

# Powering Progress: Constant Innovation in Terminal Operations



**See Jean Lau**  
VP Sales & GM (APAC)  
Hong Kong  
**Kaleris**



# TOS Industry Challenges: Container Cargo

1

## Capacity & Congestion

**RISK:**

Decreased Productivity

2

## Customs Compliance

**RISK:**

Penalties, Fines, and Sanctions

3

## Automation

**RISK:**

Workforce transition and resistance

4

## Berthing

**RISK:**

Increased Dwell Time

5

## Supply Chain Visibility

**RISK:**

Lack of Traceability and Visibility

6

## Market Dynamics

**RISK:**

Geopolitical Risks



# Terminal Challenges and Needs

## Terminal Innovation and Digitization

1

### Infrastructure Strain and Capacity Constraints

Increasing volumes with limited additional capacity opportunities

International Association of Ports and Harbors, 2023

2

### Labor Shortages and Automation Transition

Finding and retaining the right talent operations for increasingly complex, data-intensive roles on the intersection of digital and manual operations

World Economic Forum, 2022

3

### Environmental Regulations

Push towards decarbonization and sustainability

International Maritime Organization, 2023

4

### Cybersecurity Threats

Increased frequency and sophistication of cyberattacks targeting ports

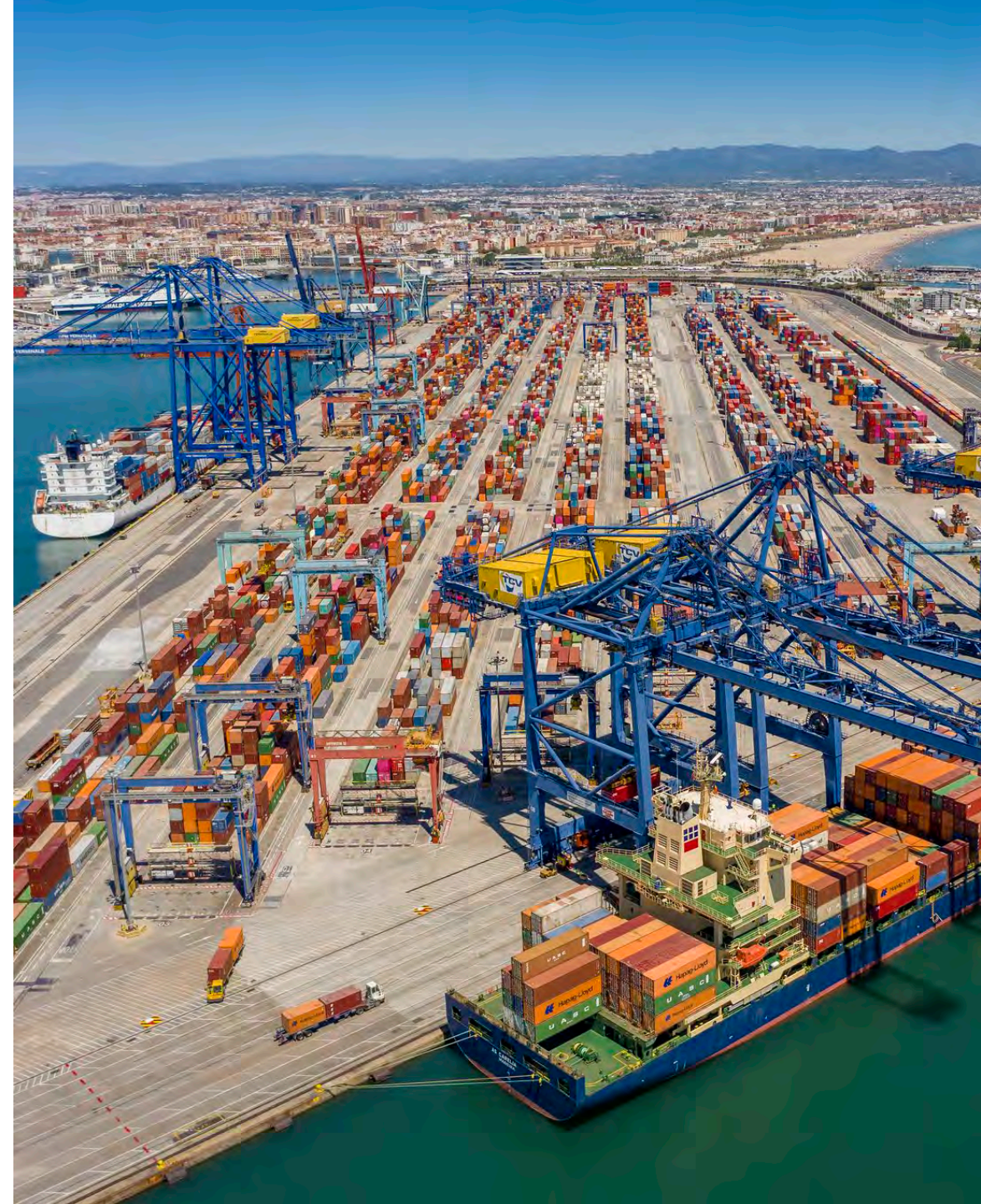
World Bank, 2023

5

### Supply Chain Disruptions

Delays due to and increased pressure to maintain efficiency amid unpredictable global supply chain disruptions

Deloitte Insights, 2023





# Transforming Terminal Operations Through Constant Innovation

Intelligent, robust  
software

Expert Services

Data-driven insights

AI & Automation  
driven

*Not just a software provider, but your **trusted partner** in operational success*

# Kaleris TOS- Built for every type of terminal



**Modern SaaS TOS (Octopi)** for every type of cargo

**N4 TOS** designed for container terminals with some general cargo

**GC TOS** specifically designed for general/mixed cargo terminals

**Operations across all nodes and modes of a terminal landscape – complete operational lifecycle coverage!**

## Typical Terminal Profile

Simple and small container or mixed-cargo terminals looking for a turn-key solution that eliminates paper and minimizes infrastructure costs including IT

## Typical Terminal Profile

**Large to mega-sized** complex container terminals looking to optimize and maybe automate their container operations

## Typical Terminal Profile

**Medium to large terminals** with a mixture of bulk, break-bulk, RoRo and containers.

**550+** terminals | **350+** fortune 1000 shippers | **85+** countries



# Innovation at the core- our optimization journey



our advanced optimization focus in container terminals

