



Kale Logistics

Technology that Transforms



**Creating World Class Digital Cargo Infrastructure
at Airports through Airport Cargo Community System**



- 1 **Speaker Introduction**
- 2 **Kale Logistics Solutions at a glance**
- 3 **Industry Overview**
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- 5 **ACS – Key Features**
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First and only IT products company from India to have global industry platforms

A company recognized as the “**Best IT solution provider to logistics industry**” consistently for last 8 years



Industry recognition - Top 10 innovations in Logistics industry by **KPMG**, case study feature in **Kellogg's Business School** publication, adopted by **Indian Customs** and presented as a case study to **PM of India, CII Industrial Innovation Award**



Widest range of solution offerings for the industry



Recognized partners of industry trade bodies like **WCO, IATA, UNCEFACT, FIATA, TIACA, ASA, TIFFA, ACAA**

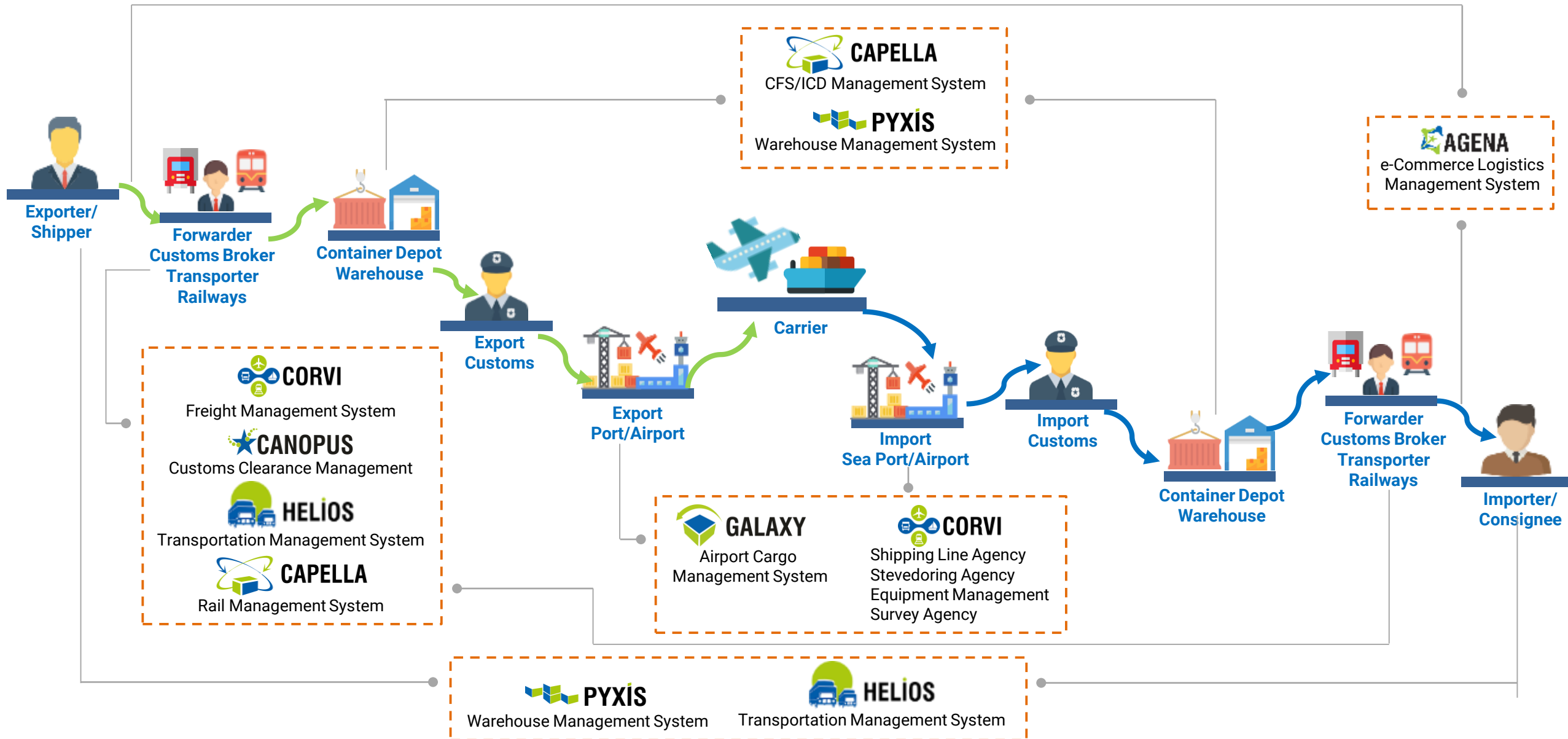


Experience of working with **Customs Authorities, Trade Bodies, leading carriers, terminals, handlers, freight and shipping management companies** globally



