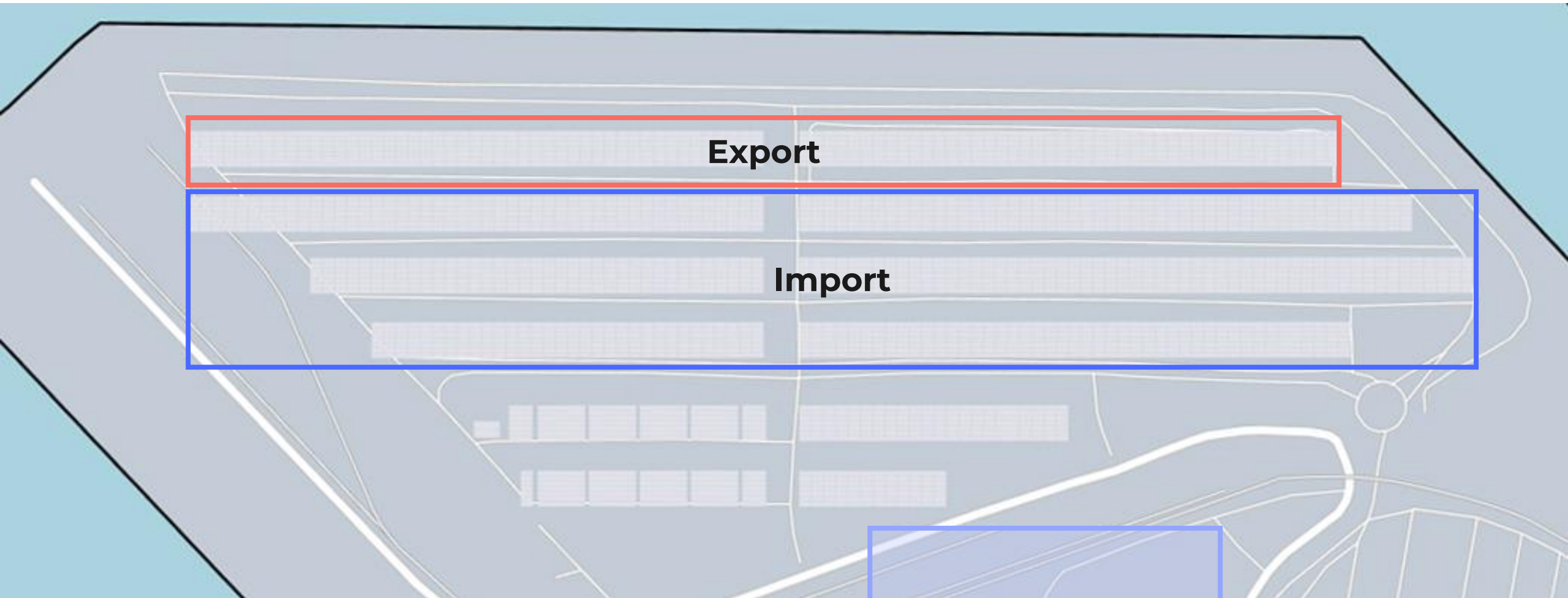
Information Classification: General

How many Terminals have a similar set of problems?

- 1) Disparate Equipment – each with different performance and maintenance issues?
- 2) Unpredictable container flow?
- 3) Manual mode of operations, with numerous planners, each trying for “local maxima”?
- 4) Challenging Yard Topology (e.g., disconnected Yard, Lane restrictions etc.)?