Equipment Optimization (side loading cranes) using **RTG Optimization**

Horizontal Transport Optimization using **Terminal Truck Optimization (TT-O)**

Much more to come this year and the next!



**Faster truck turnaround**

**Increase:**

- Number of transactions
- Laden travel
- Vessel productivity
- Berth utilization



**Reduce**

- Rehandles
- Yard & QC crane waiting time
- Idle time
- Assignment time
- Unproductive moves
- Truck waiting time
- Unladen travel
- Fuel consumption
- Cycle time



# Connectivity. Interoperability. Visibility – Powered by EVP

## Execution & Visibility Platform (EVP)



Right data. Right time. Right decisions.

# Our Formula for Terminal Success

PRODUCT



PEOPLE



SERVICES



TECHNOLOGY

Helping you **Scale, Optimize, and Lead**





Where are you in your operational journey?



How often do you innovate?

Let's shape the future of terminal operations - together!



THANK YOU!

[SeeJean.Lau@kaleris.com](mailto:SeeJean.Lau@kaleris.com)



      
**EVERY MOVE MATTERS™**

[Kaleris.com](https://www.kaleris.com)



# Work and Task Optimization (Work Orders)

## What It Is

- Enhanced **Work Orders** is designed to bring all aspects of terminal activity into a single, cohesive workflow, improve efficiency, visibility and, optimize gangs across projected workloads
- Provides a more detailed view of operations and progress of gang operations
- Also provides tracking, planning and execution of tasks from start to finish under one “work order umbrella” enhancing operational efficiency and transparency

## What It Does

- Integrates with Labor Management to import gang information and track labor hours and activities
- Provides operational workflow management by managing tasks for gangs with real time tracking and monitoring.
- Improves visibility and flexibility managing all terminal tasks including voyage activity, road and rail and, value-added services (extra activities performed beyond just cargo handling).
- Work and task load can be split between shifts and gangs

## Value

- ✓ **Task Organization:** Clearly defines tasks, assigned resources, and deadlines.
- ✓ **Efficiency:** Automates scheduling and prioritization, reducing delays.
- ✓ **Accountability:** Tracks who is responsible for each task and monitors progress.
- ✓ **Resource Allocation:** Optimizes equipment and workforce usage.
- ✓ **Compliance & Safety:** Ensures adherence to regulations and operational guidelines.
- ✓ **Real-Time Tracking:** Provides live updates on task status and completion.
- ✓ **Data-Driven Decisions:** Stores historical data for performance analysis and optimization.
- ✓ **Financial Integration:** Invoicing and charging activity can be automatically generated with zero loss calculations