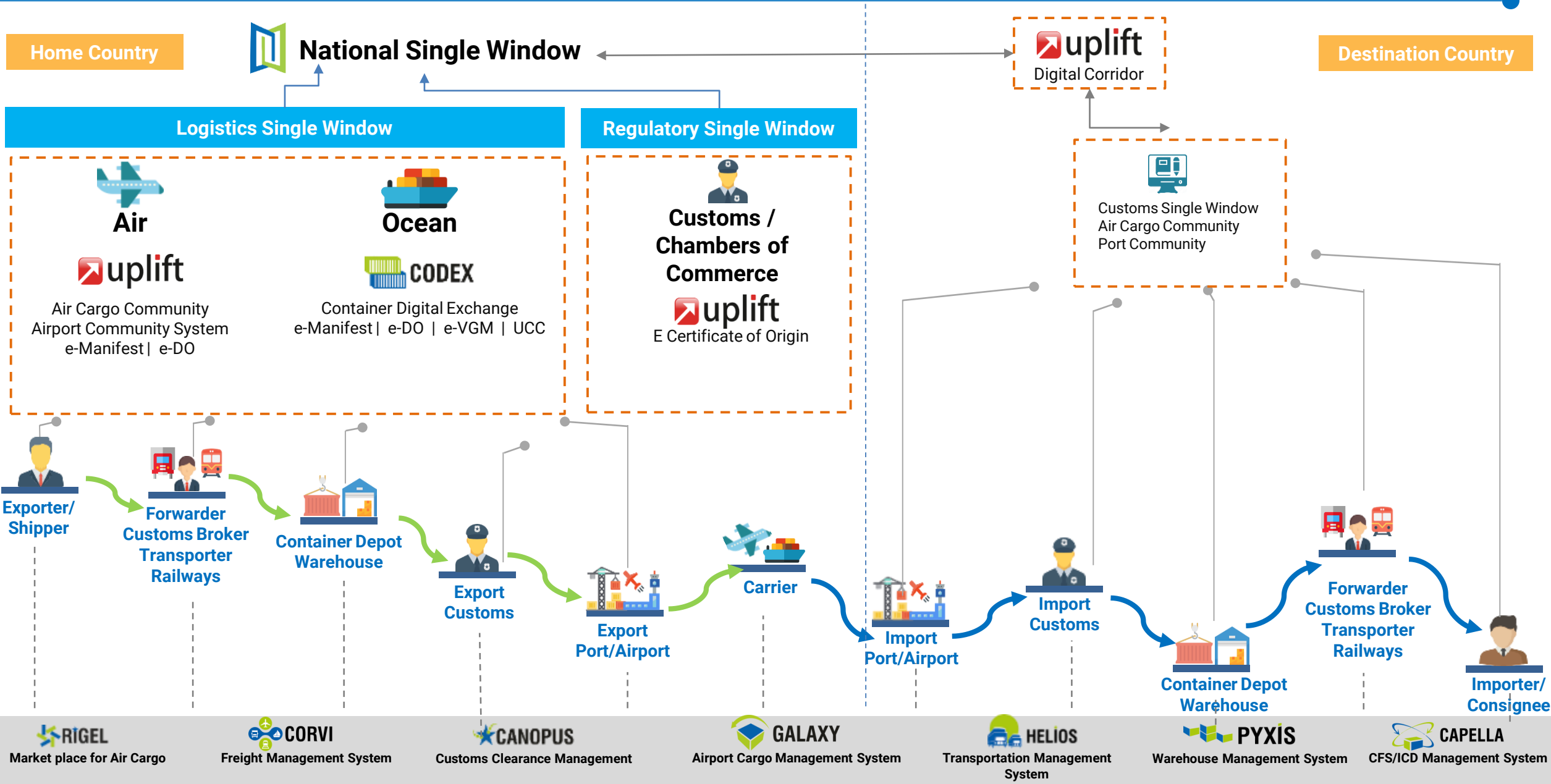


Enterprise Solutions: Comprehensive Turnkey Offerings





Kale - Trade Facilitation Platforms





Accolades: Best IT Solutions Provider YoY

2016
2014



IT Provider of the Year

Best Warehouse IT Solution Provider

2018



The **30** Most Preferred Tech Workplaces

2017



eProject of the Year by Golden Chariot at United Nations, Geneva

Best Air Cargo IT Solutions Provider

2019



Top **25** Fastest Growing Companies serving the Logistics Industry

2017



UPLIFT – India's first multi-modal cargo community system

Journey Towards Excellence – CODEX Endorsed by Indian Customs



Kale played an important role in getting India to rank 6th in eAWB adoption globally.



Best Technology Service Provider

2012



CII most innovative company in service sector

2018



75% reduction in container dwell time with CODEX



Best SCM Solutions Provider

2011
2012
2015





Kale's Air Cargo Foot Print



Web-based Airport Community System



Cargo Community Platform



GALAXY

Airport Cargo Management System
EXIM , Domestic, Custodian, GSA,



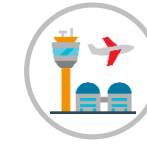
HELIOS

Transportation & Fleet Management System



CORVI

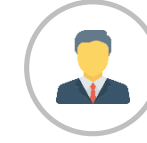
Freight Management System



6 ACS implementations



80 International airports



7 custodians



2 GSAs



HELIOS in 8 countries



CORVI in 12 countries



2Mn + AWB processed



15Mn + EDI messages



150+ Airlines connected



0.3 Mn USD payments across air cargo per day



3000+Users





Some of Cargo Handling Management (GHA) customers





ACS – What? Why? Who?





The stakeholders involved in air cargo value chain as follows:



Shipper/ Exporter



Freight Forwarder



Custom Broker



Transporter



Consignee/ Importer



Customs



Airline



Terminal Operator



Security



Chamber of
Commerce



**General Sales
Agent**

Ground Handling
Agents



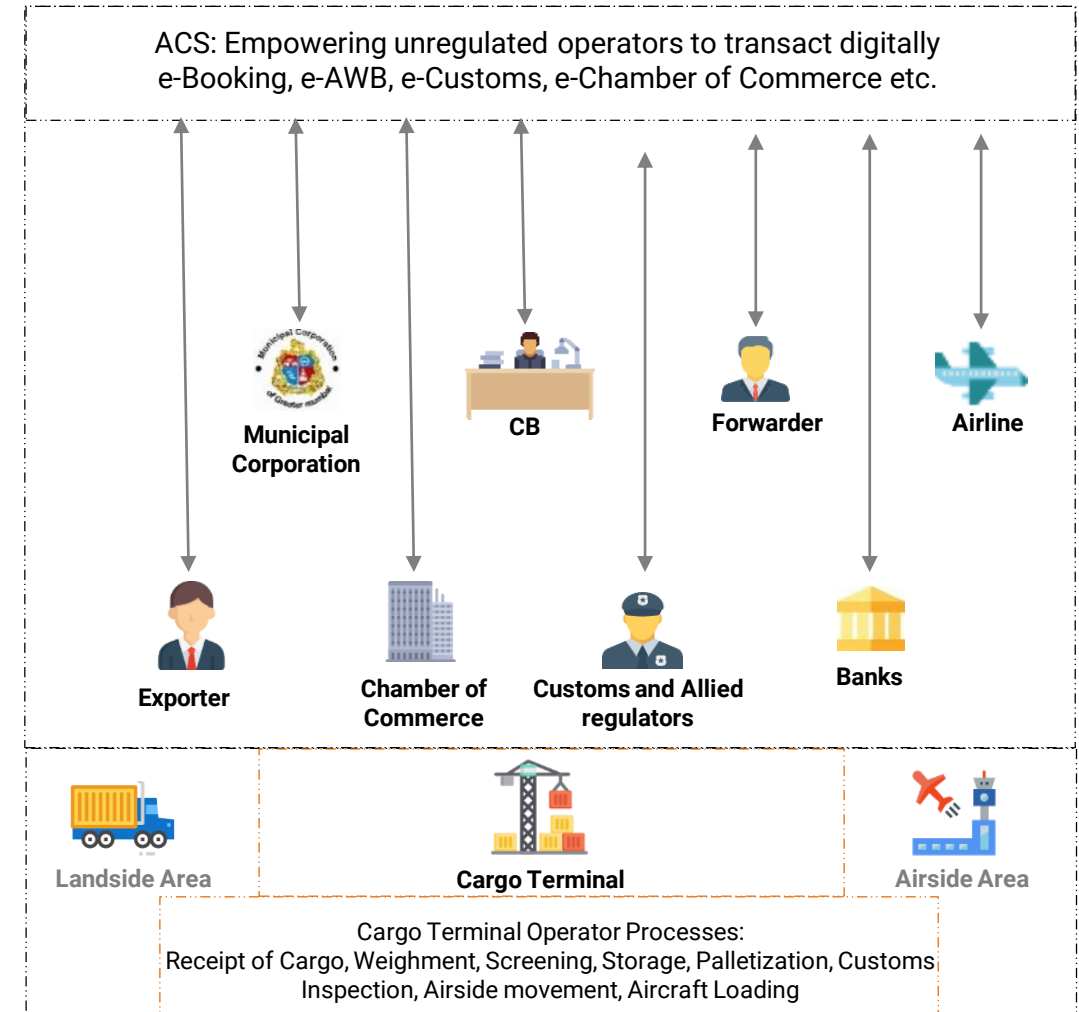
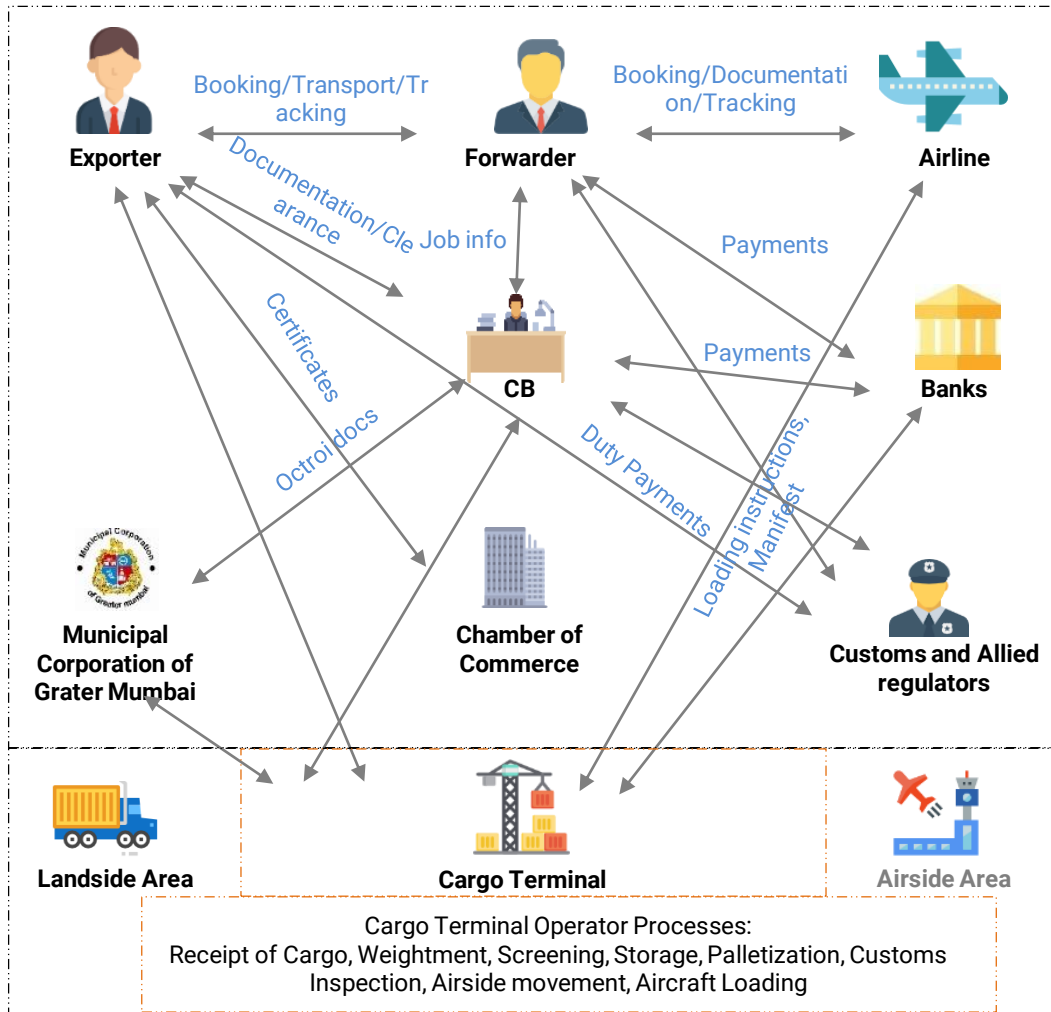
Government
Agencies



Banks

What is an Airport Cargo Community System?

