



# **DIGITAL TRADE FACILITATION**

Suite of IT Platforms for Global Trade and Logistics



### Harnessing Information Technology to Facilitate Global Trade Digitally

The Logistics supply chain entities work round the clock to move cargo safely and on time. However, along with movement of cargo, there is a lot of complex documentation and data that gets exchanged between the entities. A study indicates that shipment data gets re-entered in the supply chain at least 6 times by various stakeholders, bringing in inefficiencies, delays, penalties and lack of shipment visibility, thereby resulting in higher cost of logistics.

Kale Logistics Solutions' (Kale) Trade Facilitation platforms and solutions are a pioneering effort that enables freight forwarders, customs brokers, airlines, shipping lines, consignees, container freight stations, cargo ground handlers, transporters, warehouse operators, container freight stations, cargo terminal operators to electronically communicate within themselves and with customs authorities, port authorities, banks, Government entities and regulatory agencies.

Moreover, these platforms have the ability to connect two or more airports/seaports in different geographies thereby simplifying cross-border trade. These platforms are developed as per the UN Trade Facilitation Recommendation No. 33 and WTO Guidelines based on Trade Facilitation Agreement.



### **Community Platforms**

- Airport Cargo Community System (ACS)
- Port Community System (PCS)
- Logistics e-Marketplace (LeMP)
- Regulatory Single Window System (SW)
- Digital Freight & Trade Corridor



### e-Services

- Air Cargo e-Services
- Maritime Cargo e-Services

### **Interplay of Digital Trade and Freight Platforms**







# COMMUNITY PLATFORMS



# Addressing Conventional Challenges in Airport Cargo Communities

Airports play a key role in the movement of cargo by air. Air Cargo represents over 35 percent of global trade by value and is expected to be worth US\$130.12 billion by 2025. But the industry continues to face significant challenges, such as fallen global trade volumes, global economic activity, and weakening consumer confidence, indicating further declines.

However, the market is expected to grow due to factors such as a strong demand for manufacturing exports and increased penetration of advanced technologies in the value chain. In addition, the overall growth rate in the e-commerce sector is expected to reinforce the growth prospects globally.

#### Air Cargo and the documentation woes

The Air Cargo industry has gained more prominence in the recent past due to the growing demand for rapid requirement for cargo at the destination in a record short time. But, the pressure of physical documentation at each level and this calls for a 360 degree process and functional transformation. As per IATA, each air cargo shipment on average carries around 30 types of documents and well over 100 copies thus resulting into significant documentation overheads, increased dwell times and supply chain opaqueness.

#### Kale's Airport Cargo Community System

Airport Cargo Community System (ACS) is a United Nations award winning single window electronic platform for all stakeholders of the air cargo value chain to interact with each other digitally thereby eliminating unnecessary documentation, delays, opaqueness of supply chain and improving ease of doing business for the air cargo sector.

It seamlessly connects Airport, Cargo Ground Handlers, Transporters, Freight Forwarders, Customs Brokers, Airlines, Importer/Exporters and Customs on a common cloud-based IT platform.

The system is targeted towards helping the supply chain participant overcome the pain areas of interaction with other partners in the supply chain.

Airport Cargo Community System (ACS) facilitates seamless movement of goods and information between all the allied stakeholders.

#### Single Automated System for ease of doing business

ACS is an award winning community platform designed for air cargo movement. It not only addresses the issues on cargo visibility but also enables the SME players in the supply chain with smart apps.



Airport Cargo Community System Context Diagram



- e-Booking: Forwarder can view the airline schedules and request for bookings. Standard EDI messages can be exchanged to request booking and receive confirmation from airlines.
- **e-AWB:** Provision to capture and amend AWB's. FWB/FHL messages can be triggered to the airlines and handlers to give them pre-alerts. Also, it has a provision for AWB stock management.
- Slot & Dock Management: Provision to configure slots and docks so that trucker/ forwarders can book them to bring their cargo to the airport.
- **e-DO:** Generate airline Deliver Order (DO) and make payments through pre-deposit accounts or payment gateways. CONSOL DO can also be released by the agents to sub-agents/consignee.
- e-Manifest Filing: Convert FFM messages received from airlines to Customs format and file it with Customs. Acknowledgment received from customs can be sent back to the airlines. Helps in CONSOL Manifest (CGM) filing to customs.
- e-Payment: Forwarder can make payments through the portal using pre-defined accounts or payment gateway interfaces.

#### **Business Benefits**

- **Reduced congestion:** Reduced truck wait times at the terminal with slot booking and advance shipment information to cargo handler. Also reduced physical queues at airport counters.
- Improved efficiency: Faster processing of cargo with minimal manual documentation. Online payments to expedite shipment delivery. Real-time updates of various milestones through Mobile App. Optimal resource and warehouse planning with advance shipment notice.
- Sustainability and Compliance: Meets the sustainability goals of the airport with paperless trade. Reduces carbon footprint by 75%. Developed as per the guidelines of WTO Trade Facilitation Agreement and UN trade facilitation Recommendation no. 33.
- Visibility and Transparency: Business continuity even during pandemics with minimal touch points. Data available brings in the required business foresight with intelligence with MIS.