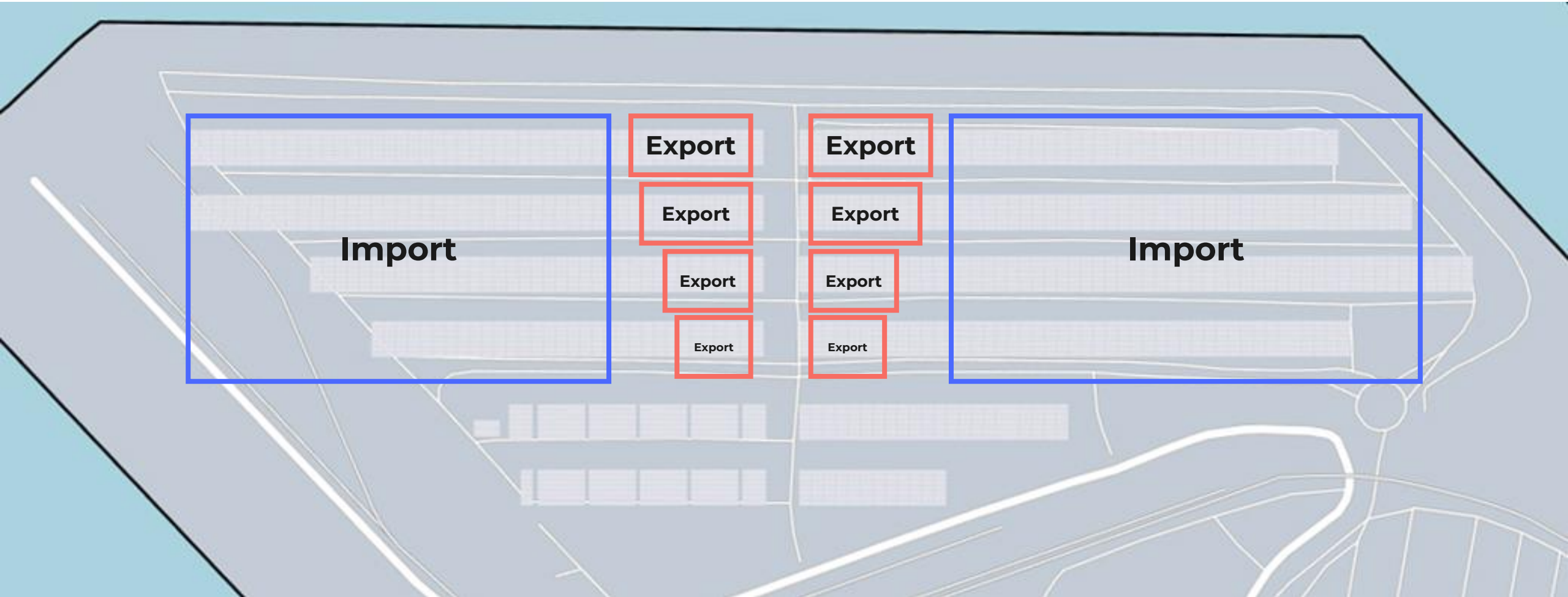


Yard Segregation – Current Operations

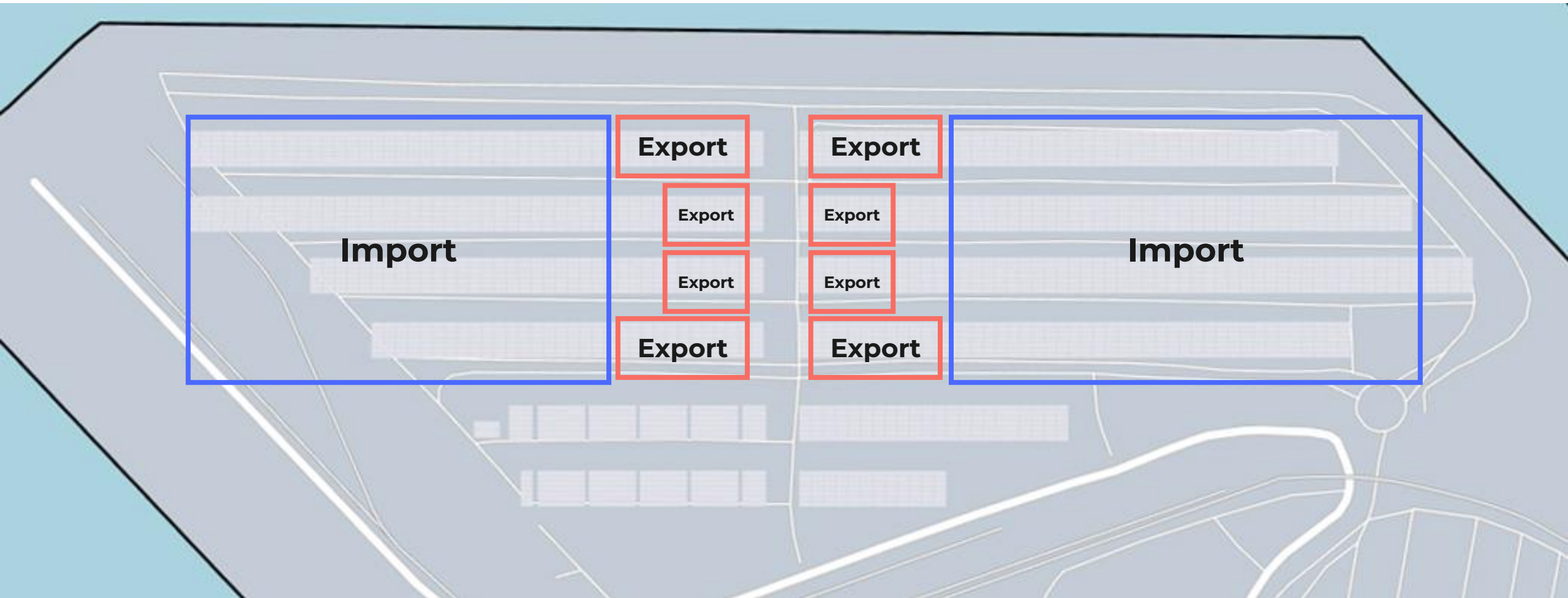


