

De-carbonizing the International Trade

Kale's innovative solution for Green Trade

Amar More



Amar More
President & CEO

- Domain Co-ordinator for Cross Border Management at United Nations (UN/CEFACT), Geneva
- On the **panel of experts for trade facilitation** at UN/CEFACT (**United Nations** Centre for Trade Facilitation and Electronic Business), Geneva
- Board member of The International Air Cargo Association (TIACA), Miami
- Chaired Asia Pacific region on the executive committee on International Port Community Systems Association (IPCSA), UK
- Member of National Council for Logistics with Chartered Institute of Logistics and Transport, India
- Empaneled with several governments globally on conceptualizing trade facilitation initiatives to usher in "Ease of Doing Business" using digital technology.

Donna Mullins



Donna Mullins
Vice President

- 35+ years of experience in the US logistics industry. Licensed Customs Broker, CCS, CES, CLA, CLT
- Current Air Freight Subcommittee Committee
 Chair for the NCBFAA Transportation Committee,
 Chair for the AfA Airport Congestion Committee
- Current member of the TSA ASAC Air Cargo Subcommittee
- Former President and Chair of the AIFBA (Atlanta International Forwarders and Brokers Association)
- Former President and Chair of the AACA (Atlanta Air Cargo Association); Board of Director for the AMA (Atlanta Maritime Association)
- Former board member of the AfA (Airforwarders Association), the TCA (Transportation Club of Atlanta) and the World Trade Center Atlanta



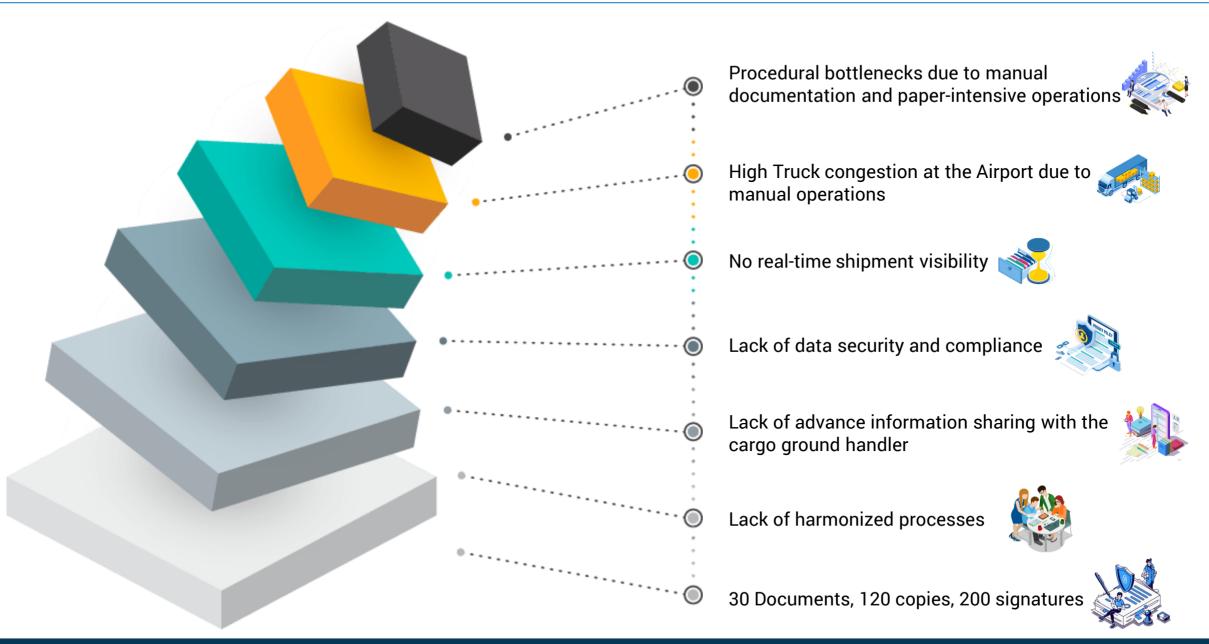


- 1 Current Industry Pain Areas
- De-carbonizing opportunities in the International Trade
- 3 Cargo Community System the solution for Green international trade
- 4 Case Studies
- 5 About Kale