#### Pioneering Air Cargo Trade uninterrupted with a Single Window Platform at Mumbai International Airport through GMAX

#### **Business Challenge**

Mumbai International Airport Limited is among the busiest airports in the world. Truck congestion, longer waiting times causing delays, ambiguity in data handling, and challenges of advance shipment information were among the key challenges faced by the airport and stakeholders in the ecosystem.

#### **Solution**

GMAX is an airport cargo e-platform, which facilitates digital interactions among airport stakeholders. It is a modern, scalable and competitive application that caters to the growing demands of the cargo operations at Mumbai Airport. It simplifies the processes at the airport through a single window of digital documentation.

Parameter	Pre GMAX	Post GMAX
Document handled (including copies)	128	24
Avg Queue Time for document/payments	1 hr 20 minutes	Nil
Airport Counters	9	1
Average time per export doc handling	28 minutes	6 minutes
Average time per import doc handling	22 minutes	8 minutes
Accuracy of data	85%	94%+
Waiting time for Export Trucks	2 hours+	30 minutes
Availability of data to stake holders	Through Mail, calls and in person	Portal, EDI, App, On Demand



Watch a 2 mins video on ACS

ACS eliminates waiting time for trucks as well as congestion at airports with Slot Booking



#### Global Maritime Industry - a dynamic market

The international Maritime and Ports industry is responsible for the carriage of around 90% of world trade. Shipping is the life blood of the global economy. Seaborne trade continues to expand, bringing benefits for consumers across the world through competitive freight costs. Thanks to the growing efficiency of shipping as a mode of transport and increased economic liberalisation, the prospects for the industry's further growth continues to be strong.

### Port Community System - a game changer for Maritime Industry

Though most Sea Ports have been relatively slow in embracing automation and digitization as compared to other modes of transportation, however, the pace is now starting to accelerate.

Ports are facing a shortage of human resources, nonavailability of the right information of and from Port Users, poor data quality, siloed operations and difficulty in handling exceptions.

Technological innovation plays a key role in developing solutions to provide a solution to these challenges with API integration. Port Community System (PCS) is a good example of the same

#### Kale's CODEX – Port Community System

Kale's CODEX PCS is a United Nations award winning innovative platform developed to not only bring together the stakeholders of the maritime sector onto a single platform but also facilitate government-to-business, business-to-government and business-to-business transactions in a highly secured environment. Customs, Port authorities, forwarders, shippers, shipping lines, terminal operators, inspection agencies, hauliers and railway operators – all of these, and more, need access to smart, real time information. The platform provides the business community with a streamlined process for submitting export and import information to customs and other government agencies and also exchange information amongst themselves.

# PCS enabling Digital Transformation for Ports and connected stakeholders

CODEX framework enables two distinct elements currently missing from existing PCS's. First part is the enablement of Smart Apps for SMEs in Freight Forwarding, Customs Brokering, Trucking, Warehouse operations and Empty/Laden Container Depots. These solutions empower the SME players in the value chain to automate their internal business processes in an end to end manner. This PCS 3.0 enables EDI exchange in UN/EDIFACT format with the stakeholder and enables deep tech like Blockchain/AI/ML in solving the inefficiencies present in the current portal-based exchange of documents and visibility.





- Vessel & Harbour Marine : Shipping line declares the vessel and voyage with the port/terminal authorities. Based on the declaration the port/terminal allots the VCN. Shipping Line requests for berthing/Un berthing/pilotage services with Port/Terminal. Approval and allotment of berth/captain done by Port/Terminal.
- e-FAL: Ports can capture advance information in electronic format for vessel arrival, stay & departure.
- e-DO: Agent can request DO online for multiple carriers on a single platform. Payments, issuance, revalidation are carried out electronically.
- Container Booking: Agent requests empty containers from shipping line based on which the liner approves and assigns empty container location and released CRO (container release order)
- Terminal Slot Management: Provision to configure and book slots as per calendar days and time on finger tips. Helps in by 35% of Gate congestion reduction.
- e-VGM: Works as a stand-alone SaaS based Web application with SOLAS compliance. Allows EDI inbound submission as VERMAS, or (IFTMIN) EDI messages or XML equivalents.
- Track & Trace (Vessel, Cargo & Container): Access to real-time container status events and alerts.

#### **Business Benefits**

- Reduced Ocean and Landside Dwell times upto 60%.
- Reduction in cost of Logistics across stakeholders upto 40%.
- Contactless and Paperless with Accurate and timely data.
- Real Time updates lead to better planning across stakeholders.
- Invoices and Payments handled seamlessly.
- Rapid improvement in Ease of doing business and LPI ranking.Trading Across Borders Rank can potentially go up by 10 places, directly impacting FDI flow.