TAC 3 - Import

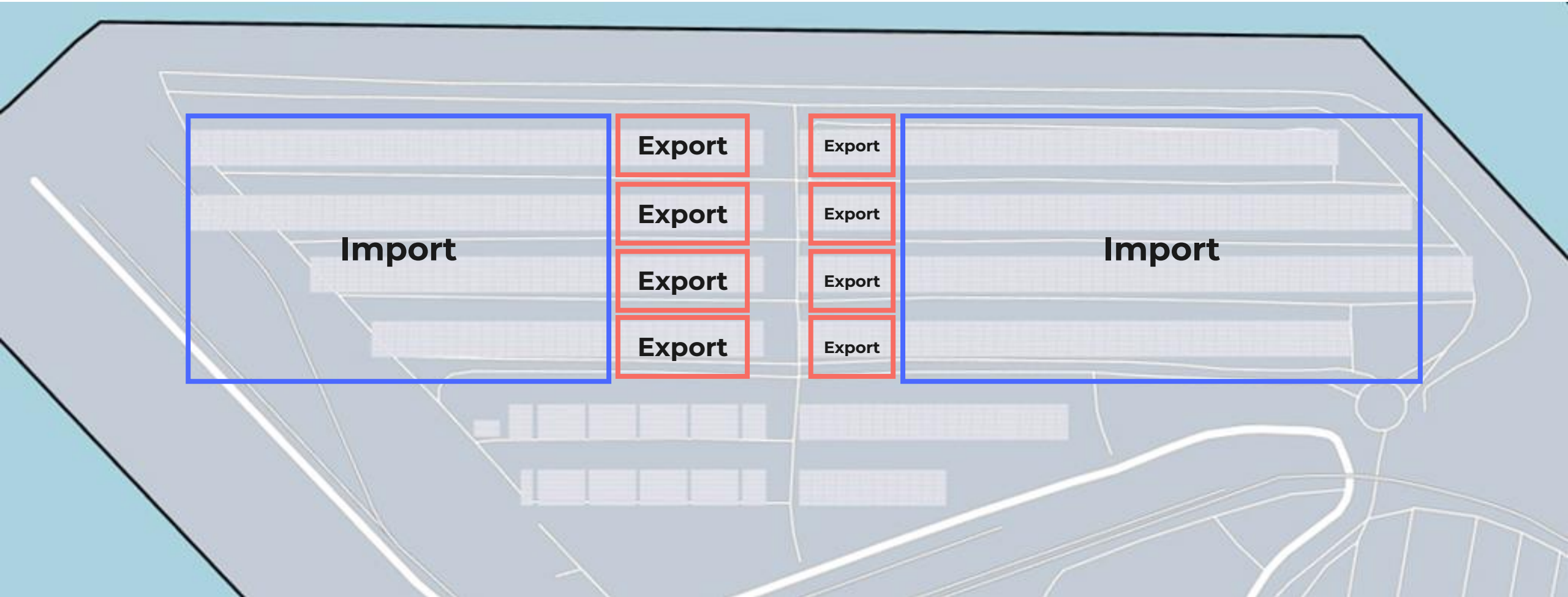
Yard Segregation – Export Transposing