Current Industry Challenges



UN Recommendation 33 for Trade Facilitation

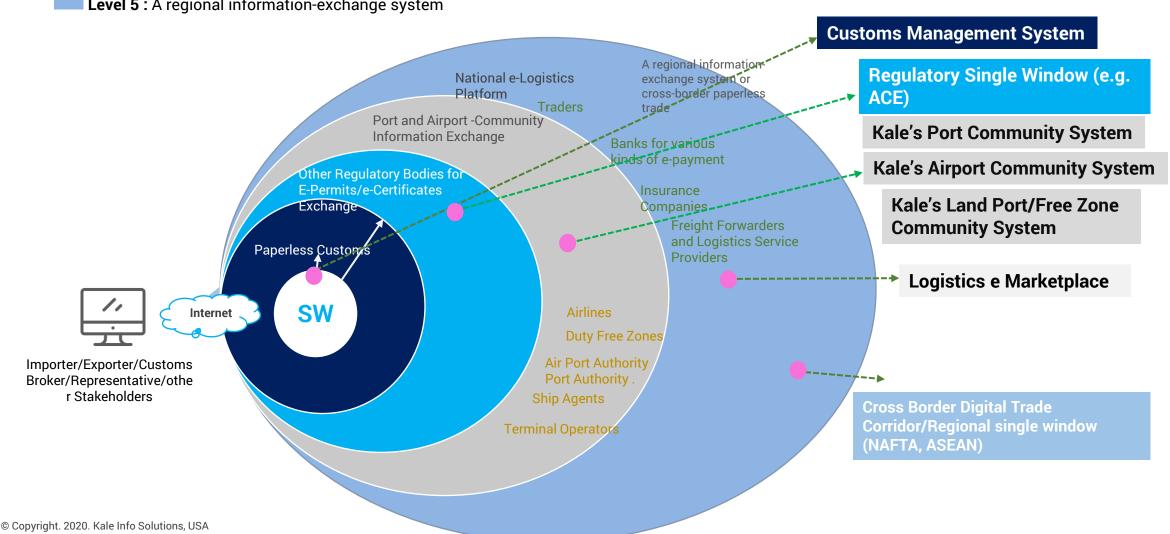
Level 1: Paperless Customs + e-Payment for Customs Duty + e-Customs Duty + e-Container Loading List + and electronic risk-based inspection

Level 2: Connecting Other Government Back-end IT systems, and e-Permit Exchange with Paperless Customs System

Level 3: e-Documents Exchange among Stakeholders within the (air, sea) port community

Level 4: An Integrated national logistics platform with also traders and logistics-service providers information exchange

Level 5: A regional information-exchange system









- ✓ An average air cargo shipment generates about 124 copies of paper from ~30 types of docs.
- ✓ An average maritime shipment generates about 200 copies of paper from ~41 types of docs
- ✓ Only about 20% of this paper might be required by law

An airport handling 1Mn tons of cargo which corresponds to about 1.3 Mn shipments annually generates 161,200,000 copies of paper out of which 128,960,000 copies might be unnecessary which is tantamount to cutting annually approximately $\sim 12,896$ trees



If we can save about 12,896 trees annually at just one airport and may be around 20,800 trees annually per port. Just calculate how many trees we could save on an annual basis by reducing unnecessary paperwork in the international trade across airports & ports?

Some shocking facts



- ✓ An idling truck burns fuel @ 0.6 gallons/hr
- ✓ At major airport and port gateways the truck dwell times could be anywhere between 4-6 hours
- ✓ Typical CO2 emissions from truck fuel is 10,000 gms/gallon
- ✓ Our studies show that about 400,000 to 700,000 trucks ply to an airport handling 1 Mn tons of international cargo (this depends on nature of commodities)
- ✓ Which means 8,333,333 to 16,666,667 Kgs of CO2 is emitted by idling/waiting trucks annually



If we can save about 16,666,667 kgs of CO2 annually at just one airport or port. Just calculate how much CO2 we could save on an annual basis by reducing the Truck Dwell time in the international trade across airports and ports?