#### Enabling Faster Container Throughput & Lowering Container Dwell time at Tuticorin Port, India

#### **Business Challenge**

V.O. Chidambaranar Port in Tuticorin, India faced the regular chores of truck congestion, waiting times and operational delays caused by redundancies in operations. In addition, the new tax system introduced in 2017 had the tax refunds delayed for the exporters upto 120 days. This was due to inaccuracies in shipment data filed.

#### Solution

Kale Logistics Solutions deployed the first instance of CODEX within three months from starting the project. CODEX provided a digital gate pass for containers – a single digital document that was mapped to individual containers via a barcode—that was accessible to every stakeholder to view and fill. The availability of information in advance allowed seamless movement of the container from the container depot to the port in 25 mins from erstwhile 2.5 hrs. With all the data being digitized, it reduced documentation errors significantly. Data filed for tax refunds by the exporter was 95% accurate which enabled speedy refunds within a week's time. The Platform also contributed to the sustainability goals of the port by reducing carbon emissions by 75%.

Parameter	Pre Codex - PCS	Post Codex - PCS
Average fuel consumption by trucks for 11kms travel from CFS to Port	15 liters	5 liters
Average container gate-in time	12-15 hours due to the manual invention in linear, seal, and shipping bill verification	2-3 minutes. The average container gate-in is 500-600 per day.
Documents required	15+	1
Container dwell time	2.5 hrs	25 mins



#### Watch a short Video on CODEX - PCS

This video explains how CODEX - PCS facilitates trade in the Maritime sector.



# One-Stop Multi-modal Logistics e-Marketplace for entire supply chain ecosystem

Freight exchange platforms exist for a while, there is still a gap to connect end-to-end logistics digitally in a seamless manner.

This need is gradually pushing for a transparent, flexible and seamlessly adjustable services that are fostering a variety of logistics demand in terms of supply. Importer/Exporters process automation linked to the freight exchange platforms are completely missing which happened post-booking.

#### A highly fragmented sector

The continued surge in e-commerce demand and the need to provide more cost-effective transportation options for shippers have led to a steady but significant growth in logistics marketplace. Higher logistics costs has been a worry for most countries and industry.

#### Shaping the future with Logistics e-Marketplace

Logistics e-Marketplace is believed to be the right way to enable seamlessly connectivity between Shippers, Freight Forwarders and other stakeholders in the loop.

Platform enables an organization to connect with all of its supply chain stakeholders on a single platform. Whether it is for document exchange or data exchange or status updates, the platform enables connectivity in

#### Kale's Logistics e-Marketplace

Kale Logistics Solutions' Logistics e-Marketplace platform connects supply chain stakeholders such as Freight Forwarders, Customs Brokers, Shipping Lines, Airlines, Transporters, Shipper, Consignee, Warehouse Operators, Rail Operators and Regulatory Authorities. The platform digitizes the entire shipment process of rates, schedule, booking, contracting, delivery, invoice and payment.

The platform helps Logistics Service Providers to actively participate in the cargo movement process by ensuring their services remain price competitive and highly flexible. It matches companies looking to ship freight using one or multiple modes of transport with service providers of suitable capacity.

real-time with entities such as Freight Forwarders, Customs Brokers, Transporters, Warehouse Providers etc.

In addition, the platform also enables all entities within the parent organization to connect with each other and exchange information related to shipments in real-time basis through a Control Tower.





- **Registration**: User-friendly registration, login and subscriptions on the go.
- **Price Discovery**: Covers multi-modal transportation, Rates & Quotes, e-Booking and Carrier Schedules.
- **Payments**: Online payments facility with invoicing, e-contract and prepaid account.
- **Reviews and Ratings**: User ratings with feedback and promos are included.
- e-Docket: A complete document management system which facilitates document exchange with digital signature.
- Tracking: Complete track and trace with integrated maps, pro-active alerts and e-Waybill tracking. Track and Trace is supported by Whatsapp, email and chat.

#### **Business Benefits**

- One-Stop Shop: Single Umbrella Platform for all logistics services.
- Improved Connectivity: Online, real-time connection and processing. Connectivity with all stakeholders.
- Enhanced Efficiency: Faster turnaround with ITenabled solution leading to increased productivity and reduced costs.
- Seamless Flow of information: Single window tracking for tracking cargo movement.
- Business Growth: Increased visibility leading to higher revenues. Access to large market with faster sales conversion
- **Exporters and Importers integration**: Business ERPs can be seamlessly integrated with the platform to perform operations post shipment.

## Orchestrating entire supply chain to collaborate digitally

#### **Business Challenge**

A leading healthcare service provider in co-ordination with its logistics and Customs Clearance team wanted to introduce a Logistics Single Window platform. This fully integrated platform was aimed to enable real-time insights on its international shipments and customs clearance. They had limited visibility on shipment status with heavy dependency on freight forwarders and customs brokers for documentation.

