



# Logistics Digitization

## **World Customs Organization**

Corporate member – Data Model Team

Chairperson - Focus Group on Dematerialization

## **United Nations CEFACT**

Member - United States delegation

Domain Expert: Supply Chain, Transit and Logistics, and E-Gov working groups

## **United States Customs & Border Protection - Trade Support Network**

Committee member - International Trade Data Standards Committee

Committee member - Entry Committee

## **Supply Chain and Logistics Group of the Middle East**

International Advisor – USA

Leader – Roundtable on Documentation Automation in Logistics

## **SMDG (ocean cargo electronic message standards group)**

Co-Chairperson – Web Services Working Group

## **International Association of Ports and Harbors**

Technical Committee Member - Trade Facilitation & Port Community Systems





**Why digitize ?**



**Exporters**



**Trade Finance Providers**



**Freight Forwarders**



**Port Operations**



**Ocean Cargo**



**Air Cargo**



**Intermodal Cargo**



**Customs Brokers**



**Importers**



# The typical global trade shipment:

- Constantly changing supply chain of **10 to 40 parties**
- Trade compliance and logistics operations:  
can involve **20 to 100 supporting documents**
- **140 compliance data elements**  
40-50 elements are re-entered multiple times into different systems  
10-20 elements have to be **re-entered over 20 times**
- **10%** of paper supporting documents are **LOST**
- Technology for many shippers and logistics providers:  
**paper records, fax machines, spreadsheets, and green screens**

# Driving needs for DIGITALIZATION

- **Extreme pressure to cut logistics spend**
  - Requires cost cutting through automation
- **Increasing scope and complexity of compliance regulations**
  - Requires improved data accuracy, completeness, and process governance
- **Complex IT interconnectivity environments**
  - Growing number of systems to interchange data with
  - Disparate and legacy nature of systems
  - Multinationals do not deal with one Single Window and one Smart Port
- **Increasing customer expectations**
  - Data availability and accuracy
  - Proactive customer service
  - Real-time, secure Web API access to data – bidirectional
  - SLA enforcement
- **Less experienced and smaller workforces**
  - requires less manual processes and less people

