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Stereotypes

Common opinions often heard:

- Automation is slow and doesn't pay off
- Automation is inefficient
- A terminal doesn't work without clerks and spotters on the ground
- Automation (and the jobs around them) is boring
- Automation takes our jobs away
- Its impossible to automate big data (I keep my excel sheet)
- Saving energy is to complicated and doesn't pay off

Challenges

We face challenges in Container Terminals:

- How to guarantee consistency in operation while maintaining a high level of productivity?
- How to create a safe working environment?
- How to create attractive workspaces for a diversified audience of employees?
- How to deal with the fear of change?
- How to make the most of the available data?
- How to fulfill green initiative targets and reduce the environmental footprint?

Consistency in Operation



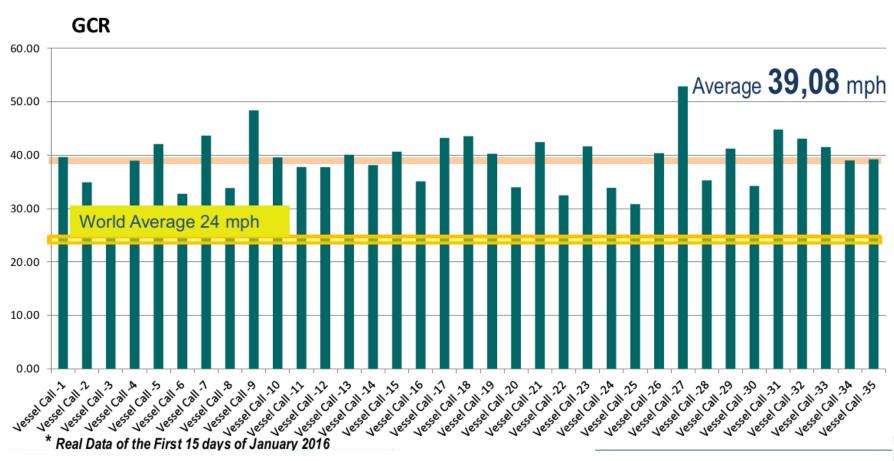
VS.



Consistency in Operation

Our Performance, Your Reliable Planning





Data courtesy of HPH BEST at PEMA conference BCN 2016

Safe Working Environment

Most common accidents and injuries in manual operated terminals:

- Slip, Trip, and Fall Accidents
- Struck by Moving Vehicles
- Struck by Objects
- Fall from Heights
- Neck and back fatigue issues (CHE operators)



Safe Working Environment

TABLE 1: 2009 INJURIES BY CATEGORY, AND POTENTIAL FOR REDUCTION VIA AUTOMATION

		Estimated Injury Reduction (%) with:	
	2009 Injuries	Column (a) ASC+Shuttles	Column (b) ASC+AGV
Tractor driver	298	50	100
Lasher	214	0	0
Mechanic	216	25	25
Holdman	124	0	0
Dockman	88	0	0
Foreman	77	50	67
Clerk supervisor	53	50	67
Gantry crane driver	35	50	50

Data courtesy of Port Technology International 2009

Attractive Workspaces

How to create attractive workspaces for a diversified audience of employees?

- It becomes more challenging to find motivated young people to work in a port environment.
- We have the obligation to create equal employment opportunities.