#### Solution

The online platform connects supply chain stakeholders such as Freight Forwarders, Customs Brokers, and other stakeholders with entities and business units of the Healthcare Provider spread across the globe. Equipped with pre-defined controls in terms of approval mechanism and access rights, this platform acts as an enabler and controller of shipment and shipment-related information - including documents - in a single window.

The platform encompasses functionalities related to import-export of commodities, documentation/controls for Customs Clearance, document storage and retrieval mechanism, roles and rights-based workflows, integration with third party systems and track and trace including Licenses, Duty Drawback Schemes, Certificates, Bond Management etc. Visibility on cargo movement is available through interface with internal systems of Airport Operator and Port Operator





# Regulatory Single Window – A Paradigm for Governance

The WTO Trade Facilitation Agreement encourages countries to the development and implementation of National Single Windows. Developments in Information Technology have enabled governments to make dramatic improvements in delivering services. Each new development in IT has brought with it a new set of possibilities to help bring transformational change to the regulatory environment of international trade. These developments have not just been about technology, but about new business philosophies and architectures that have enhanced convenience and efficiency for the trading community. The emergence of the 'Single Window' concept is one such development.

#### **Regulatory complexities**

Regulatory agencies and governments worldwide find it challenging to enable faster clearance by cutting down delays and improve trade compliance. The processes are suffused with costly inefficiencies, lack of co-ordination among cross-border regulatory agencies, and burdensome procedures and documentation.

# Kale's Regulatory and Customs Single Window System

Kale Logistics Solutions' Regulatory and Customs Single Window facilitate the Trading Across Borders for nations. The platform allows importers and exporters, the facility to lodge their certificates, licenses, permits and clearance documents online at a single point with government agencies and customs. Required permissions, if any, from other regulatory agencies would be obtained online without the trader having to approach these agencies. The platform reduces interface with Governmental agencies, dwell time and the cost of doing business.

Risk Management for the government agencies puts measures for individual bodies for controls and interventions. It also aims to simplify and streamline interagency procedures and documentary requirements for across border trade.

#### Single Window - an Integrated IT Platform

In recent times, the term 'Single Window' has especially gained importance in trade facilitation circles. The trade community strongly supports a Single Window approach because it offers a vision of a dramatically simplified interface with regulatory agencies, whereby the entire government apparatus that deals with the movement of goods across borders is re-engineered to meet the specific and exacting needs of business, while maintaining appropriate regulatory controls.



**Regulatory Single Window Context Diagram** 

- Registration: User friendly registration for traders and agents with approval from Single Window admin. Secured Login using unique credentials.
- Certificate Management: Certificate are issued online with eSignature. Certificate available in XML and PDF format. eDocument repository for all certificates issued.
- Workbench: Milestone based application tracking. Applications can be downloaded in XLS or XML format for data reusability. Applications can be filtered by multiple fields.
- Risk Management: Government Agencies can define the risk levels based on their internal assessment. The officers can process shipments based on the risk level which are prompted by the system. Risk levels can be modified based on the collected experience and data
- Invoices and Payments: All fees collected at once and then disseminated. Payment received using payment gateway and Predeposit account. Invoices are generated for agency service charges in the required format.
- e-Certificate of Origin: Chamber of Commerce and Customs can issue online preferential and non-preferential certificate of origin to exporters and agents.

# Enabling fast track Certificate of Origin to 200,000 exporters in India

#### **Business Challenge**

Federation of Indian Export Organisation (FIEO) is an apex body of all export promotion councils, commodity boards and export development authorities of India under the Ministry of Commerce. It wanted to digitize the process of issuance of Certificate of Origin (CO)document to over 200,000 exporters.

#### Solution

Kale Logistics Solutions deployed the very first electronic certificate of origin platform for FIEO in 2016. The solution digitizes the process of Application for CO, Attachment of supporting documents, Verification & Issuance of CO by FIEO.

The exporters can make online payments using the facility of payment gateway and pre-deposit account. This service is availed from 20 branches of FIEO across India where over 54,000 certificates are issued annually.

#### **Business Benefits**

- Eliminates Redundant Data Entries with Security & Encryption
- Real-time Cargo Visibility
- Pro-active Functioning & Operations
- Last Mile Traceability Guarantee
- Enables Informed Decision-Making Capabilities





#### **Cargo visibility across nations**

The volume of trade has forever been the driving force of economic growth. New production systems, integration of global value chains and trends toward reliance on just-in-time delivery systems mean that more than ever, trade needs to be faster and more reliable. This calls for increasing the quantity and quality of information exchange.

#### **Need for greater harmonisation**

In the recent times, emphasis on trade facilitation has been significant. More than ensuring seamless operational capabilities in a single airport/port environment, it is now important to have advanced information on the freight arriving at cross border.