# Significant cost of logistics in retail supply chains:

Leaders :: 4% of REVENUE

Laggards :: 12% of REVENUE

**8% of REVENUE = STRATEGIC PROFIT IMPACT**

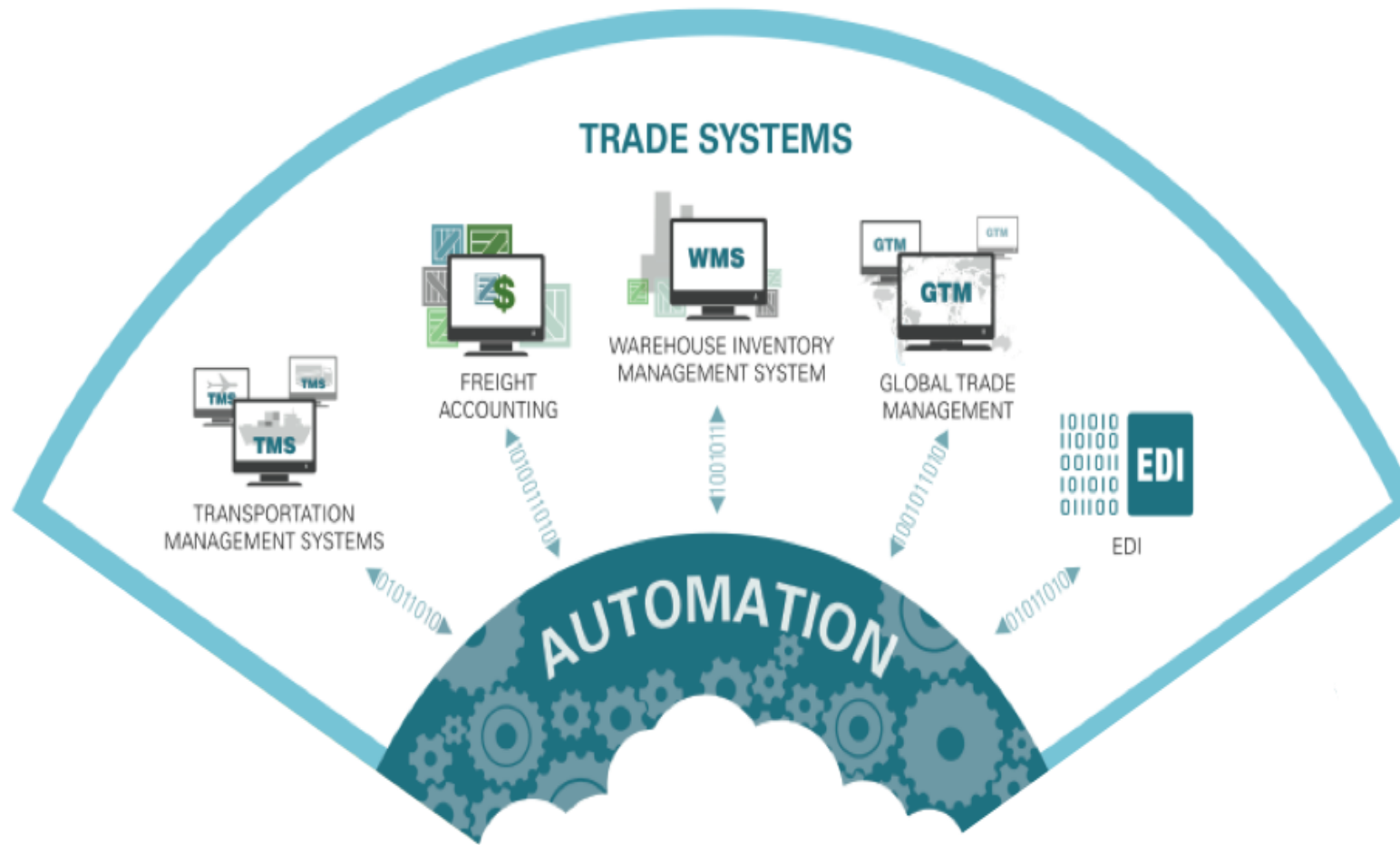
**Shippers – Retail Logistics**



**5 things  
to do  
to fully digitize.**



# 1



**Real-time connections between everything.  
Internal, external, customers, carriers, Customs**

# 1.5

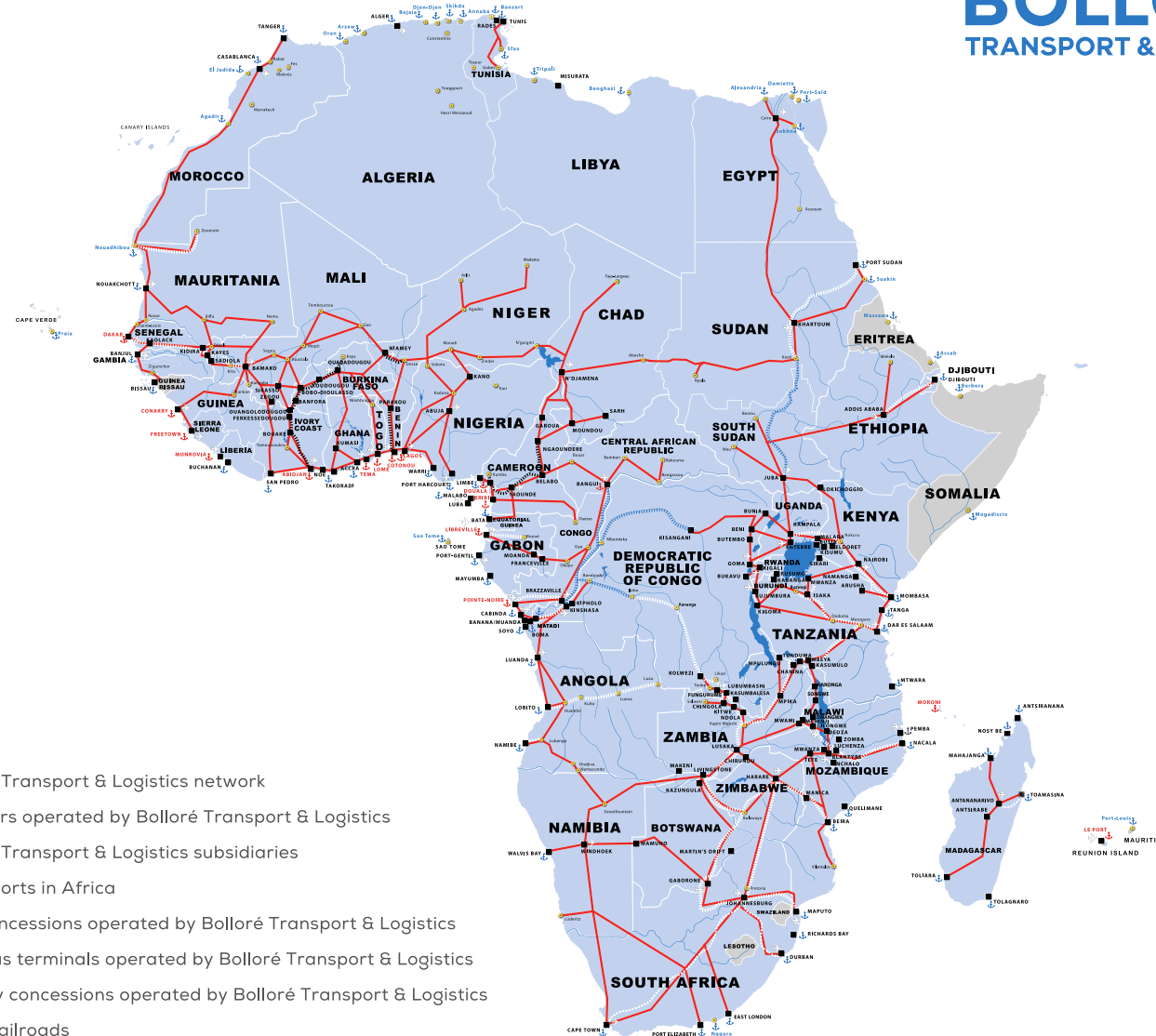












**Visibility across the entire logistics chain**

Constantly changing  
supply chains of:

10 to 40 parties

# THE LEADING PORT & LOGISTICS OPERATOR IN AFRICA



-  Bolloré Transport & Logistics network
-  Corridors operated by Bolloré Transport & Logistics
-  Bolloré Transport & Logistics subsidiaries
-  Major ports in Africa
-  Port concessions operated by Bolloré Transport & Logistics
-  Oil & gas terminals operated by Bolloré Transport & Logistics
-  Railway concessions operated by Bolloré Transport & Logistics
-  Other railroads
-  Waterways operated by Bolloré Transport & Logistics
-  Airport agencies operated by Bolloré Transport & Logistics

**Single Window**

**Smart Port**

# Single Window

x 100 countries = 100 single windows

# Smart Port

# Single Window

x 100 countries = 100 single windows

# Smart Port

x 80 ports = 80 smart ports

**2**

**Capture and  
Digitize  
Everything**



# Typical import record requirement:

## Importer MUST retain for 5 to 7 years for each import entry:

- Organizational **declarations to customs** authorities and other government agencies
- **Electronically generated or stored data**
- Time-stamped and submitter-ID'ed **transactional data submissions**
- **Supporting transactional documents**
- **Supporting correspondence** between cargo owners, carriers, ports, other freight intermediaries
- **Transactional event messages and time-stamped evidence**
- **Financial payment and accounting data/evidence**
- Relevant books and papers
- Evidence of staff credentials
- **Evidence of operational diligence** for compliance
- Bonding/guarantee/insurance evidence
- **Temperature/humidity control evidence** (food/pharma)

