TRADELENS-Intermodal Africa 2019

A BLOCKCHAIN ENABLED PLATFORM BUSINESS MODEL

DAVID OCHOLI Regional product manager, West central Asia & Africa

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An open and neutral blockchain-powered platform that is digitizing the global supply chain and transforming trade.

GLOBAL TRADE IN NUMBERS



\$16+ TRILLION IN GOODS

ARE SHIPPED ACROSS INTERNATIONAL BORDERS EACH YEAR.



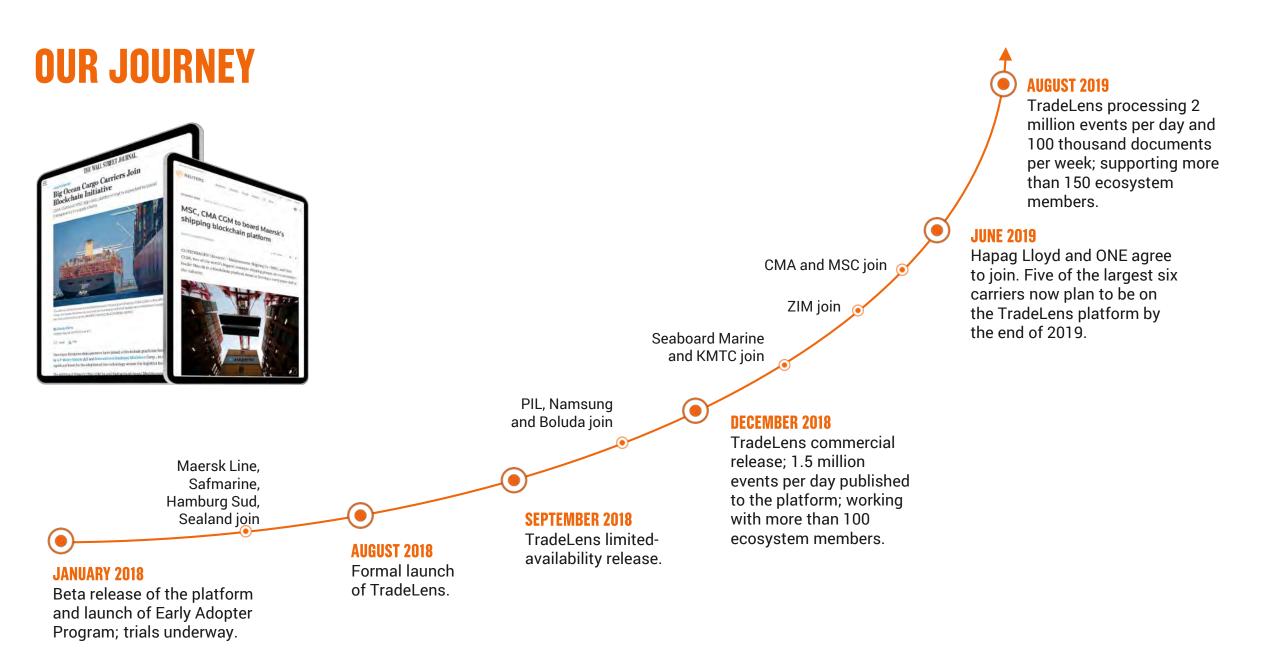
80% OF THE GOODS

CONSUMERS USE DAILY ARE CARRIED BY THE OCEAN SHIPPING INDUSTRY.





BY REDUCING BARRIERS WITHIN THE INTERNATIONAL SUPPLY CHAIN.