Even though, stakeholders at the source manually share information through Email and other sources, the possibility of data reaching the right stakeholders on time in limited.

### Digital Freight & Trade Corridor to build resilience for the Logistics Industry

A Digital Corridor is an electronic platform that connects multiple entities to share the status of business activities and relevant information.

The digital corridor is established when a airport/port/customs at a location gets connected with the airport/port/customs at another location to exchange relevant trade and shipment data.

#### Kale's Digital Freight & Trade Corridor

Kale Logistics offers Digital Freight and Trade Corridor to support trade facilitation. The digital corridor allows the country of shipment origin to collaborate with the destination country of shipment. It facilitates real-time visibility of shipments exchange from one stakeholder to another stakeholder and subsequently to the trading partner country.

The shipment details, multiple e-certificates and supporting digital documents are saved on a secured and reliable platform. The destination country gets to access all the information before the arrival of a shipment. On arrival of the shipment at the destination, the origin country gets all the status updates and other details until the delivery of cargo.

Access to the data is restricted and protected by a strong and complex encryption algorithm. This network can be extended to government, regulators or similar body by adding them as a participant.

The collaboratively created digital corridor facilitates the flow of information within the stakeholder chain and optimises cargo visibility across the stakeholder network. These digital data corridors can evolve from connecting one cargo network like airport community platform in one country to the airport community platform in the other country. These hubs can connect multiple countries using the simple principle of data federation and trust.





- Uses IATA One Record data format for APIs to Exchange Data for Air Cargo
- Seamless Data Interchange
- Regulatory Compliance
- Just-In Time Delivery Systems

#### **Business Benefits**

- Visibility & Transparency: Provide end-to-end shipment visibility from origin to destination. This leads to saving of effort and time involved in the tracking shipments until their final delivery. Business partners' risk of counterfeiting is eliminated
- Swift processing of documentation: enables shipment information and documentation to be available in advance.
- Secured data sharing: A platform based in Blockchain is resistant to modification of data. Therefore, risks associated with the loss or tampering of data is eliminated.
- e-Freight compliance: Digital exchange of documents aligns with the e-Freight initiatives of IATA.
- Cost saving: Eliminates paper from transactions amongst stakeholders. Multiple copies of AWB generated for acceptance at truck dock, cargo screening and Carting Order gets eliminated thereby reducing cost.

## Connecting Mumbai and Schiphol Airports through the Digital Freight & Trade Corridor

#### **Business Challenge**

Trade between India and The Netherlands was carried out, however, visibility of a shipment up till final delivery to the consignee was a challenge. After a shipment departed from the export location, shipments status visibility was not available to the stakeholders at the origin.

Kale conceptualized and worked in partnership with Cargonaut a cargo community system provider in Netherlands to create world's first digital air freight corridor between Mumbai and Schiphol airport. The Digital Corridor was established with the objective of creating a completely transparent supply chain.

#### **Solution**

This Digital Freight & Trade Corridor is powered by Blockchain and iShare enabling all players in the community to connect with each other on the basis of mutual trust, irrespective of type, size, modality and jurisdiction.

iShare is a framework of agreements on identification, authentication and authorisation of actors. The framework delivers a transformational level of maturity in the way stakeholders share data with other partners and partners of partners that they may not know. The digital corridor uses IATA's ONE RECORD data format for APIs to exchange data.







# e-SERVICES

# Enabling Cargo Community with Point Solutions

With the commencement of the digital era, logistics companies are obligated to redefine and manage their business globally. Providing modern business solutions along with latest trends and technologies to keep their customers content has become a mandate.

Kale Logistics Solutions has in-depth domain expertise and experience to support Air Cargo industry by offering point solutions or electronic services for facilitating real-time "Information flow" throughout the journey, enabling business owners to take informed and faster decisions, thus, resulting in optimized operations for better margins and enhanced customer experiences. Customer-centric approach and innovation prowess has always been our key strength. This is allowing Kale to deliver disruptive solutions and technology across the Logistics sub-domains.

We are creating entirely new services that deliver measurable business outcomes. These services will play an increasingly vital role in differentiating enterprises and enable them to become a 21st-century enterprise.

### PING services – converting **Electronic Consolidation** .pdf documents to system (House) DO data Electronic Delivery Orders Electronic Manifest Filing (e-DO) between the Airlines and Forwarders for Airlines **Electronic Consolidation** Electronic Terminal Charges Manifest Filing in Imports Payments for e-Invoicing for Forwarders **Electronic Certificate** Electronic Air Waybill of Origin (e-CoO) (e-AWB) on a Single Window

### e-Solutions for Air Cargo





- Trucker | Forwarder | Ground Handler
- Manual Air Waybill data entry at the ground handler's counter results in higher costs, higher risks of pandemic spread through increased document handling, increased waiting time of trucks resulting in congestion, increased stress and error prone processes.
- Kale offers an innovative PING service wherein the forwarders or truckers can send .pdf copies of the air waybills to the ground handlers (GHA). Kale's technology converts the pdf into system data and after quality checks sends the AWB information to the GHA's system thereby sending accurate data in advance prior to cargo arrival at the GHA's facility.

