Data Sharing as a lever to a sustainable port of the future.

AAPA
April 3 2019
Agenda

Intro: What’s cooking in the supply chain?

Data Sharing within the Port Community and with intermodal operators is key for a sustainable growth and the supply chain transparency.

How to approach this as a Port Authority?

Testimonials:
• Port Houston
• GE Transportation Port Optimizer
• Port of Antwerp
Agenda

➢ What are the key messages from the supply chain ecosystem?

➢ What response do we see from the supply chain players?
  ▪ Start-up’s, BCO’s and Freight forwarders
  ▪ Response from Carriers
  ▪ Initiatives by Port Authorities/Port Community Systems

➢ Main reasons why the Port Authorities/Port Community Systems can play a key role in the digitalization of the cross border supply chain

➢ Port Testimonials

➢ Q&A
What are the key messages from the supply chain ecosystem?

**BCO driven:**

- BCO’s are pushing for Data-driven landside logistics optimization, visibility and transparency.
- The Maritime transparency is abundantly available but..
- The landside transparency is too often a pebble in the shoes of the BCO’s and their freight forwarders.
- Operational and Cost efficiency gains in the supply chain: avoiding errors by sharing data and documents digitally and by eliminating re-keying data.

**Operational focus at the Ports**

- Growing cargo volumes put pressure on the port operations and intermodal fluidity.
- The larger container vessels calling on the Port unloading X times more containers.
- The data sharing should result in:
  - operational efficiency gains, improving fluidity and intermodal connections at the Port.
  - Supporting the Intermodal shifts from truck to rail and/or barge: less truck, more rail and/or barges.
- In other words, how to increase the fluidity and efficiencies at the Port?
What response do we see from the supply chain players?

Many announcements being made with respect to merging data sources from the entire ecosystem to produce an international visibility picture and provide end-to-end transparency for the BCO’s.

- **Many start-ups** in this field. Cfr RILA, TPM, WPC..
  - Project44 “Introducing Ocean Visibility: Track North American-bound container shipments as they travel across the ocean, as they arrive in port, and are discharged from vessels to be moved onto rail or trucks.”
  - Clear Metal: predictive analytics
  - Cargo Smart.AI
  - FourKites
  - Infor Gt/Nexus and many more

- **BCO’s** implementing their own solutions or working with cloud-based global supply chain management platforms like Infor/Gt Nexus, XPO Logistics, Kuebix,..

- **Large Freight forwarders** investing heavily in this domain: Kuehne + Nagel & DB Schenker taking the lead
  - Flexport got 1 Billion, yes 1 Billion from Softbank, to become the new breed of freight forwarder focusing on international visibility in the supply chain
“TRADELENS is an open, neutral platform underpinned by Blockchain technology, supported by IBM AND MAERSK.”
The platform enables a more efficient, predictable and secure exchange of information fostering greater collaboration and trust across the global supply chain.

- Some US ports and terminal operators are linked to Tradelens.
  
  Case study: Port Houston

- Each participant is connected individually to the global network versus the Port Community systems approach.

Global Shipping Business Network (GSBN), include ocean carriers CMA CGM, Cosco, Evergreen Marine, OOCL and Yang Ming, as well as terminal operators DP World, Hutchison Ports, PSA International and Shanghai International Port. Powered by Cargosmart.

Global Carrier consortium to discuss standardization
Initiatives by Port Authorities/Port Community Systems

IPCSA, the International Port Community Systems Association
https://www.ipcsa.international/

IPCSA Members 2019

EUROPEAN UNION

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Initiatives by Port Authorities/Port Community Systems

- European and Asian Port Authorities take the lead in digitalization
  - Antwerp, Rotterdam, Singapore, Shanghai,..
- Port of LA and GE Transportation joined forces: **first operational data sharing project**.
  Solution: Port Optimizer: case study by GE Transportation.
- Port Houston connected to Tradelens: case study Port Houston.
Main reasons why the Port Authorities/Port Community Systems are key in the digitalization of the supply chain

➢ Too many silo projects based on different APIs and standards. Too much integration effort and cost for individual companies who participate in for example the Tradelens project.