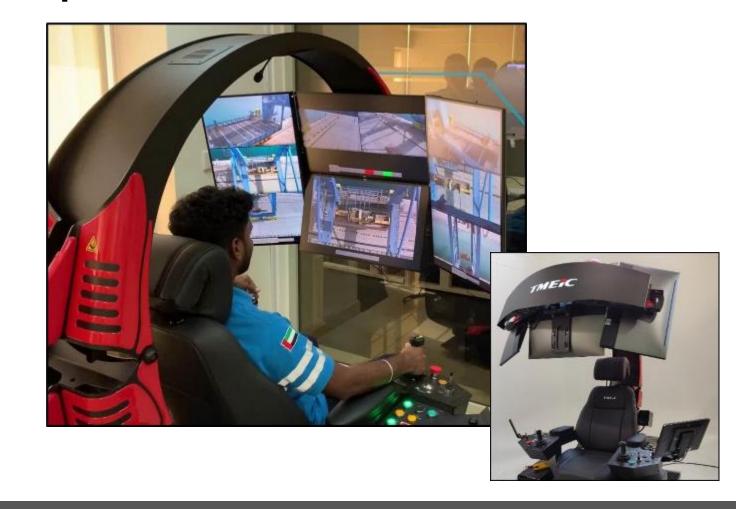
Attractive Workspaces

How to create attractive workspaces for a diversified audience

of employees?

 Workplaces must be easily accessible for everybody.

- Work must be fun.
- Work must be physically easy but positively challenging.



Fear of Change



Enter a search term





Ports & Terminals

Cargo Handling Equipment

Shipping & Logistics

ICT Auto

Automation

Multimodal

Container Industry

Refrig

Can the ILA stop the clock on automation? **EXCLUSIVE**

News 7 Oct 2024 by Paul Avery

The Union's demand that there will be no further full or semi-automation at east and gulf coast terminals would prevent these terminals integrating with the emerging digital supply chain.

Fear of Change



STATE OF FREIGHT

U.S. ports start 100-day countdown clock to new strike, and automation is poised to be the dealbreaker

PUBLISHED FRI, OCT 4 2024-3:51 PM EDT | UPDATED FRI, OCT 4 2024-6:39 PM EDT





Fear of Change

Report: Port Helps Drive Economic Investment and Job Creation Throughout the Commonwealth

BACK TO NEWS

More than 565,000 jobs and \$41B in compensation attributable to port activity

May 23, 2023

NORFOLK, VA –The Port of Virginia® continues to be an expanding economic force in the Commonwealth's economy by helping to create hundreds of thousands of jobs and billions in sales, income, taxes and fees, says a recently published study.

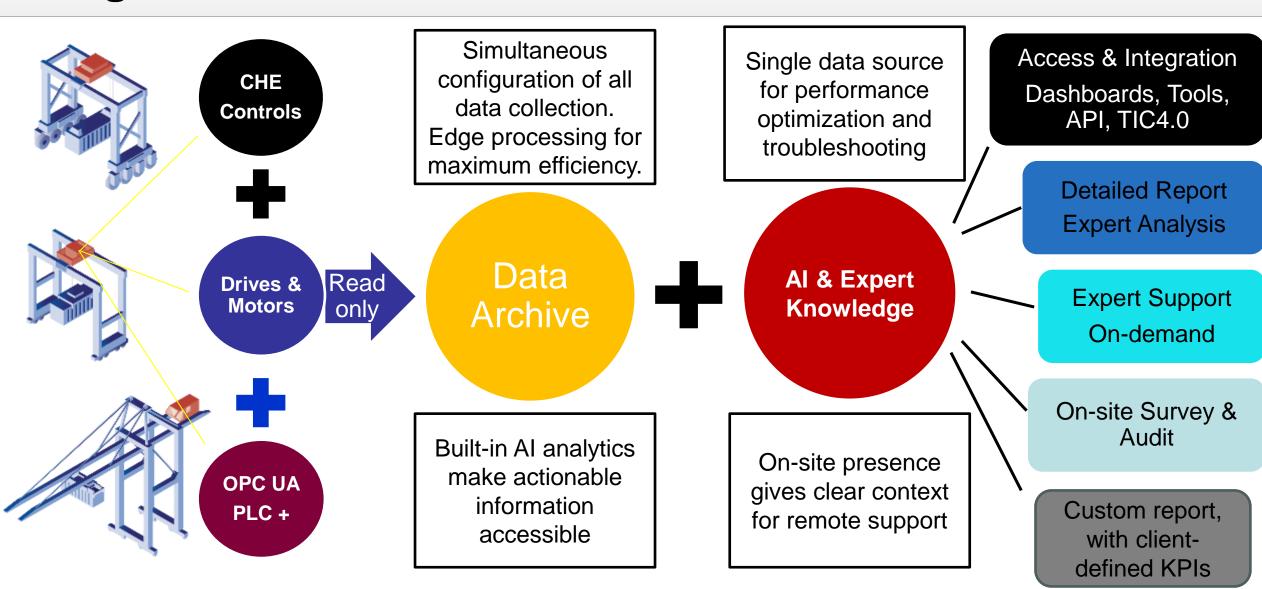
The study was conducted by The College of William & Mary and analyzes the overall value of the port to the Virginia economy during fiscal year 2022 (FY22) and compares the findings with the port's economic impact in FY21. The fiscal year began July 1, 2021 and ended June 30, 2022.



