How Camco Facilitates Smart Port Developments in ASEAN

20 March,2024

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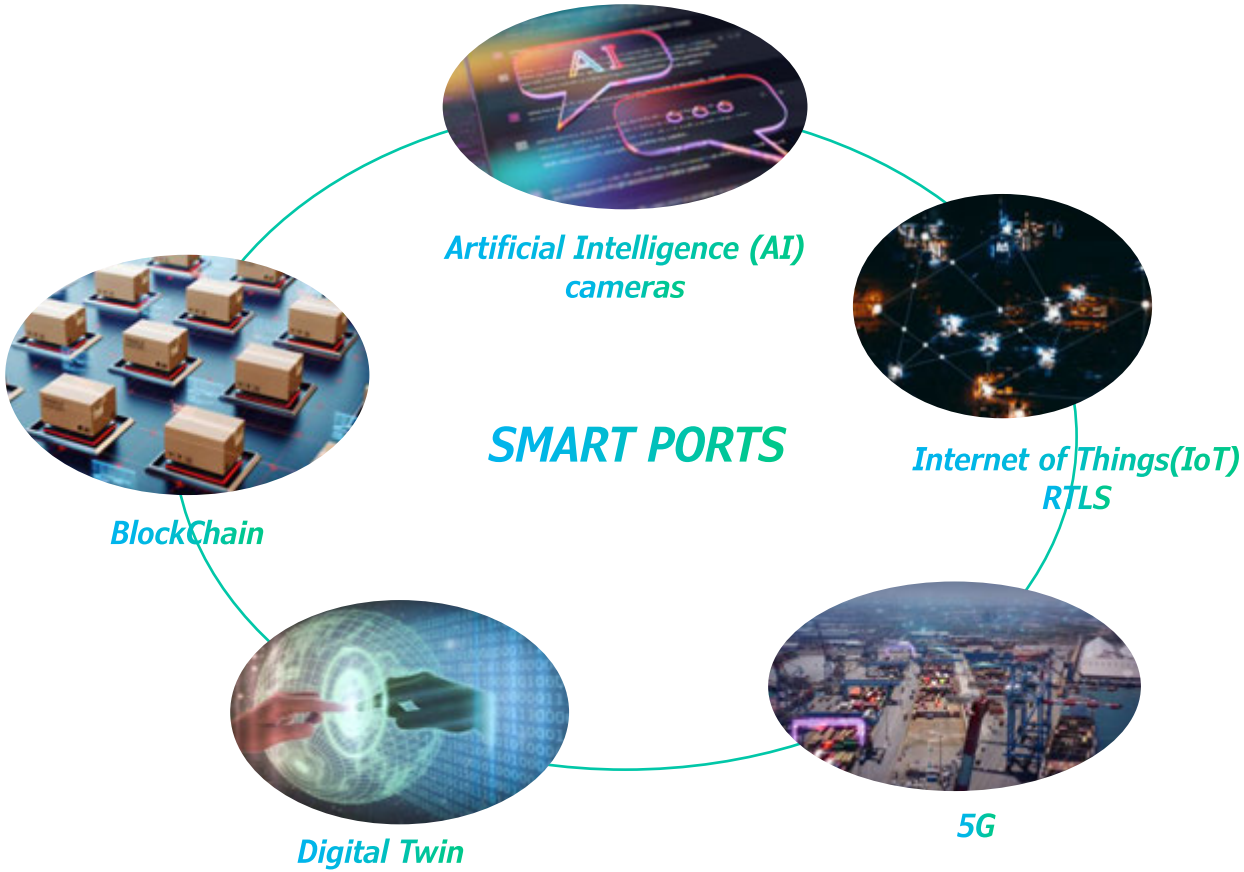
Outlines

- *SMART PORTS*
- *How Camco Helps Achieving "SMART PORTS"*

SMART PORTS

A smart port is a modern and technologically advanced port that leverages innovative technologies and data-driven solutions to enhance its operational efficiency, safety, and sustainability.

5 Key Elements for the Smart Ports:



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Why SMART PORT ?

Gate

Quay

Yard

Rail

Automation Software

Enhancing productivity and maximizing efficiency

Automated checking reduces truck, train and vessel turnaround time. Faster and more accurate checking means better use of the infrastructure, leading to shorter visits increasing throughput and capacity.

Removing human mistakes and frauds

Providing man less access control at perimeters and validation of asset ID to eliminate the human element so common in theft, pilferage and other criminal activities.

Increase operational control

Providing real-time visibility of an asset and its location to enable process automation and control.

Increasing safety

Ensuring the safety of personnel and equipment, typically within a facility environment.

Reduce costs

By digitalization and automation of the operation process, one can save on operational costs. Some experts project operational cost savings up to 55% with automation.