➢ Sharing data requires trust and a governing entity within the Port eco system. Trust between the data providers within the local Port ecosystem is better manageable because of the personal relation and in many cases because of the existing commercial relation.

➢ The Port Supply Chain operators, local customs agencies and the intermodal service providers generate 70% of the data.

➢ Ports are the ideal environment to setup harmonized data sharing and creating the Port’s datahub for
  ➢ terminal optimization, efficiency gains and intermodal connectivity improvements and landside transparency.
  ➢ the Port Community System can be linked to other international PCS to achieve international end-to-end transparencies.

➢ Monetization of the data-lab data at the Port is an option for new revenue.
Port Testimonials

Mr. John Moseley
Chief Commercial Officer
Port Houston

Brian Hill
Program Manager
GE Transportation

Filip Vandenbussche
Business Development North America
Port of Antwerp
Port of Antwerp’s NxtPort Project

The future of our Port is digital and connected globally.

Our goal is to Optimize capacity, intermodal connections and modal shift: more barges, rail and less trucks.

2 years ago we embarked on a challenging task: the data sharing project within the Port’s supply chain ecosystem.

How did we project it to the Port Community?

NxtPort 2 years ago
And now, 2 years later

Magazine American Shipper: “NxtPort could be seen as the new digital breed of a port community system, unifying data exchange through standard APIs”
Transatlantic Data Sharing between major USA Ports and Port of Antwerp

Our Vision: **End-to End Visibility in a Network of Trusted Networks**

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**# CARGO TYPES**

- Containers
- RoRo
- Breakbulk
- Liquid Bulk
- Dry Bulk

**# ACTORS**

- Shippers / Consignee (Industry/Retail)
- Deep sea Carrier / Shipping Agent
  - Terminal
  - Forwarder
- Logistics operator
- Barge operator
- Rail operator
- Trucking company
- Authorities / Customs
Case study by Port Houston: Mr. John Moseley

John Moseley joined the Port Houston in 2010, successfully leading the port’s sales efforts as Senior Director of Trade Development.

• He was named Chief Commercial Officer in June 2018.
• Mr. Moseley started his career in international supply chain and logistics in 1987 and has held expanding roles in the U.S. and overseas with ocean carriers, international freight forwarders, customs house brokers and beneficial cargo owners.
• Prior to joining the Port, his most recent position was with CMA CGM.
• Mr. Moseley earned a bachelor’s degree in international business administration from California State University at Los Angeles and an MBA from the University of Massachusetts at Amherst, Isenberg School of Management.
• In his position, he is responsible for Port Houston’s real estate, trade development, economic development, marketing/external communications and media relations departments and the administration of Harris County’s Foreign Trade Zone.
• Mr. Moseley actively serves in leadership positions of the Retail Industry Leaders Association, American Institute for International Steel and the Greater Houston Partnership and is a member of the Society of Industrial and Office Realtors, NAIOP – Commercial Real Estate Development Association and the Industrial Asset Management Council.
Mr. Brian Hill, Program Manager GE Transportation, a Wabtec Company

Brian Hill joined GE Transportation as Program Manager for the Port Optimizer™ product being developed in conjunction with the Port of Los Angeles in November 2016. Overseeing the initial pilot program and the subsequent full rollout.

Prior to joining GE Transportation, Brian worked in the rail supply chain world as Customer Success Manager for Railinc, a subsidiary of the Class 1 Railroads, focusing on major commercial accounts.

Brian’s career has been primarily focused on technology with a strong focus on customer experience through his previous work with IBM and Nortel Networks in Research Triangle Park, NC.

Brian has a BS in Communications from East Carolina University and makes his home in Durham, NC.