Yard Segregation – Export Transposing



Yard Segregation – Export Transposing



RTG Equipment Placement

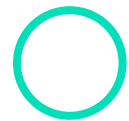
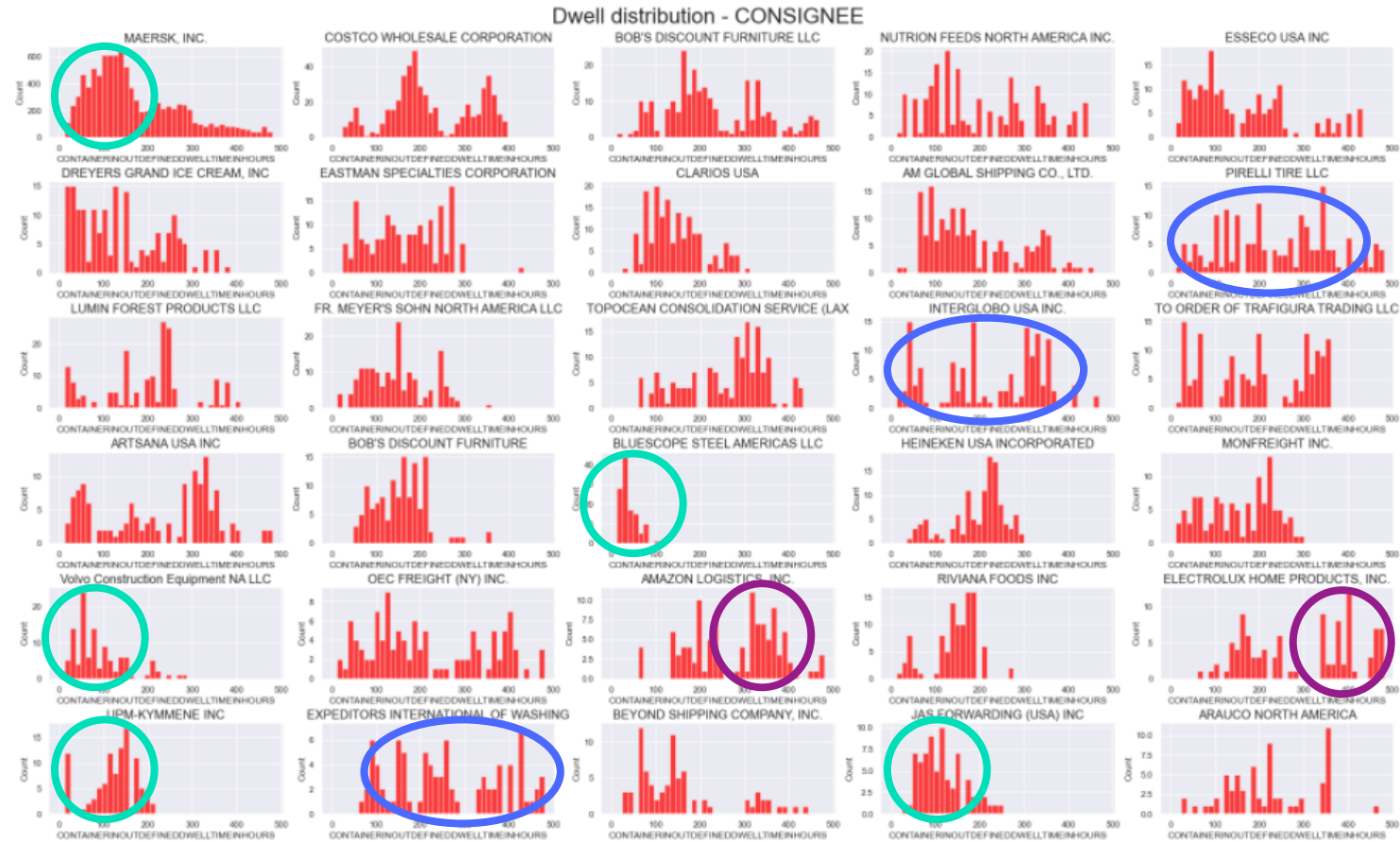
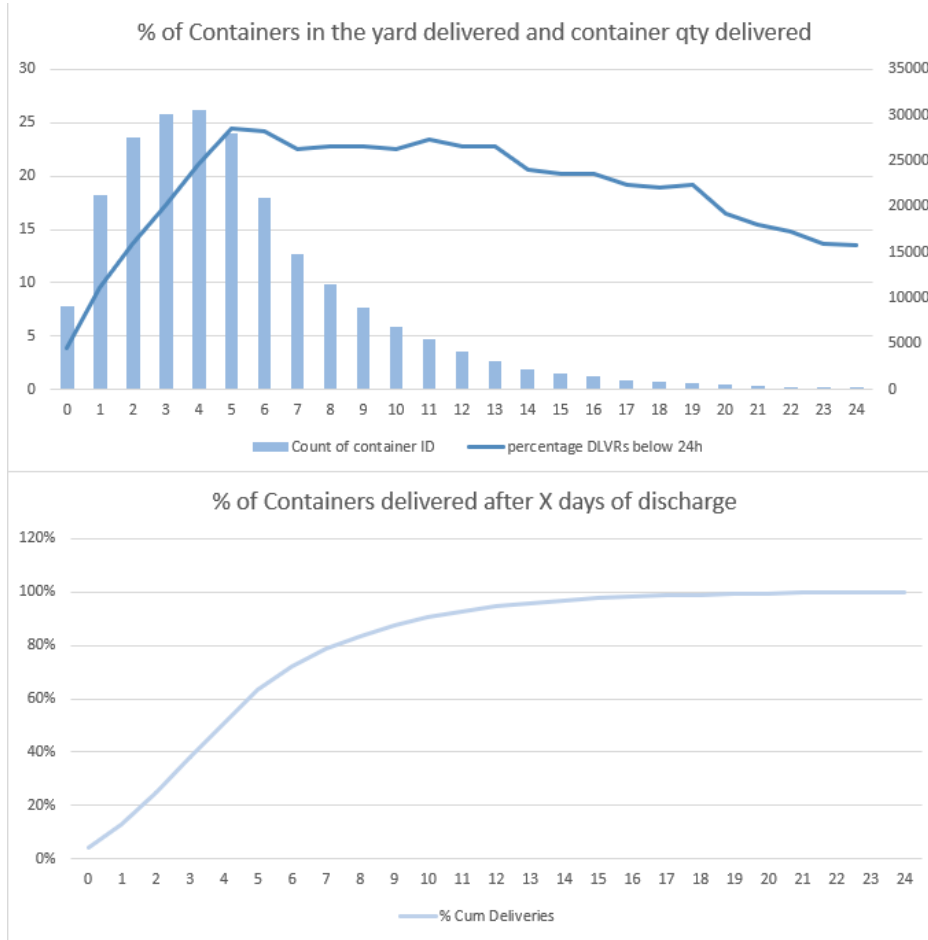