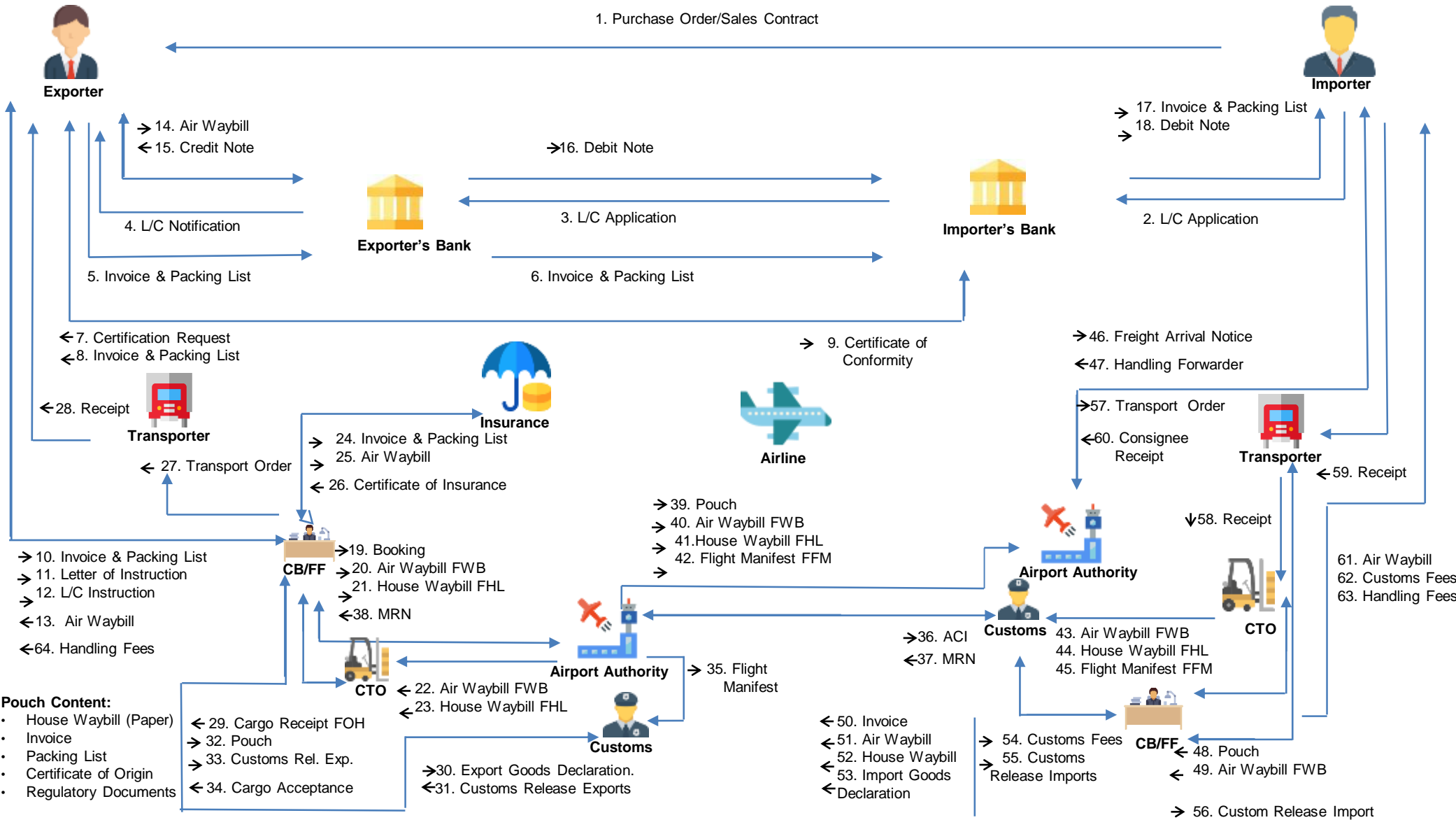
- An Airport Cargo Community platform is an electronic platform that facilitates digital interactions between airport stakeholders viz. Importer / Exporters, Forwarders, Customs Brokers, Carriers, Customs, GHAs, Other Stakeholders at the airport