Congestion

- Trucks arriving in bunches at the cargo terminal
- Trucks / Cargo waiting at the airport due to the paperwork needed
- No advance information to handlers at the airports about the number of trucks and cargo expected making the trucks wait at docks
- Trucks for whom cargo is not ready increasing the queues at the airport

Paperwork

- On an average 124 copies of paper per shipment
- Cargo stays on ground for 85% of the total transportation time waiting for paperwork
- Same cargo data is reflected and created on multiple documents

Visibility

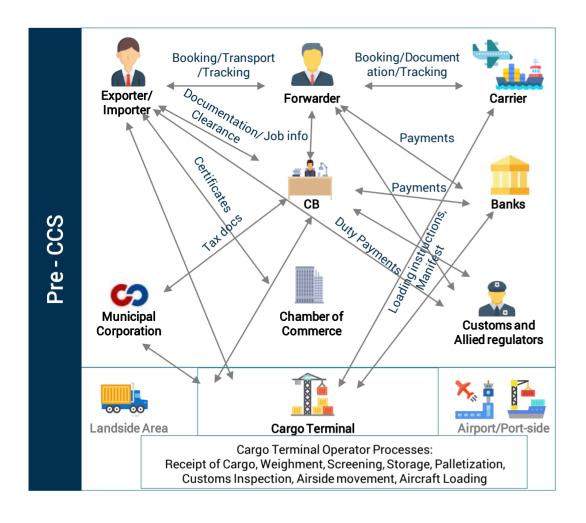
- No single location to get the consolidated and near real time shipment status
- Increases inventory and storage costs

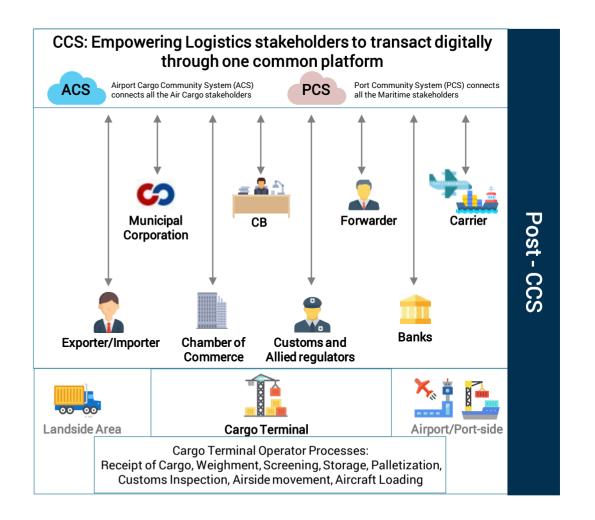




What is a Cargo Community System?

A Cargo Community System is an electronic platform that facilitates digital interactions between stakeholders viz. Importer / Exporters, Forwarders, Customs Brokers(CB), Carriers, Customs, Terminal Operators & other players in the supply chain





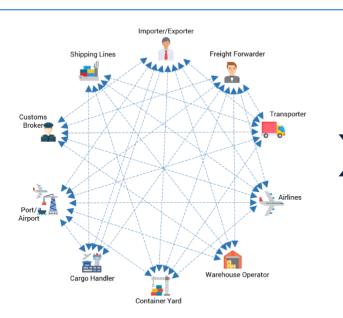


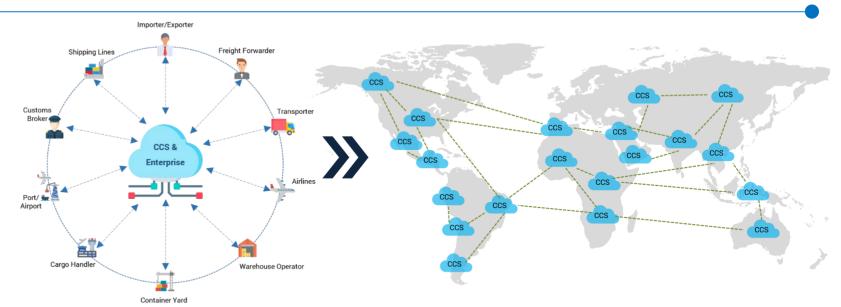
Cargo Community Systems for Greener Trade

Hurdles to Green Trade	Community Systems – addressing the hurdles
 Congestion ✓ Trucks arriving in bunches at the cargo terminal ✓ Trucks / Cargo waiting at the airport due to the paperwork needed ✓ No advance information to handlers at the airports about the number of trucks and cargo expected ✓ Trucks for whom cargo is not ready increasing the queues at the airport 	Addressing Congestion ✓ Trucks can only come at the allotted time ✓ Paperwork is done online even before the truck is headed towards the airport ✓ GHAs know exactly how many trucks to expect when ✓ Trucks can't get a vehicle token without completing the paperwork in advance online
Paperwork ✓ On an average 120 copies of paper per shipment ✓ Cargo stays on ground for 85% of the total transportation time waiting for paperwork	Addressing unnecessary paperwork ✓ Authorized data access is given to the relevant stakeholders eliminating the need for paperwork ✓ Elimination of paperwork means cargo doesn't have to wait on ground
Visibility ✓ No single location to get the consolidated and near real time shipment status	Addressing Visibility ✓ One single window for paperwork and shipment tracking. Shared visibility across the stakeholders



