Future Ports, Decarbonisation & Green Logistics

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ABOUT THE CARIBBEAN SHIPPING ASSOCIATION

• Founded in 1970
• Objectives
  – Exchange views on areas of common interest
  – Produce reports on industry practices and port development
• Main groups:
  – National shipping associations
  – Shipping agencies and brokers
  – Port authorities/operators and container terminals
  – Shipping lines, cruise lines and bunkering companies
  – Non-vessel operating common carriers and ocean transport intermediaries
  – Dock yards, towage, salvage and hydro operators, insurance, maritime education institutes
• 4 different languages represented
1. Untamed economy – impending collapse
2. Mega-efficiency in megacities
3. Customized lifestyles
4. Paralyzing protectionism
5. Global resilience – local adaptation

MTCC Caribbean's 2nd Southern Sub-Regional Workshop – T&T
Port 4.0 will be powered by artificial intelligence, optimization through advanced analytics, and dynamic scheduling.

**Real-time berth planning**
Berthing slots and labor can be better used by forecasting ships’ arrival times more accurately, resulting in up to 8 percentage points of EBITDA potential for terminals.

**Predictive maintenance for key assets**
Predictive and remote crane and vehicle maintenance can lead to a 30–50% reduction of total machine downtime, increasing the availability of critical port assets, such as STS and RTG cranes.

**Automated yard planning**
Advanced analytics and modeling make it possible to swap assets, reroute containers dynamically, and adjust routing and speed in real time.

**Demand planning at gate**
More accurate predictions of consumer and production behavior can help terminals better estimate demand for gate arrivals.

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1Earnings before interest, taxes, depreciation, and amortization.
2Ship to shore.
3Rubber-tired gantry.
Container shipping: The next 50 years
Two Key Imperatives: Digital Customer Experience And Digital Operational Excellence

March 2014 “The Future Of Business Is Digital”

Digital customer experience
- Digitize end-to-end customer experience.
- Digitize products and services as part of the value ecosystem.
- Create trusted machines.

Digital operational excellence
- Source enhanced operational capabilities within a dynamic ecosystem.
- Drive rapid customer-centric innovation.
- Digitize for agility over efficiency.
Container shipping: The next 50 years

The view from 2067
A smart, customer-focused container industry

1. Invest in digital
2. Think consolidation
3. Integrate
4. Be bold
HUMAN INPUT OF EVERY TRANSACTION
THANK YOU