Legacy systems and  
data don't just go away.

# 3

Legacy systems and  
data don't just go away.

# 3

## Salvage your legacy systems and legacy data for today.

- Wrap legacy data in real-time, digitized, **Web Service APIs**
- Send legacy system event messages to **trigger transactional workflows** in a separate, modern BPM automation engine

**4** Improve the accuracy and completeness of your core operational data...

before worrying about predictive analytics and machine learning.

**5**

**Digitize, automate and fully control your core internal business processes...**

**before reading that next blockchain news release**



**BONUS**  
**Where can you  
start ???**

- **Digital Shipment Folders**  
(centralized, global folders for logistics and trade documents, compliance evidence, logistics data, import/trade records)
- **Operational process cost control – automation, connections, and governance**
- **Dashboards for customer visibility and customer service**
- **Dashboards for carriers and other service providers**
- **Freight Contract Management**
- **Freight Settlement – Audit and Payment**
- **Customer Freight Billing**
- **Vendor Contract Management**
- **Customs - Import Clearance & Compliance**
- **Customs - Export Filings and Compliance**
- **Customs - Electronic Recordkeeping**
- **No-code integrations to Trade/Logistics Systems: ERP, TMS, GTM, WMS, Port Community systems, and customs systems**  
- internal, customer, vendor, Customs, Ports
- **Trade Document Capture: Images, XML, EDI, INTTRA, more**
- **Trade Document Transfer**
- **Cargo Surety Bonds**
- **Cargo Insurance Policies**
- **Cargo Insurance Claims**
- **Trade Letters of Credit**
- **Trade Payments**
- **Trade Loans**
- **Fleet Management**
- **Asset Management**
- **Lease Management & Records**
- **Facilities maintenance Automation & Records**
- **RFID and GPS systems integration**
- **Procedures and Policies education/acknowledgement**
- **Customer Service processes**
- **Executive KPI Visibility Dashboards**

**LOGISTICS – Digitalization candidate processes.**