#### Electronic Delivery Orders (e-DO) between the Airlines and the Forwarders

- Airline | Importer/Freight Forwarder | Ground Handler
- n 🎇 Traditionally, airlines permit the pickup of imported cargo through a paper-based Delivery Order. The importer or his agent would submit a physical copy of the Delivery Order at the counter of the airline, pay the charges, and hand over the paper copy of the Delivery Order to the Ground Handler. However, this transaction involves manual exchange of physical copies. It also involved the importer/agent visiting offices of multiple carriers and consolidators, waiting for making payments and thereafter waiting for document approval. This may increase the risk of spreading pandemic diseases.
  - Kale offers electronic generation of the Delivery Order electronically, which automates entire process, without the importer or agent having to visit multiple offices and waiting in the queues. They can perform this process from anywhere-anytime and pay charges online. This secured and single platform has the ability to issue DO for multiple carriers and can validate expired/soon to expire DO with auto-calculation of DO charges.

#### **Electronic Terminal Charges Payments for e-**Invoicing

- - Ground Handler | Freight Forwarder
- Freight Forwarders need to go to the terminal payment counter to pay export and import terminal handling charges. This creates queues/human congestion at the terminals along with complexity of cash management. In the pandemic situation, this also increases the risks of disease spread.
- r N N Kale offers electronic invoicing for the terminal handling charges. It takes the input from respective terminal and enables online payment of charges by the agent. This eliminates the need to manage large cash, brings transparency and reduces congestion at the counter. It also helps reduce the human contact in a pandemic situation.
  - Electronic Air Waybill (e-AWB) on a Single Window
  - Airline | Ground Handler | Freight Forwarder
- At present air waybills are manually collected from airlines by the agents and submitted back to the airlines at the airport. The process of air waybill requisition, issuance and usage is semi-automated which are accompanied by physical movement, email/phone calls, and multiple re-entry of same data.
- - Kale offers electronic exchange of air waybill information, both master air waybill and house air waybill on a single window with one-time data entry that automatically transmits shipment information using CARIMP EDI format between agent and airline. With complete track and trace for multiple airlines at one place, this service can be availed by Third-Party Interface, Portal or Bureau Service.

#### Electronic Consolidation (House) DO

ġ\$

Importer/Customs Broker | Freight Forwarder

- Import forwarder after obtaining Airline Delivery
  Order at Master Air Waybill level issues his own CONSOL Delivery Order to consignee or his appointed Customs Broker. Consignee or Customs Broker has to visit import forwarder's office to pay the charges and collect delivery order and other documents. In addition, consignee or his Customs Broker has to visit multiple agents' office to pay the charges and collect delivery and documents.
- Kale offers electronic option to send Cargo Arrival Notice (CAN) and e- CONSOL DO to the consignee. Consignee can view the CAN, receive DO and documents online.

#### Electronic Manifest Filing for Airlines

- 🔉 Airline | Customs | Freight Forwarder
- It is mandatory for airlines to file the import flight manifest to customs before the flight arrives and export flight manifest after the flight has departed. Customs levy huge penalties on airlines for delayed and incorrect filing. Airlines need to file the manifest to respective customs as per individual customs format.
- Kale offers electronic Manifest Filing system for airlines and freight forwarders to comply with local customs with latest filing mandate. Both Import and Export manifest can be filed as per the prescribed EDI formats. The system is capable to receive airline manifest in any form like FFM, excel or txt.

# Electronic Consolidation Manifest Filing in Imports for Forwarders

- 🖉 🛛 Freight Forwarder | Customs
- As per norms, import forwarder needs to file import house details with local to customs before the flight has arrived at airport, failing to which customs can impose penalties.
- Kale offers electronic filing of import house manifest to customs. Freight Forwarder can use Kale's platform to file it from anywhere, or they can send a pre-alert to a dedicated email id and Kale's Bureau Service team can process it on their behalf using PING BPO service.

### 🖄 E

#### Electronic Certificate of Origin (e-CoO)

- Chamber of Commerce | Exporter | Freight Forwarder/Customs Broker
- The generation and processing of a certificate of origin (CoO) is often manual and involves a lot of time and effort. It is required for an importer to produce the CoO to authorities for good clearance at destination. As a result, exporter at the origin station has to obtain CoO from authorised agencies like Chamber of Commerce. The exporter or his authorised Customs Broker has to go physically to pay the charges and collect Certificate of Origin.
- Kalo requests

Kale offers electronic option to submit online request and approval of Certificate of Origin. This shall help exporters, authorised Customs Brokers and Chambers to avoid physical movement. It automates the final step for export documentation and reduces administrative time and cost with digital signature provision.