WHERE WE ARE TODAY



DATA ON 60% OF GLOBAL CONTAINER SHIPPING VOLUME

ESTIMATE BY Q1 2020



17 OCEAN CARRIER MEMBERS



160+ NETWORK MEMBERS SPREAD ACROSS ALL 6 CONTINENTS



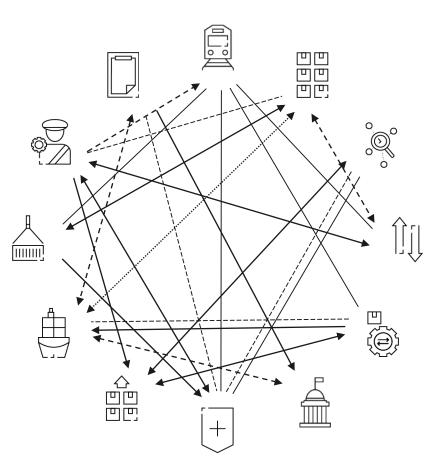
700M EVENTS PER YEAR



5.5M DOCUMENTS PER YEAR

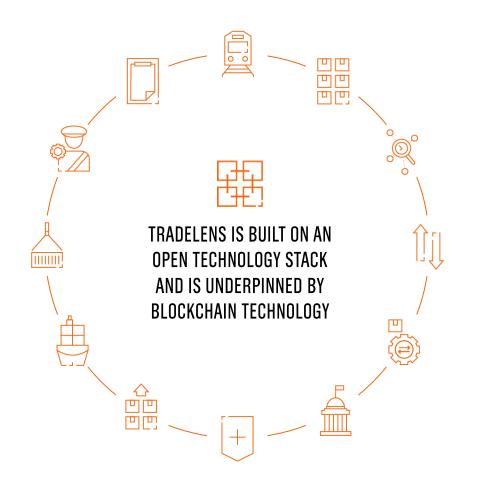
GLOBAL TRADE IS HIGHLY INEFFICIENT AND BURDENED BY PAPER-BASED PROCESSES

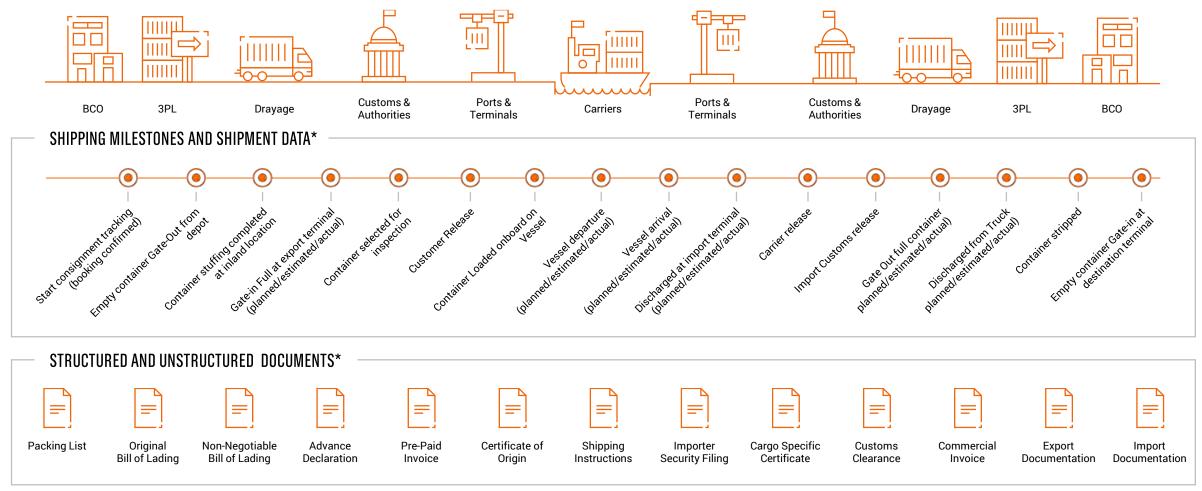
- + Data trapped in organizational silos
- + Manual, time-consuming, paper-based processes
- + Processes often subject to fraud and error
- + High costs and poor customer service

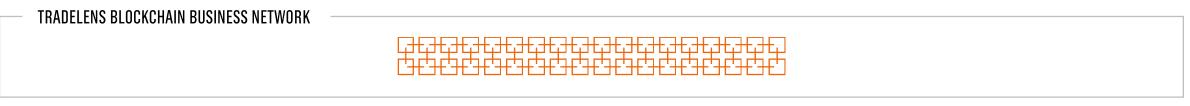


OUR MISSION DIGITIZE THE GLOBAL SUPPLY CHAIN

- + Connect the ecosystem
- + Drive true information sharing
- + Foster collaboration and trust
- + Spur innovation