The holistic approach to Green Trade





Current scenario

Global Airports & Ports are characterized by

- Congestion
 - Bunching of trucks
 - Paperwork at airport/port
 - No advance Shipment Information
 - Queueing of trucks when cargo isn't ready
- Inefficient information exchange manual documentation – 120+ copies per shipment
- Higher dwell times for cargo
- Opaqueness in operations

Transformation through CCS

Transforming cargo handling at Airports & Ports through Cargo community Systems (CCS)

- Elimination of congestion through scheduling tools
- Streamlined documentation elimination of huge number of paper copies
- Faster movement of cargo higher throughput
- Visibility in supply chain real time information
- Creation of large logistics marketplaces at Ports/Airports

Digital Corridors

Creating such Airport/Port CCS globally and linking them through digital corridors

- Global visibility
- Global logistics marketplaces
- Transforming global regulatory and commercial processes through data reusability



Potential Economic and Ecological benefits of Cargo Community Systems

	Annual Savings		
	Air/Ocean movements	Copies of paper	Trees
Global Impact	\$50 Bn	10 Bn	625,000
USA	\$8 Bn	1.6 Bn	100,000









ACS 2021 by the numbers:

389

Trucks Processed

1839

Shipments

9,017,020

Estimated grams of CO2 Saved***

1.5 Million

Pounds of Cargo

1945

Hours Saved

\$69,000

Estimated Driver Labor Savings*

1245

Estimated Gallons of Fuel Saved**



SEFL-We get into a door as we have some priority because of the pre-booking with the [ACS] computer system we use at Swissport.



DBA-Thank you so much for your help with getting our drivers in and out at the scheduled appointment times. It makes our life so much easier.



Greer Trucking -ACS has significantly enhanced a large portion of our Air Cargo related workload. With a well-defined process in place and a system to facilitate import and export shipments, we have recognized substantial time savings. Further, our working relationships with cargo handling stakeholders has improved tremendously.





PCS Success Story at Tuticorin VOC Port, India

A first of its kind, the CODEX PCS is a great example of a joint initiative between an Industry association and Kale to solve the challenges for Port Users

Port

Community System

Tuticorin Port







Redundant operations



Repetitive paperwork and errors



Limited shipment visibility



Stakeholders on disparate systems

KALE'S SOLUTION

Electronic connection with all stakeholders



Ease of operations and transparency



Container tracked by a unique barcode



Standardisation of Trade documents



Parameter



Documents handled (including copies)