Today's Maritime logistics need to be highly flexible to enable faster turnaround. There is increased pressure to deliver goods fast, with companies lining up alternative transport modes and 'smarter' routes to achieve this. There is also a higher focus on sustainability and compliance in the sector. Companies are fast deploying robust IT Solutions as one of the means to address these challenges.

Kale Logistics Solutions leverages its rich domain expertise to implement cutting-edge IT e-services for maritime sector, helping address the industry's key challenges effectively. Customer-centric approach and innovation prowess has always been our key strength. This is allowing Kale to deliver disruptive solutions and technology across the Logistics sub-domains.

With all these e-services come many advantages. The core benefits for all parties involved are higher efficiency and speed regarding port processes, particularly through automation and the reduction of paperwork. In this way, Maritime e-services contribute to sustainable transport logistics and support the ambitions to meet global carbon reduction requirements.



#### e-Solutions for Maritime Trade



#### Electronic Delivery Order (e-DO)

- Ports/Terminals | Shipping Lines / Line Agents |
  NVOCC | Consolidators | Customs Brokers | Freight Forwarders | Customs | Transporters
  - Traditionally, shipping lines permit the pickup of imported cargo through a paper-based Master Delivery Order. The importer/agent submits the original BL at the office of the shipping line, pay the D0 charges and hand overs the Original D0 to the Port/Terminal/Container Depot. In case of Consolidation shipments, it is a similar process for issuance of House D0. This process involves exchange of physical copies, the importer/agent visiting offices of multiple carriers, waiting to make counter payments and receiving paper copies of the Delivery Order.

Kale offers electronic generation of the Delivery Order from anywhere-anytime with charges paid online. This secured and single platform has the ability to issue DO for multiple carriers and facility to validate expired/soon to expire DO with autocalculation of DO charges. The platform has the capability to issue Master and House DO.

#### 进 e-FAL

Ports| Shipping Lines /Line Agents| Port Health Organisation | Customs| Other Government Agencies

The International Maritime Organization (IMO) has come up with a new global guideline on electronic information exchange between Carriers and Ports for vessel reporting and clearance processes at Ports. This has come into force from April 2020.

Kale offers a fully developed electronic FAL system in conformance to IMO requirements. All critical information such as Forms, Declaration & Certificates required by Port/public authorities related to the arrival, berthing, and departures of ships, as well as all data required to carry cargo and allows the entry and departure of passengers, processed through a single portal.

#### Container Appointment & Slot Management

- Transporter | Freight Forwarder | Container Depot | Port| Terminal
- Most Ports/Terminals face significant congestion at Port/Terminal gate as the container pick-up/drop appointment is completely manual. Due to the high variability of container truck arrivals with a significant concentration at peak hours there is congestion at the access gate with unbalanced utilization of the resources.
- Kale offers an electronic slot and container appointment management solution which enables the Transporters to do pre-advice with the terminal for all cargo & container gate in/out. This service also assists Transporters to assign the vehicles for requested jobs and place movement job orders for containers and cargo. The transporter is also able to book the slot with Port/Terminal for gate in/out of Cargo or Container for stipulated date & time. The Terminal/port can also configure and assign slots based on multiple parameters. This goes a long way towards smoothening gate operations by reducing the gate congestion issue.

#### Container Booking & Empty Release Order

- Shipping Lines | NVOCC | Consolidators | Customs Brokers | Freight Forwarders | Exporters
- Most Consolidators or Freight Forwarders connect with various shipping lines for container booking and freight rates manually. Shipping Lines follow the manual process for container booking and Empty Release Order. This procedure is time consuming and hampers the exports process on cargo shipments.
- Kale offers an online portal that enables an Exporter to nominate a Consolidator or Forwarder for shipments. The platform also enables all stakeholders to do booking of shipments with various Shipping lines and NVOCC operators. Shipping Lines can also issue the Empty container release order online that can be viewed & downloaded by Consolidator/Forwarder and Empty container depots.

#### **EDI Message Service**

- Shipping Lines | NVOCC | Ports | Terminals | Empty **Depots** | Container Freight Stations
- Exchange of information like shipment information and tracking are manually carried in the absence of EDI messages.
- Kale's online EDI module caters to different types of n 🎇 EDI messages, which are transmitted to various stakeholders. Kale offers UN/EDIFACT based industry standard messages like CODECO. VERMAS. COPRARI etc.

#### **Electronic Certificate of Origin (e-CoO)**

- Chamber of Commerce | Exporter | Freight Forwarder/Customs Broker
- The generation and processing of a certificate of origin (CoO) is often manual and involves a lot of time and effort. It is required for importer to produce the CoO to authorities for cargo clearance at the destination. As a result, exporter at the origin station has to obtain CoO from an authorised agency i.e. Chamber of Commerce. Exporter or his authorised Customs Broker has to go physically to pay the charges and collect Certificate of Origin.
- Kale offers electronic option to submit online request and approval of Certificate of Origin. This shall help exporters, authorised Customs Brokers and Chambers to avoid physical movement. It automates the final step for export documentation and reduces administrative time and cost with digital signature provision.