Enhance Sustainability

Offset Carbon emissions > 10% or more

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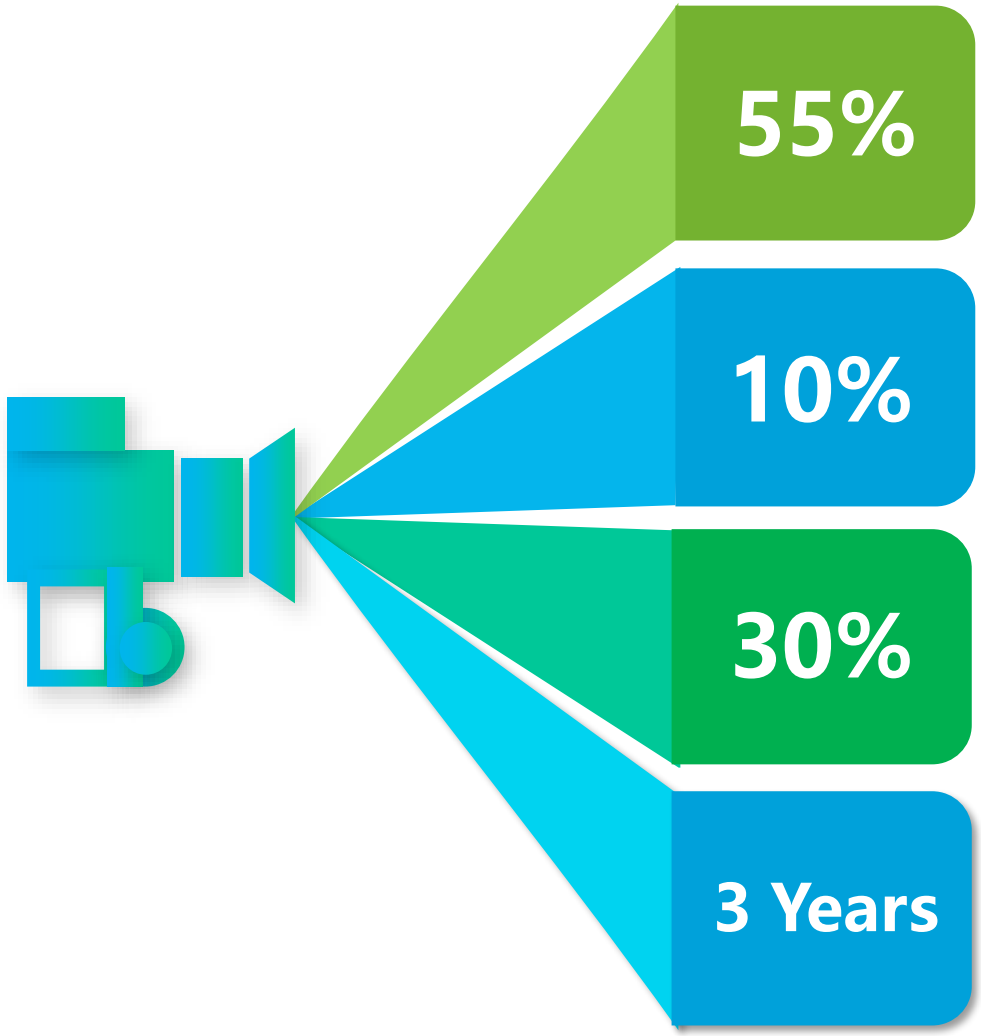
Why SMART PORT ?

Investing in Automation



Operational cost saving

Some customers said that their operational cost saving up to 55% after the terminal upgraded with automation.

Carbon emissions

"The automated terminal not only increases the port's handling efficiency, but also reduces carbon emissions by up to 10 per cent," said Chen Wuyuan, president of Shanghai International Port Group.

Productivity

Some terminals tell the productivity increased round 30% after they upgraded their terminals with automation.

ROI

By increasing the productivity , eliminating the human mistakes and accidents, reducing the cost ,normally the terminals can get back their investment in automation in 3 years more or less.

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Who is Camco?

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Who is Camco?

An Innovator

Smart Port Coach

A Belgian Engineering Company

Automation Consultant

An industry Standard

A Full-time Service Provider

NO.1 Port Automation Provider

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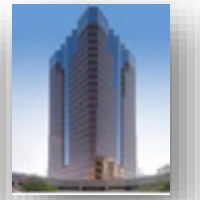
About Camco

CAMCO Headquarters in Belgium

CAMCO China Office



CAMCO USA Office

CAMCO UAE Office

CAMCO Australia Office

25 Years
The longest history

CAMCO established in 1999, with 286 employees becomes the biggest company in terminal automation. CAMCO is the most stable technology company guarantee to provide long term services for her supplied systems.

300+
Biggest Project Reference

More than **300** container terminals worldwide installed Camco automation systems, it makes Camco the global leader in our industry with the richest experience and knowledge for all types of projects. And same time all the new technology developed by CAMCO are proved.

5 M&S teams
The Efficient Service

With five M&S teams located in Belgium, Abu Dhabi, Shanghai, Los Angels and Australia, CAMCO provides the 24/7 full time efficient maintenance service globally.

Innovation Focus

With a 30 engineers R&D team, CAMCO never stopped innovation, it guarantees the customers of CAMCO have always the most advanced technology in the industry.

Design and produce own hardware
In-house engineered Solutions

Camco designs, develops and implements its own technologies. Unlike sales organizations or system integrators, we keep total control over our hardware and software, and support a long-term product strategy.

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Project References

60
Countries

300+
Project Reference

Project References

Camco Customers

60 Countries

300+ Project Reference

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What Camco Does?