- 1 Eliminating unnecessary paperwork at the airport
- 2 Faster processing of cargo – Reducing Truck Congestion
- 3 Making information available to airport prior to cargo reaching the airport thereby enhancing security
- 4 Better planning processes which further reduces dwell times at the airport
- 5 Facilitation of creation of Digital Corridors with partner airport communities (like BOM–AMS, ATL-AMS)
- 6 Help comply with global regulatory and industry requirements such as
 - Trade facilitation treaty
 - PLACI Compliance (Advanced Air Cargo Screening (ACAS) initiative of US CBP/TSA, PRECISE initiative of EU, PACT initiative of Canada)
 - Advanced security declaration requirements of countries that have signed up for WCO SAFE framework
 - e-AWB, e-CSD, e-freight initiatives
- 7 Bringing in more transparency and visibility in supply chain to reduce overall transaction costs
- 8 To aid country in improving its ranking in Doing Business initiative of World Bank

Process of industry



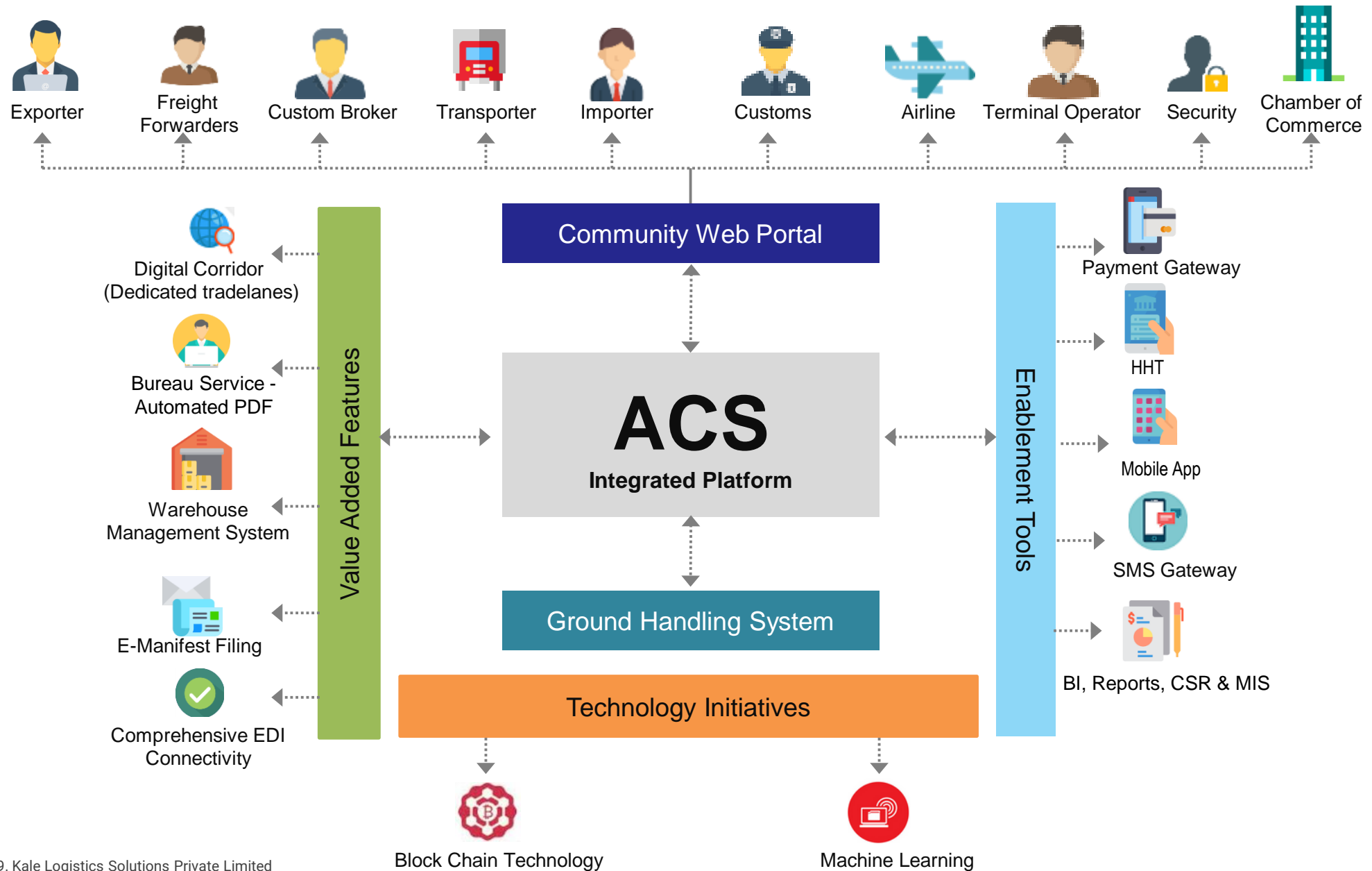


ACS – Key Features



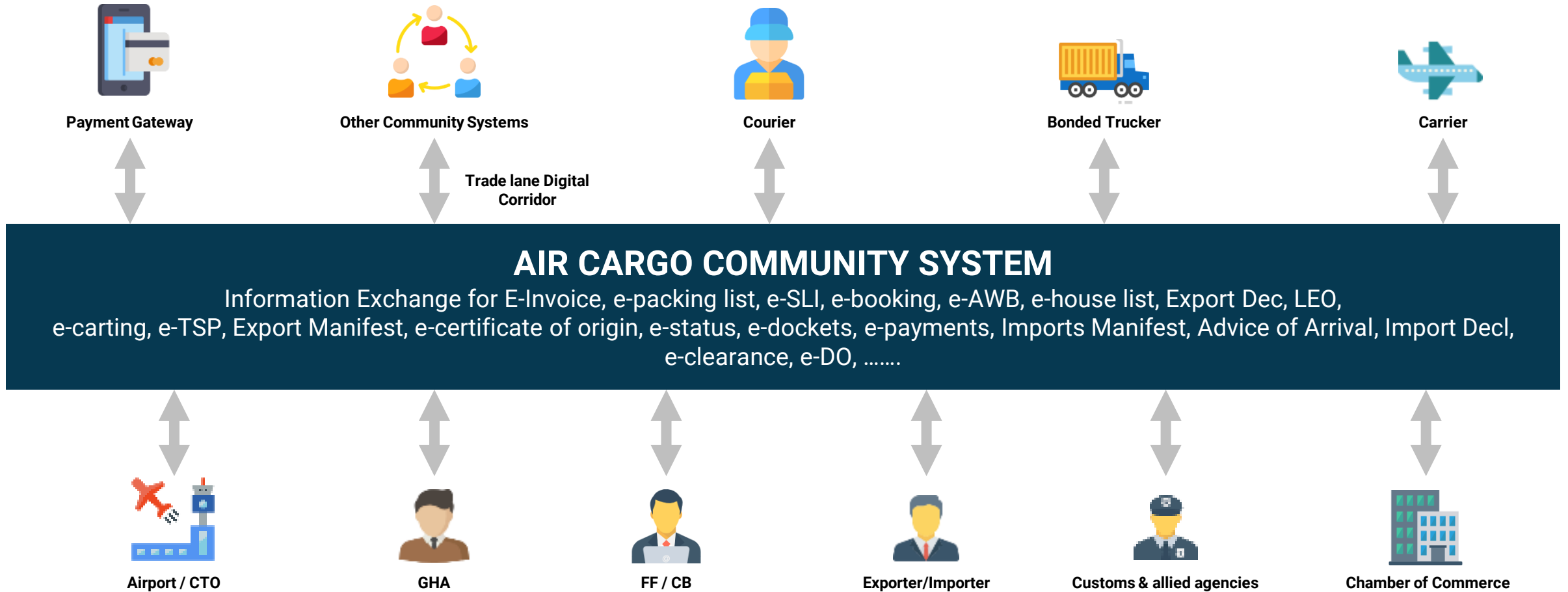


ACS Functional Diagram



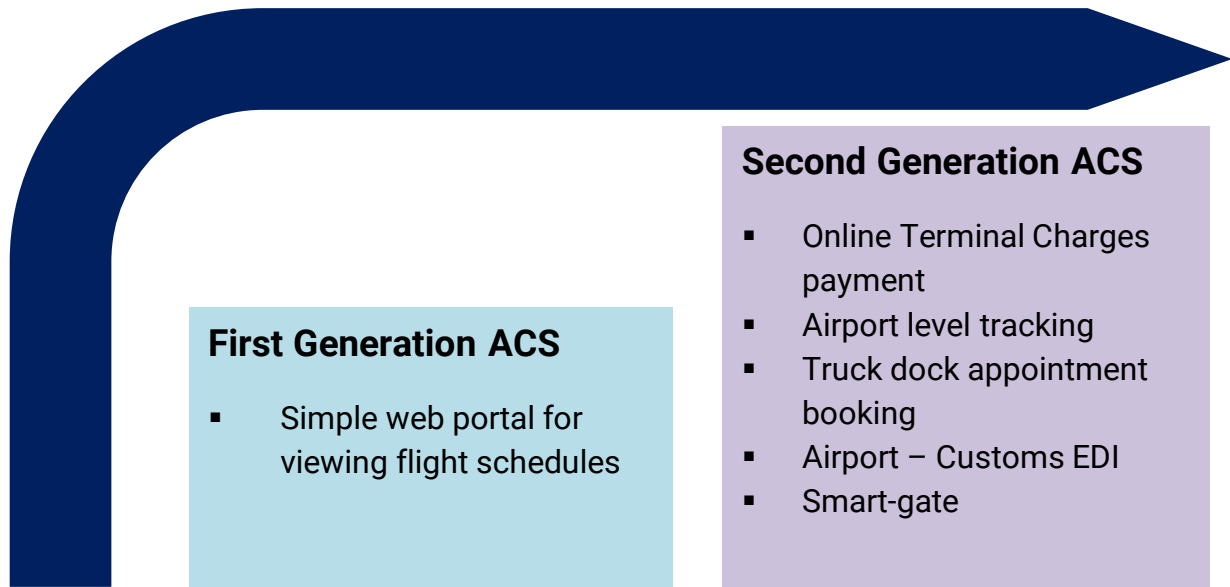


The ACS Context diagram





We at BIAL are going to leapfrog to the Next Generation ACS!!!



First Generation ACS

- Simple web portal for viewing flight schedules

Bahrain, Some US /European airports

Second Generation ACS

- Online Terminal Charges payment
- Airport level tracking
- Truck dock appointment booking
- Airport – Customs EDI