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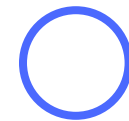
Sample for Predictive Dwell by Consignee



Early Deliverers



Late Deliverers



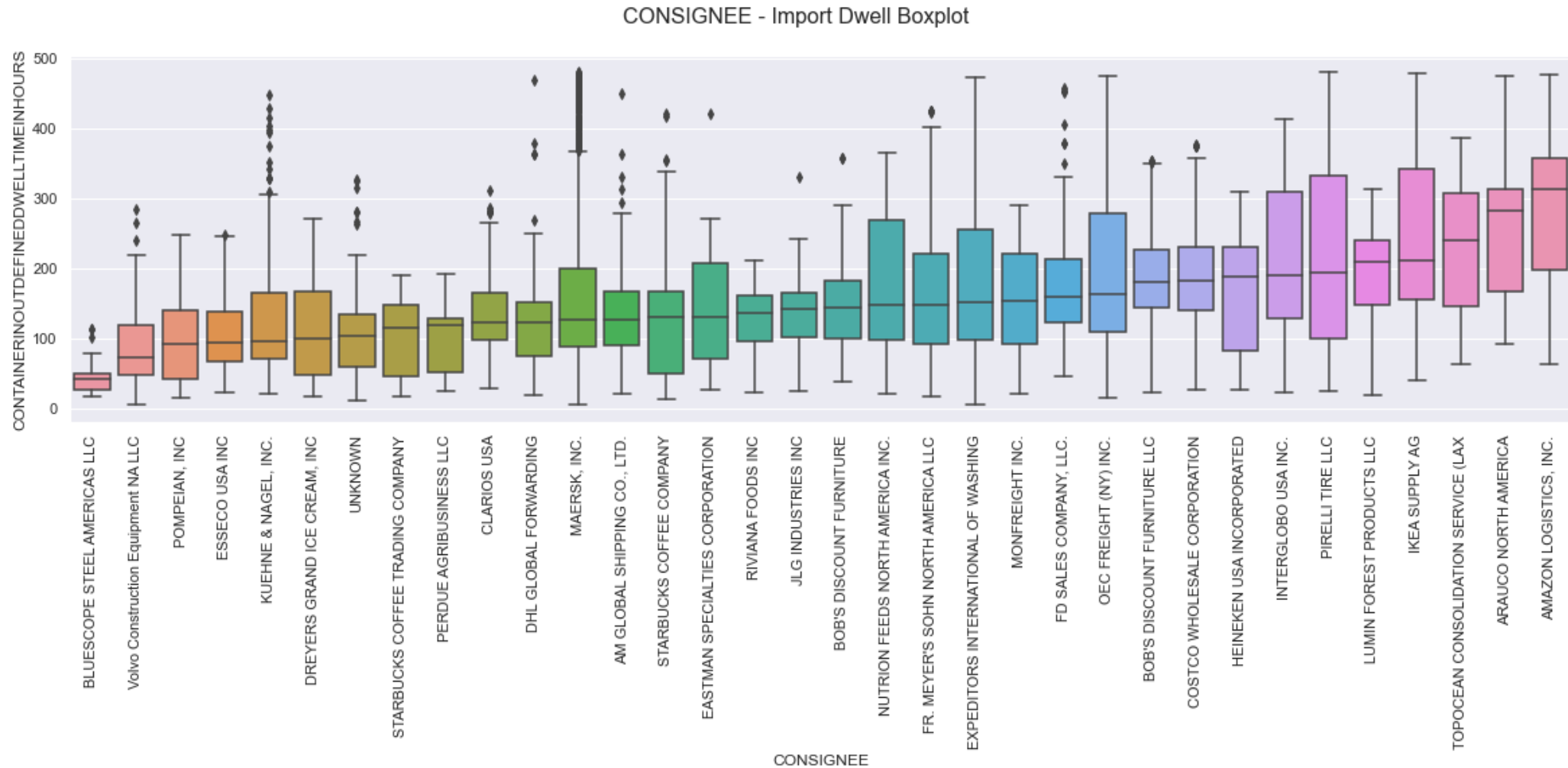
Random Deliverers



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Container Flow – Dwell Information