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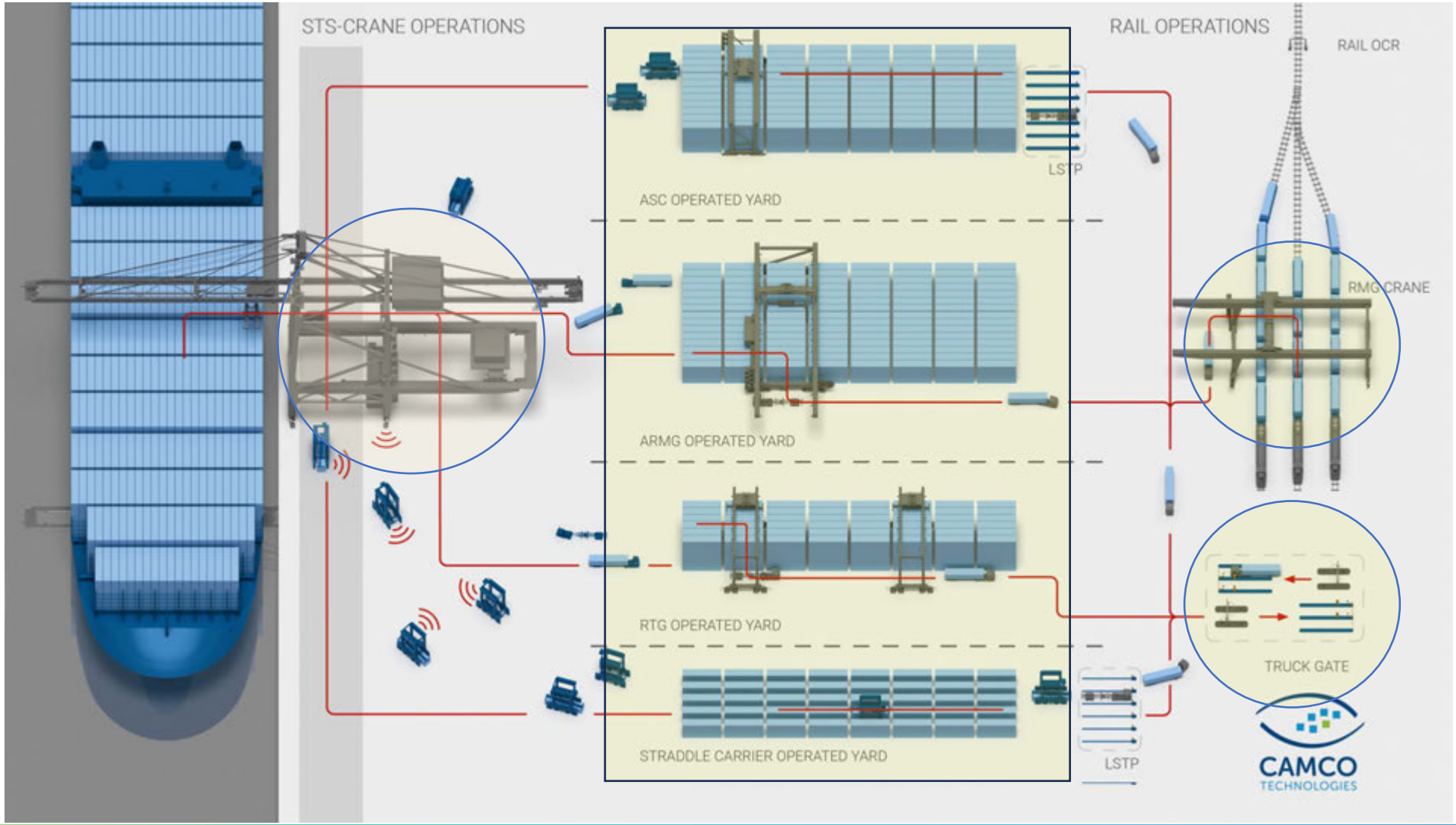
Automate Container Hand-over Processes

"Through the automation of the container hand-over process, Camco empower terminal operators to increase performance and improve safety while reducing operating costs."



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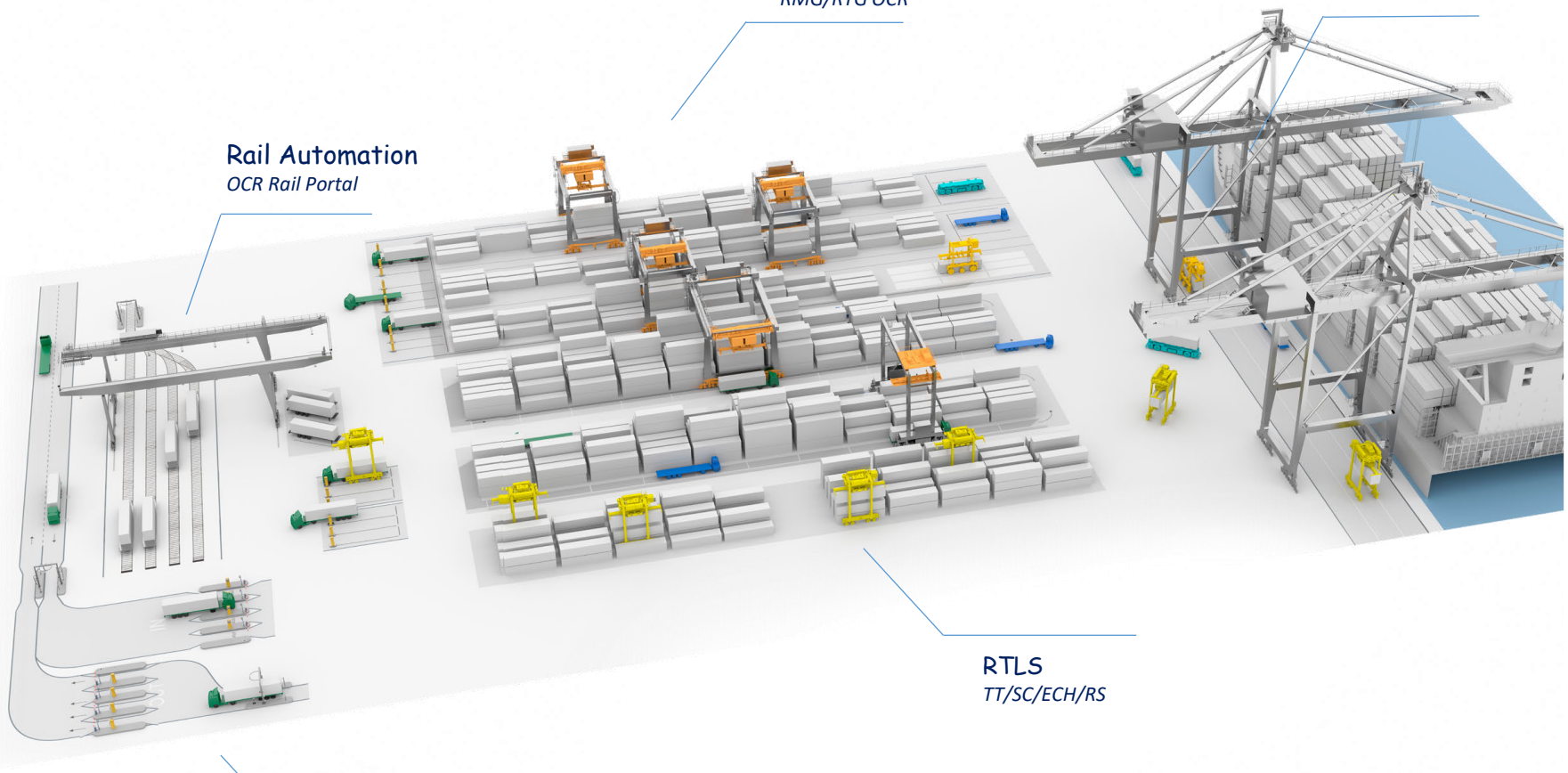
CAMCO Solutions