Avg Dwell Time for Trucks

Average processing time for Tax refunds

Average time per export doc handling

Average time per import doc handling

Availability of shipment status

Availability of data to stake holders

Pre PCS



16 6-8 hours

90-120 days

145 minutes

35 minutes

Limited to tele calls

Through Mail, calls and in person

Post PCS



Less than 1 hour

Less than 7 days

25 minutes

15 minutes

Real time

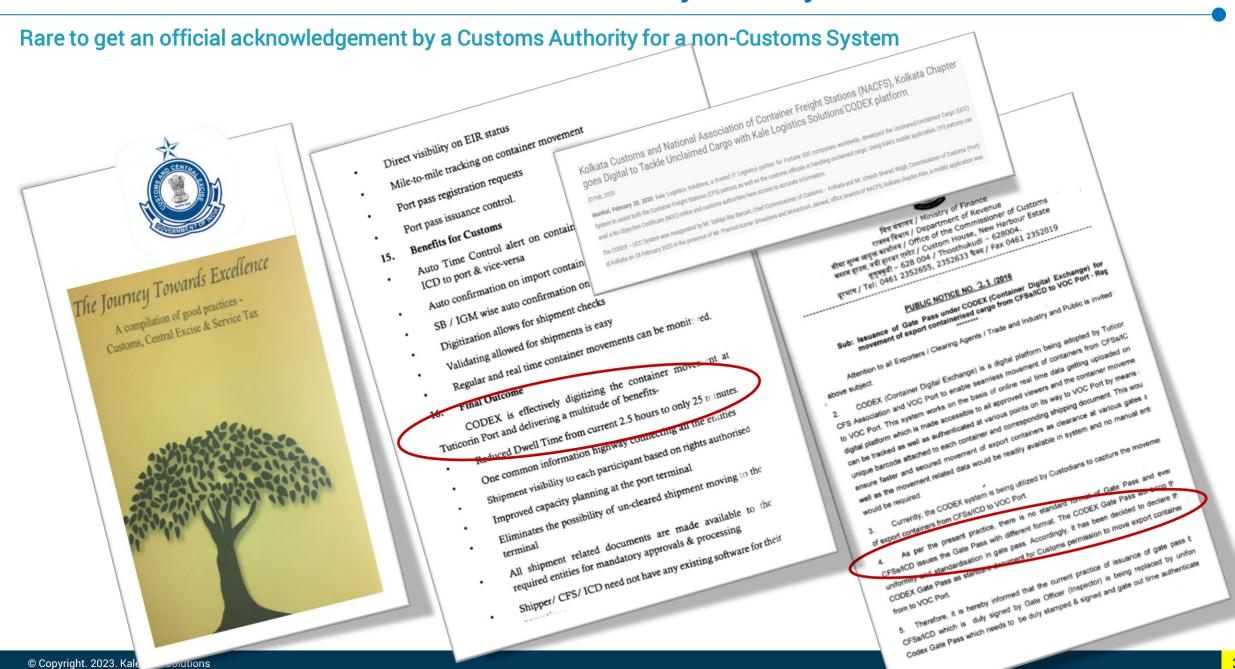
Portal, EDI, App, On Demand

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Kale's Platform is Actively Used by Border Control Authorities





PCS Success Story at Sohar Port, OMAN

A first of its kind, the CODEX PCS is a great example of a joint initiative between Ministry of Transport and Kale to solve the challenges for Port Users



BUSINESS CHALLENGE











KALE'S SOLUTION

IMO Complied Maritime Single

E-Services Promoting Paperless Trade



AIS Based Vessel Tracker



Standardisation of Trade documents



Parameter



Documents handled (including copies)

Avg Dwell Time for Vessel

Average Vsl Fuel Cost

Average time per vessel doc handling

Average time per Delivery Order documentation

Availability of Vessel & shipment status

Availability of data to stake holders

Pre PCS



36-48 hours

9600 OMB

24

45 minutes

25 minutes

Limited to tele calls

Through Mail, calls and in person

Post PCS



NILL

12-24 hours

7200 OMR 25% Savings

18 minutes

10 minutes

Real time

Portal, EDI, App, On Demand

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Kale – The Bird's eye view

Leading Provider of Operational and Community Integration Solutions to the Government, Maritime, Aviation & Logistics Industry

13+

Years of existence



5000+ Customers across 30+ countries



Presence at the United Nations, TIACA, IPCSA, IAPH etc.



2 Awards from United Nations and Case Study in Kellogg's Business School's publication



Propelling India to no.6 position globally in e-AWB



Offices in 10 locations: Americas, Europe, ME, Africa, Asia with ~400 employees



100+ Global Airport/Ports



North America's 1st Airport Cargo Community System Initiative



Building digital cargo communities globally

We are currently working with 40+ Airport/Port Stations for setting up Airport and Port Cargo community systems























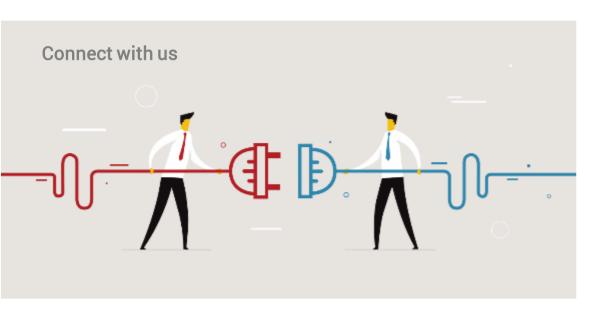








Thank You



Kale Info Solutions Inc. - USA Office

100 Hartsfield Centre Parkway, Suite 500, Atlanta, GA, 30354, USA.



Corporate Office

9th Floor, Thane One Corporate Business Park, Behind CineWonder Mall, Majiwada, Thane (W), Maharashtra, INDIA - 400 610.















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