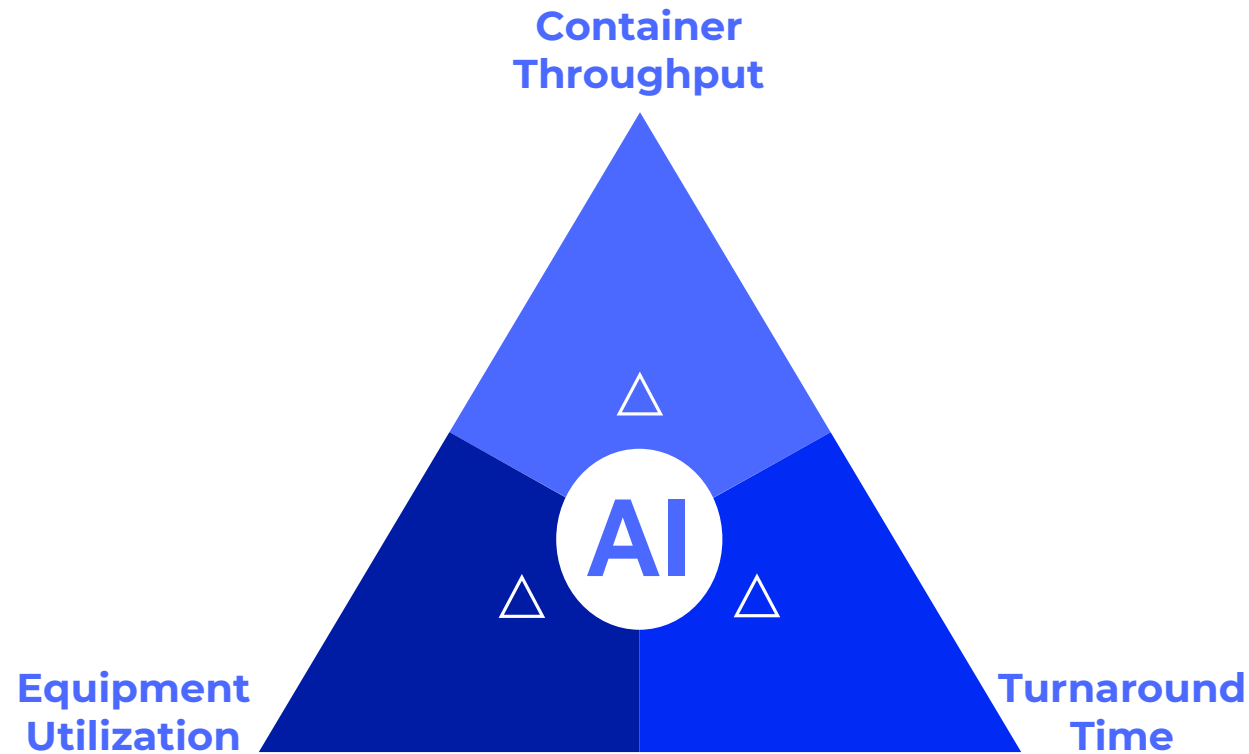
Solving the Paradox with AICON

Before

- **Business KPIs were static**
- **Software and operational logic drove business outcomes**

Now

- ✓ **Business KPIs are dynamic**
- ✓ **Business objectives drive the operational logic**



THANK YOU

Contact us

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