Yard Automation
Crane OCR Camera
RMG/RTG OCR

Quay Automation
OCR-Boxcatcher
STS Crane

Rail Automation
OCR Rail Portal

RTLS
TT/SC/ECH/RS

Gate Automation
OCR portals + kiosks

Gate Automation
OCR portals + kiosks

Quay Automation
STS OCR-Boxcatcher

Yard Automation
RMG/RTG OCR

RTLS
TT/SC/ECH/RS

Rail Automation
OCR Rail portals

THEBRIDGE Management by Intelligence X RT DIGITAL TWIN Management by Intelligence

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Camco RTLS
Precision carrier alignment
UWB technology

How to Start the Smart Transformation?

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How to Start the Smart Transformation?

CONTACT CAMCO

Anytime Anywhere

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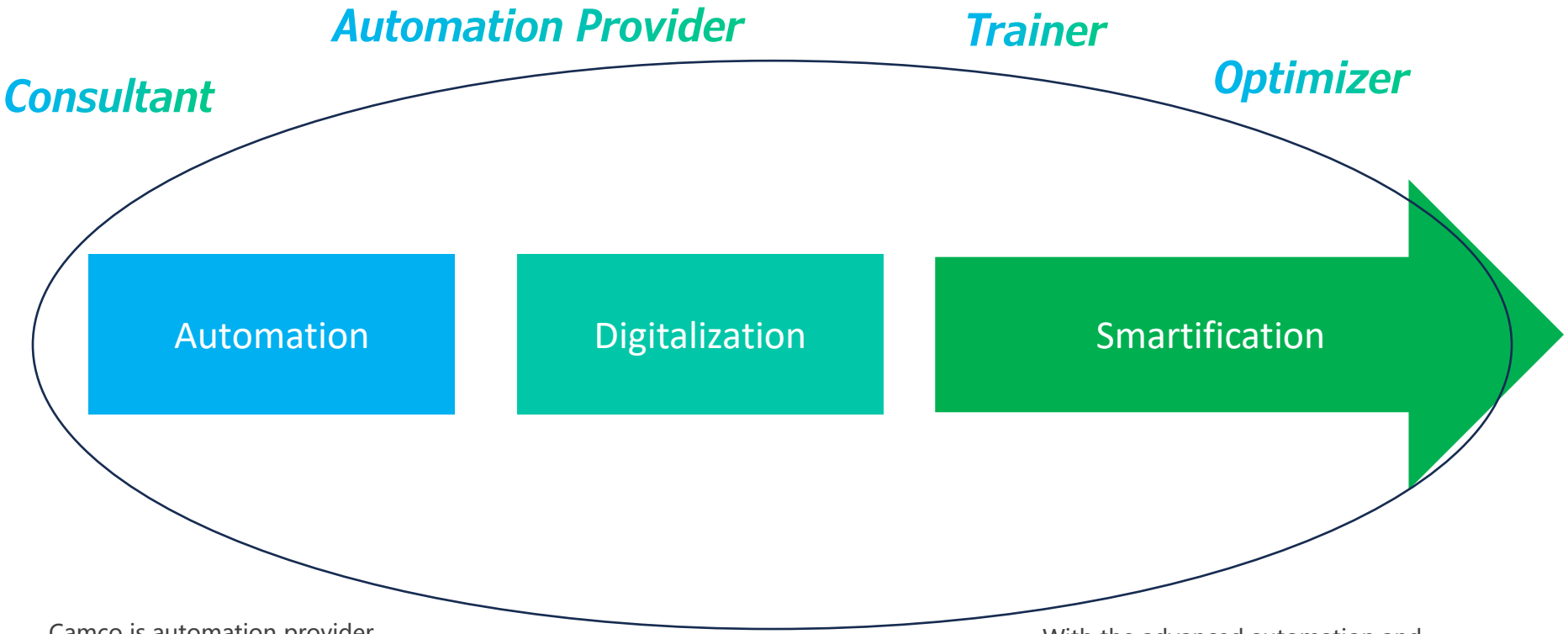
How to Start the Smart Transformation?