How to make the most of the available data?

- Every Equipment produces masses of data…
- How to interface all the data?
- How to pick the right data?
- How to create trends that make sense?
- How to use Al for analytics?
- Not another Excel Sheet!!!





How to make the most of the available data?

The 1st and possibly most important step in the Bid Data journey:

Embrace a common data language. Talk TIC4.0!



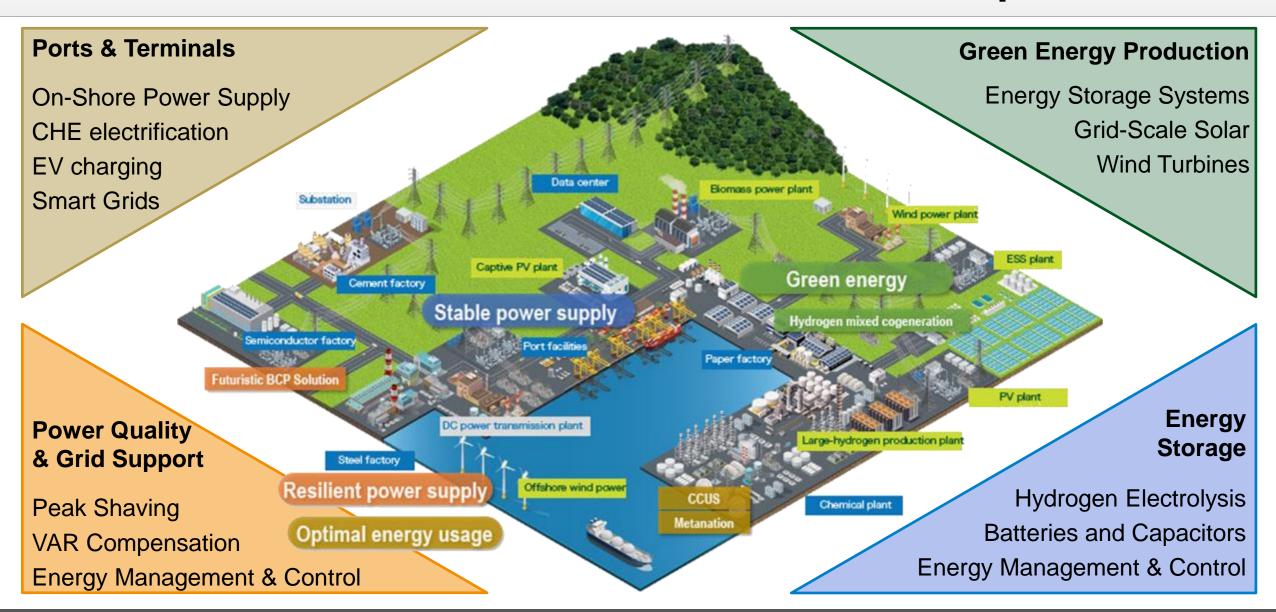
Green Initiatives / Reduce Environmental Footprint

How to fulfill green initiative targets and reduce the environmental footprint?

- How to charge all the EVs?
- How to manage peak loads?
- How to integrate renewable energies?
- How to manage OPS / Shore Power?
- How to store electric energy and make it available when needed?
- How to cope with power outages or grid fluctuation?



Green Initiatives / Reduce Environmental Footprint





Let's make this world a better place togehter!