#### **Shipping Instructions**

- Shipping Lines | NVOCC | Consolidators | Customs Brokers | Freight Forwarders | Exporters
- The generation and processing of Shipping Instructions is mostly done manually. With multiple stakeholders involved the process becomes very cumbersome and is time consuming.
- Kale offers a online portal to submit electronic цж. Shipping Instructions which enables the Consolidator to prepare and submit the shipping instructions online and obtain the Bill of Lading from the shipping line.

#### **Electronic Manifest (e-Manifest)**

- Ports | Shipping Lines | NVOCC | Consolidators | Customs Brokers | Freight Forwarders | Customs
  - - The current manifest filing with local customs is manual, prone to human errors and time consuming.
- r∛ S Kale offers electronic Manifest Filing system for Shipping Lines and Freight Forwarders( Master and House level) to comply with local Customs as required by the latest filing mandate. Both Import and Export manifest can be filed as per the prescribed EDI formats. The system is also capable to receive and submit carrier manifest in any form like UN/EDIFACT format, excel or txt.



### Kale @ Forefront



#### Kale's association with global trade bodies

Owing to their portfolio of products and services, Kale Logistics have garnered recognition and appreciation from several global industry associations. Their experts hold critical positions in esteemed industry associations such as IATA, TIACA, and other industry trade associations. Kale is empanelled on the coveted United Nations Economic Commission for Europe (UNECE).



#### **Recognition on Trade Facilitation**

Kale's efforts in driving Trade Facilitation across the logistics domain have been recognised and appreciated globally. UPLIFT- Kale's Cargo Community System has been featured as a case study in the Supply Chain Management book, authored by Kellogg's Business School academicians. CODEX- India's first Container Digital Exchange Platform is an Electronic Data Interchange (EDI) based platform that has accelerated container throughput at leading ports. This solution has been recognized by United Nations (UNESCAP) as the best trade facilitation initiative from India and also appears in the list of 'Top 10 innovations' by KPMG in their 'Adding Wings' publication. A case study based on it has been presented to the Honourable Prime Minister as one of the innovations in trade facilitation.



#### **CLEAR VIEW - Our Annual Air Cargo Thought Leadership Summit**

CLEAR VIEW - A Kale Thought Leadership Summit for Air Cargo is a first of its kind interactive platform with participation from several global organizations such as leading Airlines, Cargo Handlers, Industry Associations, Regulators, Prominent Industry Consultants and industry leaders from across the world. CLEAR VIEW encourages Air Cargo industry to come out with participative and innovative practical solutions concerning the business.



#### **INDUSTRY AWARDS**

- 'Trade Facilitation Innovation' award from UNESCAP at the APTFF
- Best Technology Solution Provider in the Logistics Industry for 9 consecutive years
- The 30 Most Preferred Tech Workplaces
- Global Ports Forum Awards Port/Terminal Innovation of the Year
- CII Industrial Innovation Award



### INDUSTRY ASSOCIATIONS & TECHNOLOGY PARTNERSHIPS

- The International Air Cargo Association (TIACA)
- Pan Asian Alliance (PAA)
- International Port Community Systems Association (IPCSA)
- International Federation of Freight Forwarders Associations (FIATA)
- National Association of Freight & Logistics (NAFL), UAE
- Canadian International Freight Forwarders Association (CIFFA), Canada
- Airforwarders Association (AfA), USA
- Air Cargo Agents Association of India (ACAAI), India
- Microsoft Certified Gold Partner



### WHAT OUR CLIENTS SAY ABOUT US

We are excited by the possibilities that lie in store for us with Atlanta Airport's Cargo Community System, especially the reduction in truck waiting time. The scope of availability of accurate and complete information before the truck arrival has been leading to clarity, cooperation and understanding amongst the stakeholders. This initiative demonstrates the airport's commitment to be the bell-wether in creating the new generation digital infrastructure at the airport. It is also the keystone for facilitating the digital trade corridor between Atlanta and Schiphol airport.

> - Mr. Elliott Paige, Airport Director, Air Service Development at Atlanta Airport

We were impressed with the work Kale Logistics has done on Airport cargo handling side for Mumbai Airport and also at other port CFS/ICDs in India and abroad. They completely understand our business and that of our extended logistics value chain. With the CODEX platform, we look forward to better manage multiple document exchange between our members & trade partners, streamline the processes involved in container movement, track queue issue at port and reduce overall waiting time.

• www

### Kale Logistics Solutions Private Limited

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

**C** +91 22 4113 4113

info@kalelogistics.com

www.kalelogistics.com

Mumbai | Delhi | Dubai | Port Louis | Amsterdam | Atlanta