Camco is automation provider.
With 25 years experience , Camco could use the expertise to give consultancy for the ports and terminals for automation.
All automation solutions from Camco:

- Gate automation
- Quay automation
- Yard automation
- RTLS

Digitalization is the next step after automation in terminals.
Camco has developed two smart digital platforms :

- The Bridge
- RT Digital Twin

With the advanced automation and digitalization technologies adopted from Camco , With the training and talent development, With continuous monitoring and optimization, , Ports can gradually evolve into smart ports.

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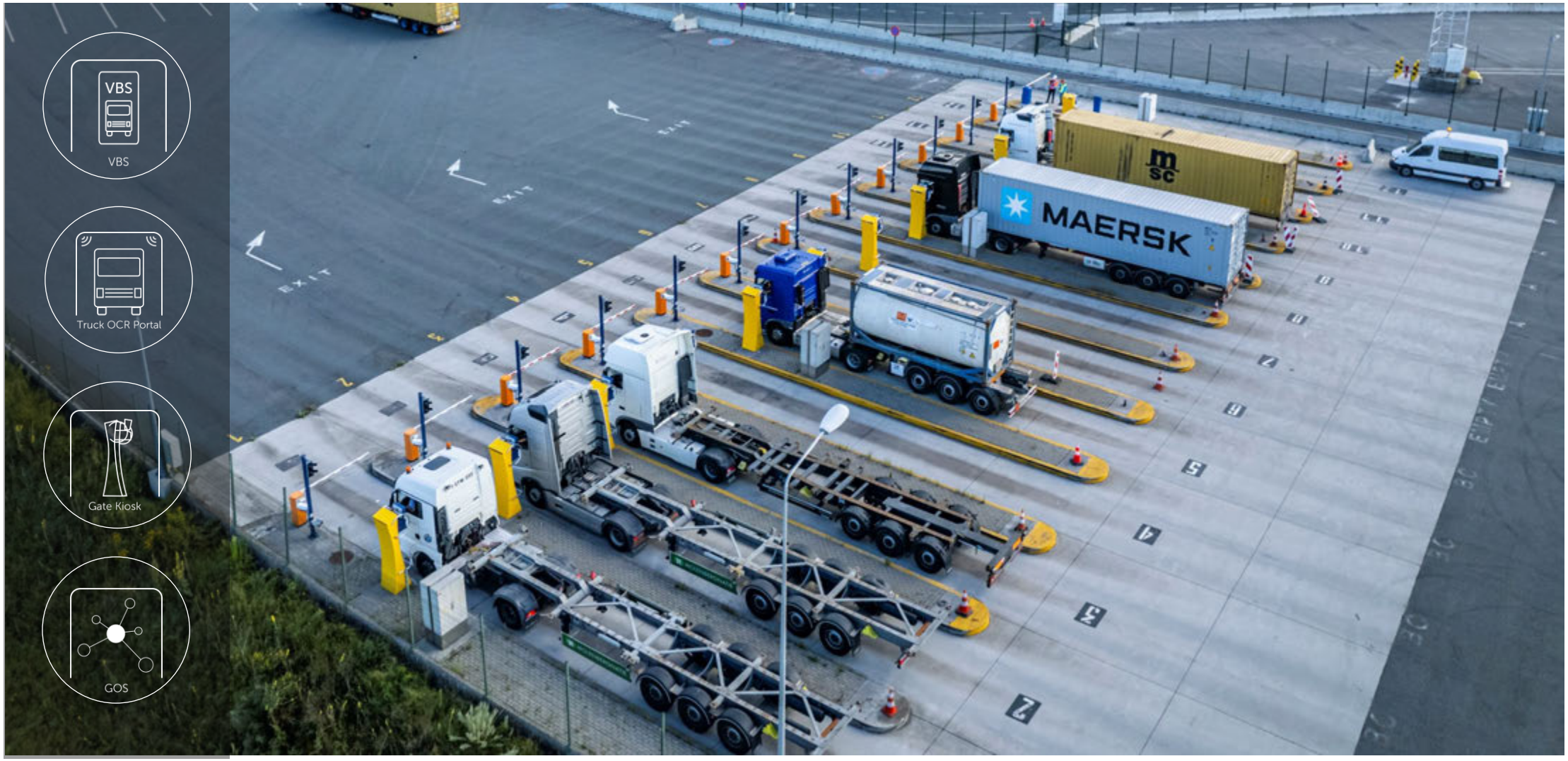
Camco Suggests to start with Gate Automation As your first Step