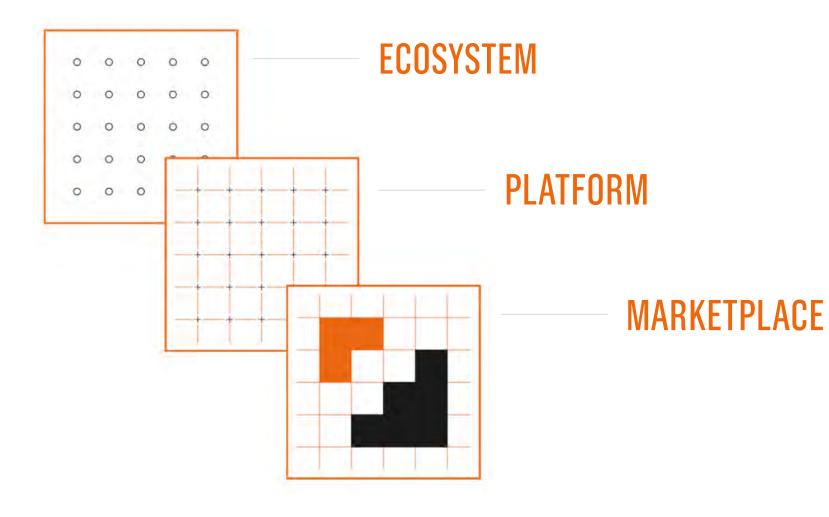






* Note: representative sample only of the data on the platform

THE TRADELENS SOLUTION





TradeLens uses the permissioned IBM Blockchain Platform to guarantee immutability and provenance of shipping documents and support inter-organisational workflows

HOW THE TRADELENS BLOCKCHAIN CONNECTS THE ECOSYSTEM:



TAMPER-PROOF RECORDING AND NON-REPUDIATION



VERIFIABILITY OF DATA

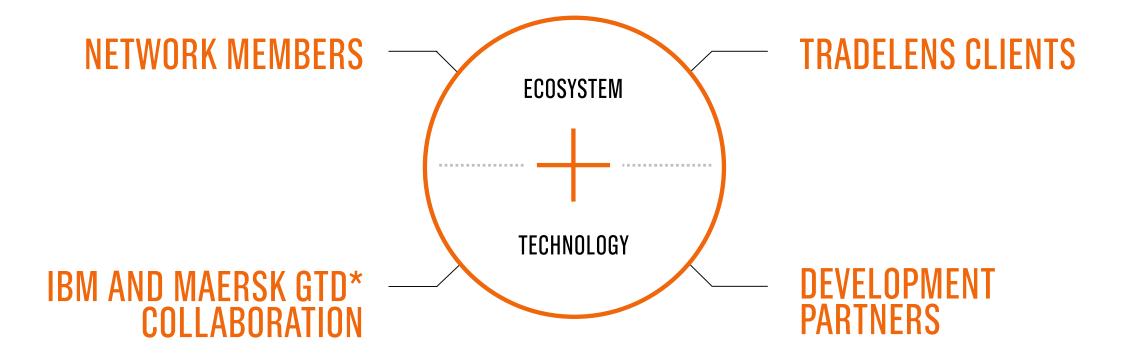


PROVENANCE AND AUDITABILITY



PRIVACY OF DATA

THE TRADELENS COLLABORATION



* Maersk GTD is the subsidiary of A. P. Moller Maersk responsible for TradeLens

Classification: Internal

OCEAN CARRIERS

The ocean leg is at the heart of a container shipment journey, and as such carriers are the linchpin of the end-to-end information model by providing the booking that links all parts of the journey.

Given the central role that carriers play today in safeguarding and distributing key information and documents across parties to a shipment, they are in a unique position to govern the blockchain network that will transform the industry's information-sharing model.

TradeLens is currently in partnership with 17 global ocean carriers*.



* CMA CGM, MSC, Hapag-Lloyd and ONE have agreed to join TradeLens; final on-boarding pending. Speak with your TradeLens representative for a report on current onboarding status. Classification: Internal

3PL AND INTERMODAL

Third-party logistics providers (3PLs) and Freight Forwarders are central to the global movement of goods. As a solution designed for the entire supply chain industry, TradeLens is focused on maximizing the value of these participants by:

- + Improving collaboration with their customers by leveraging global standards and nuanced data control
- + Tangibly bringing together the commercial, documentary and operational elements of supply chain management

Intermodal operators handling their customers' cargo want more visibility up and down the supply chain so they can act fast and lower the cost of every shipment.

TradeLens provides trustworthy data that helps them to predict and optimize equipment utilization, speed up pick-ups and drop-offs and reduce queueing times.



* This list of 3PLs and intermodal operators is not exhaustive. Speak with your TradeLens representative for a complete list, along with current onboarding status.

GOVERNMENT AUTHORITIES

Authorities and agents in charge of the import and export of goods want powerful new tools to help them simply and clearly identify risks and efficiently process huge volumes of trade that cross their borders.

TradeLens is working with authorities from 11 countries to deliver better information sharing, less manual paperwork, and easier connections to national single window platforms.



* This list of authorities is not exhaustive. Speak with your TradeLens representative for a complete list, along with current onboarding status.