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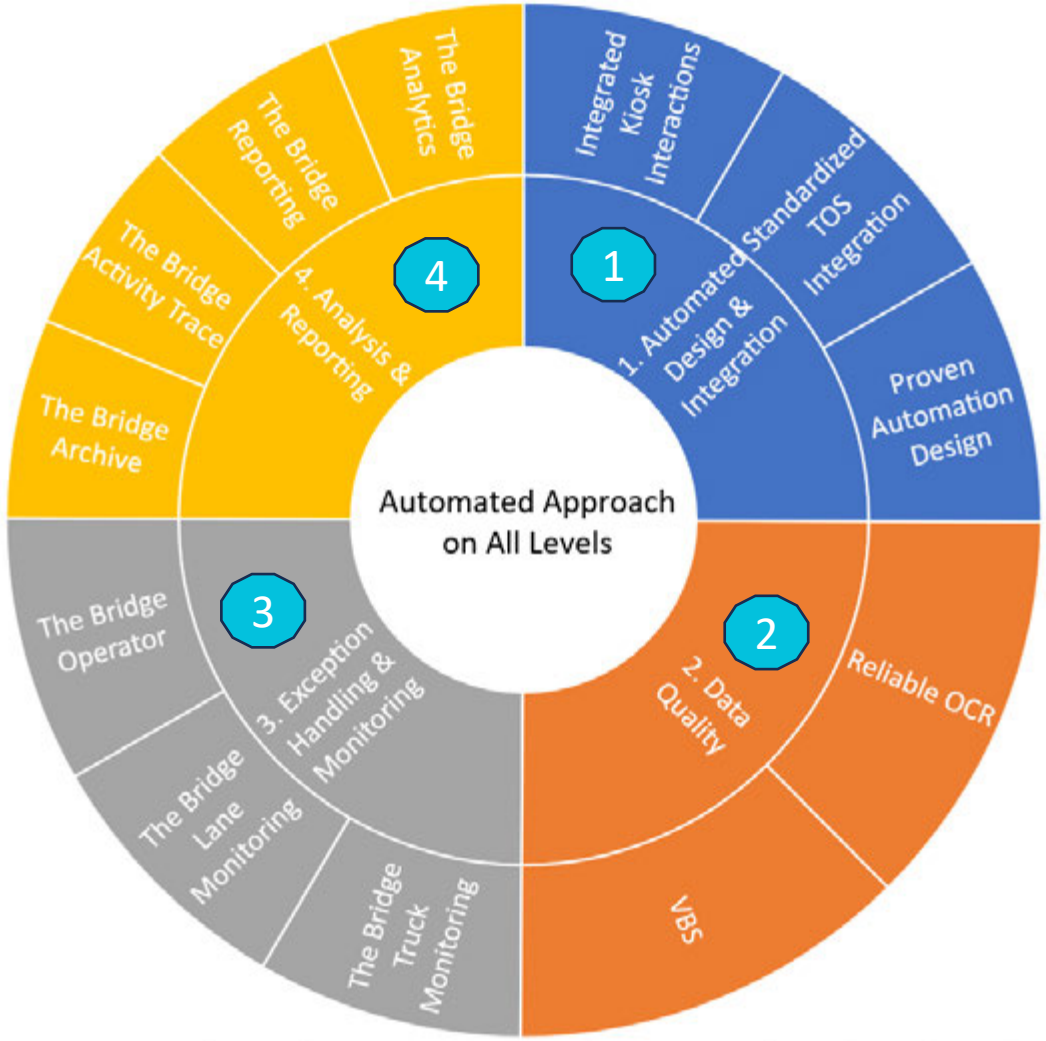
In 4 steps to a Structured approach of gate automation

Gate automation ≠ installing OCR cameras

1. Design: physical, business processes, KPI's
2. Maximize Data Quality: use OCR&VBS
3. Implement Exception handling & monitoring
4. Analysis & reporting



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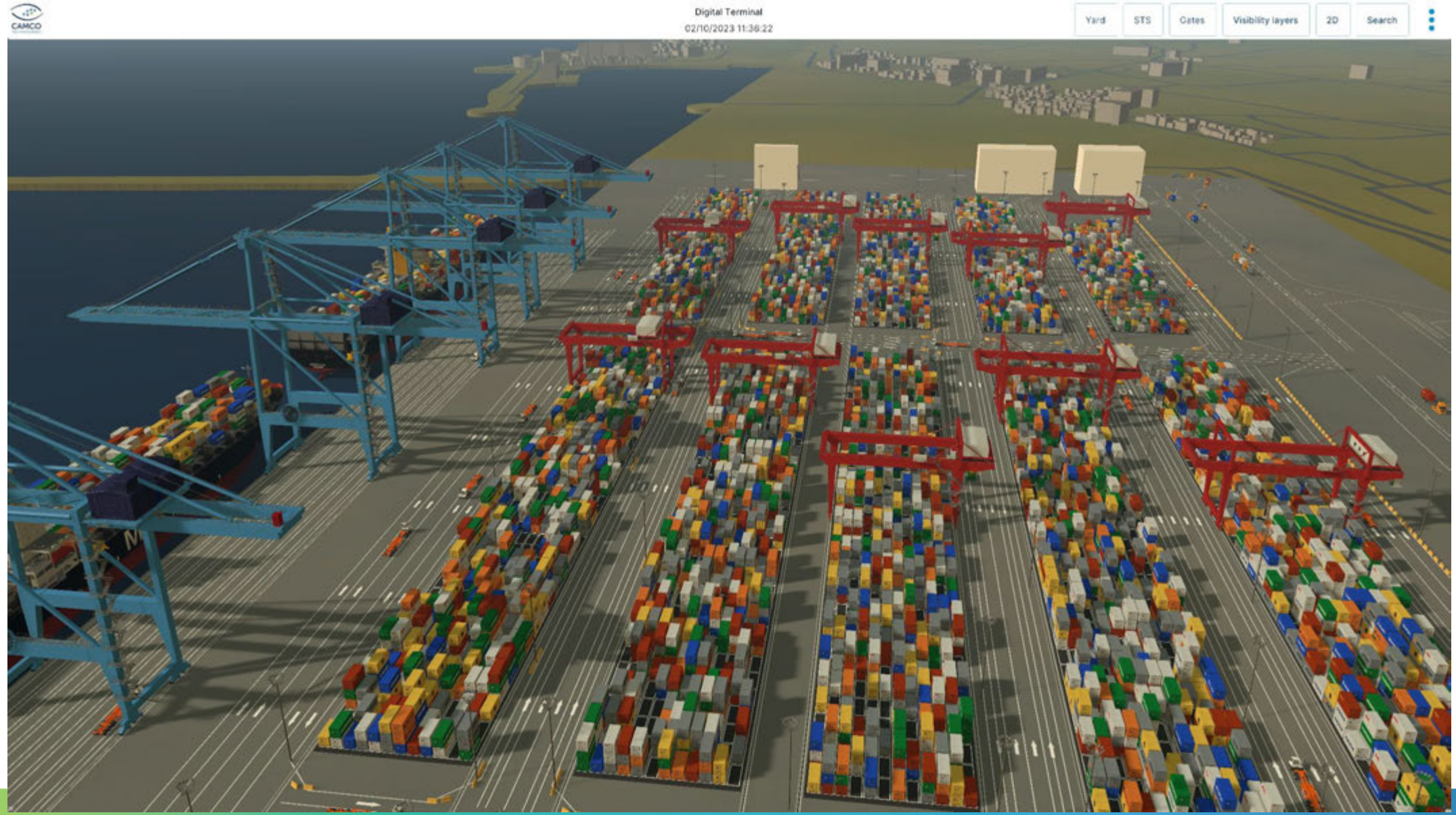
CAMCO
TECHNOLOGIES

BoxCatcher

Unparalleled STS crane OCR

RT Digital Twin



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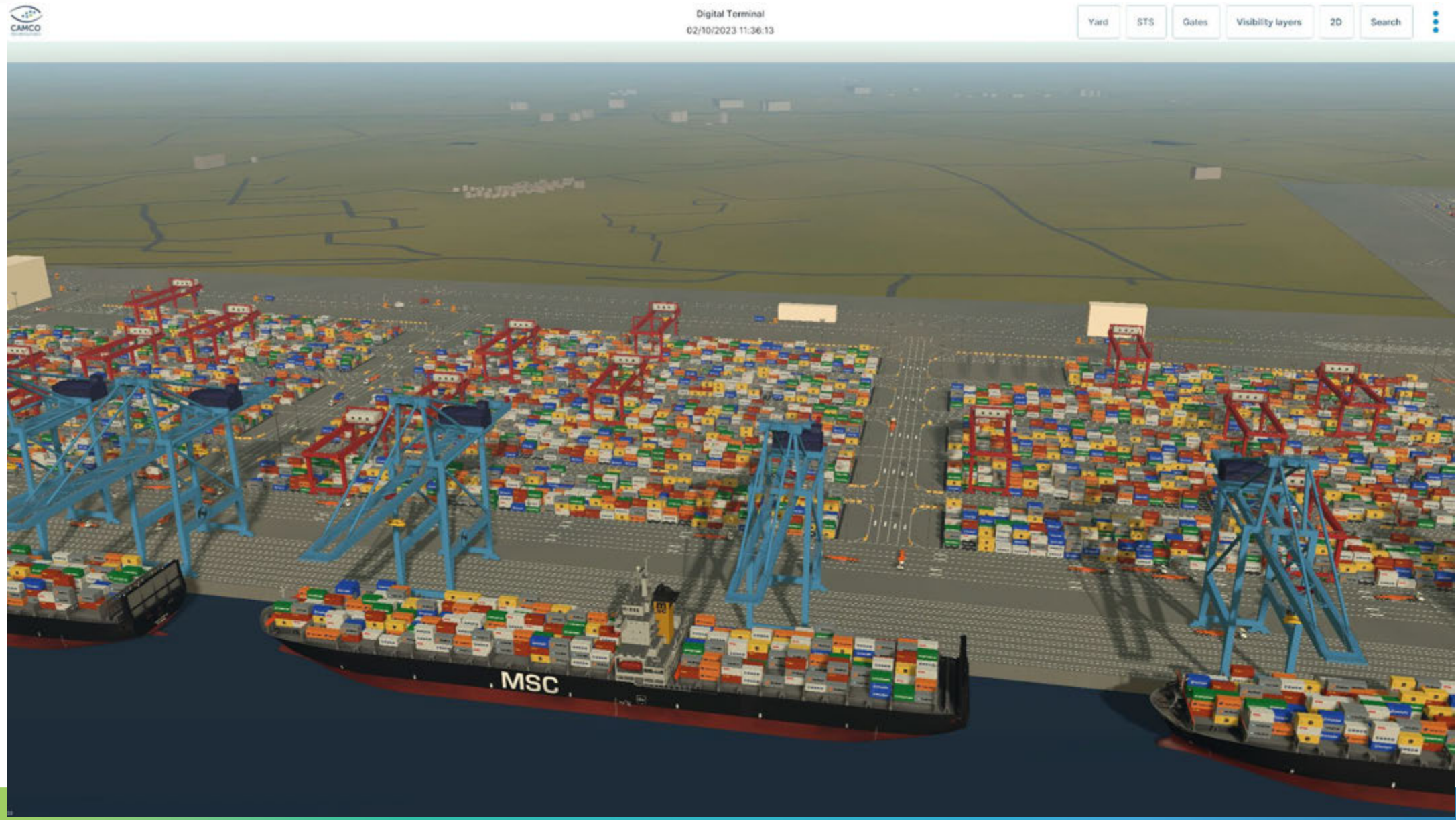
RT Digital Twin