Classification: Internal

PORTS AND TERMINALS

Port communities and terminal operators are seeking ways to reduce the cost of connecting partners in the supply chain in order to increase stack placement efficiency and optimize truck and vessel service times.

TradeLens is focused on maximizing the value of these participants by:

- Reducing the cost of connecting to shipping lines and the broader port community by leveraging an industry standard platform participants are already connected to
- + Simplifying conversational electronic communications of ETAs for all port community participants improves utilization of port assets
- + Enabling advanced communication on aggregated booking volumes and next mode of transport provides better data for stack placement decisions, leading to better truck and vessel service times



* This list of ports and terminal operators is not exhaustive. Speak with your TradeLens representative for a complete list, along with current onboarding status.

THE TRADELENS PORT AND TERMINAL NETWORK

- + Coverage across 6 continents
- + 80 ports and terminals directly integrated with TradeLens
- + Data from up to 600 ports and terminals captured by existing TradeLens members

- Ports and terminals directly integrated with TradeLens
- Ports and terminals contributing data via carriers to TradeLens

Interactive map of TradeLens port and terminal network: https://www.tradelens.com/ecosystem/

15

Benefits to Ports and Terminal operators

- PAIN POINTS
- Costly development and support of point-to-point EDI integrations with shipping lines 1. and the port community
- Inaccurate ETA & ETDs of vessels and intermodals leads to poor planning and use of 2. port and terminal assets
- 3. Fluctuating equipment flows make it difficult for yard density management, leading to operation difficulties including suboptimal stack placement
- 4. Lengthy truck and vessel gueues and suboptimal asset utilization adversely impact port and terminal operations
- 5. Slow message receival from authorities causes delays and poor planning
- 6. Highly competitive environment given the rise of global port capacity and increased clout of a more consolidated shipping line industry

- Simplifies and reduces the cost of connecting to shipping lines and the broader port community by leveraging an industry standard platform participants are already connected to
- Quick, easy, conversational electronic communications of ETAs for all port 2. community participants improves utilization of port assets
- 3. Advance communication on aggregated booking volumes and next mode of transport provides better data for stack placement decisions, leading to better truck and vessel service times
- 4. Accurate and frequently-updated ETAs, improved stack placement, faster service times, and optimization and predictive capabilities lead to shorter queues at the port, reduced environmental impact, and better asset planning and utilization (barges, cranes, etc.).
- 5. Event data around authority activities will be received more quickly allowing for better yard planning. This is especially the case for ports and terminals not connected directly to the authorities today
- 6. Drive competitive advantage with cheaper, easier sharing of port data; extend visibility of information across end-to-end shipping corridors; opportunity to more fully exploit investment in port community systems

BENEFITS

1000

Benefits to Intermodal & Trucking operators

PAIN POINTS

BENEFITS

- 1. Long and unpredictable waiting time to pick up or drop off cargo (e.g. long queueing at marine terminal gate for a drayage firm due to gate flow imbalance)
- Additional dry runs, empty equipment moves, or deadhead miles due to changing conditions or inaccurate info from other ecosystem members such as BCOs, ocean carriers, or terminals
 - e.g. Marine terminals and carriers direct the return of empty equipment (containers and chassis) to different locations often via an end of day email communication, causing delays and inefficiencies
- 3. High customer service costs and administration efforts due to manual and complex tracking and reporting activities
- 4. Disputes of detention and demurrage and error-prone validation steps
- 5. Difficulties identifying root causes of shipment exceptions lead to finger pointing
- 6. Lack of visibility to upstream events and timing, such as actual / estimated vessel departures and rail actuals, prevents accurate planning and efficient asset allocation

- 1. Increase asset turn time and revenue by reducing waiting time via a better yard/terminal capacity planning driven by the real-time event sharing (e.g. confirmation of vessel actual time of arrivals)
- 2. Reduces non-revenue trips and associated costs by getting up-to-date and consistent data from BCOs, ocean carriers, freight forwarders, and terminals

- 3. Common, end-to-end platform provides a single, standard source for supply chain visibility event data
- 4. Full, trusted visibility on the end-to-end journey of a shipment will decrease inland transportation provider's efforts to validate fees and surcharges and gain shippers' trust
- 5. Clear audit trail and data provenance makes it easier to avoid problems, but also aids in diagnosing and correcting them when they occur
- 6. Increased efficiency in planning and allocating assets based on real-time consignment status updates from supply chain participants

17

THANK YOU

Visit <u>www.tradelens.com</u>

David Ocholi Regional Product Manager, West Central Asia & Africa | David.Ocholi@maersk.com