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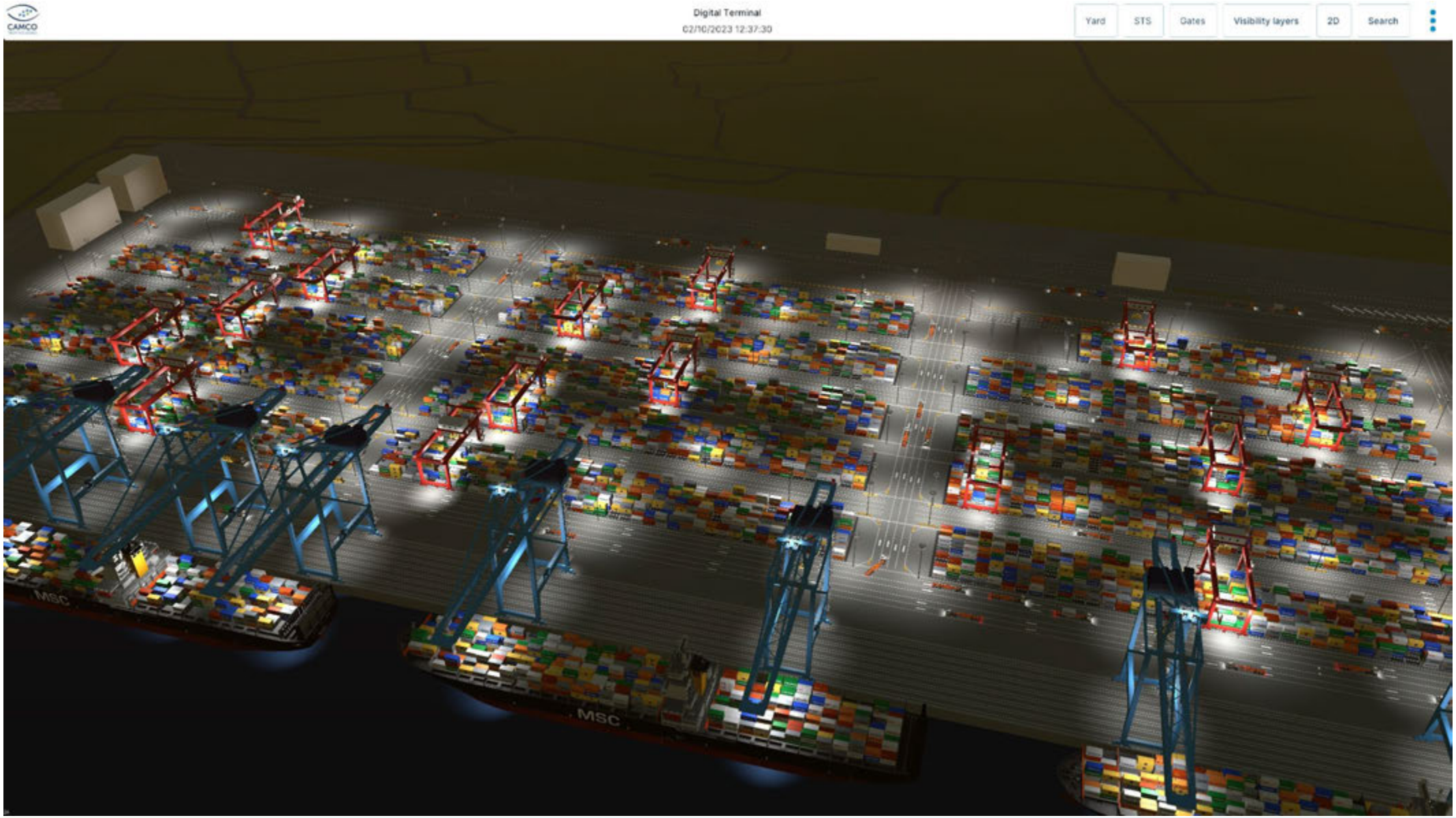
RT Digital Twin



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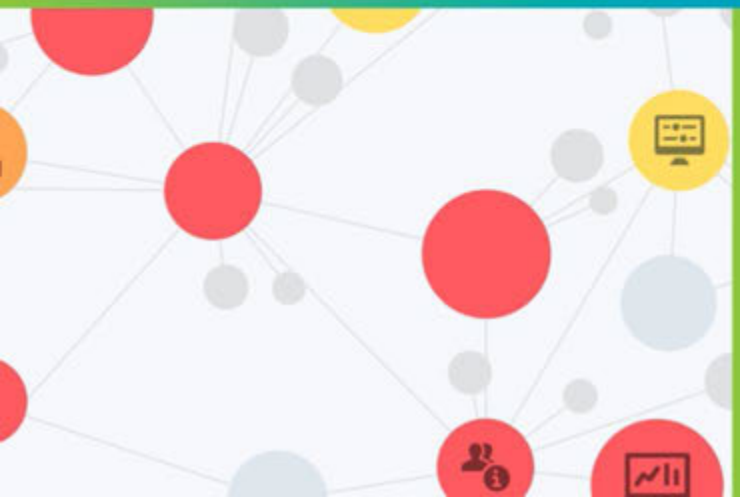
CAMCO
TECHNOLOGIES

THE EDGE

Empowering container terminals
through automation



Thank you!

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