- Smart-gate

Major Indian Airports, Brussels, Hongkong, Amsterdam, Dubai, Paris

Next Generation ACS

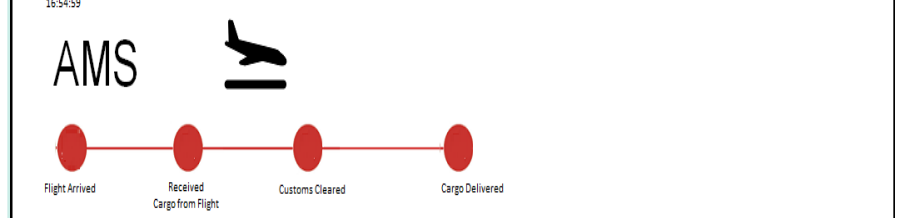
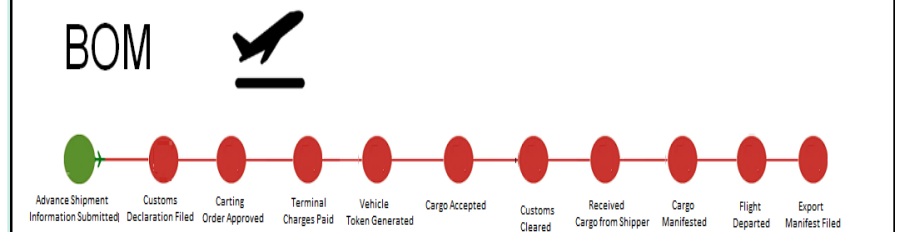
- e-AWB
- e-booking
- e-DO
- E-CSD
- Digital Corridors
- ENS/AMS filing with carriers
- Online vehicle token
- Online Certificate of Origin
- ASI with CTO
- Export / Import declaration filing with customs
- Online AWB printing
- Online Terminal Charges payment
- Airport level tracking
- Truck dock appointment booking
- Airport – Customs EDI
- Smart-gate

Next Generation ACS
GMAX - Mumbai

Add New AWB MAWB No. Search AWB Show All Generate Token Search Token Book Slot Search Slot

Details	MAWB No.	Agent/Shipper Name	Dest.	Last Updated	ASI	CO	SB	TSP	Token	Book Slot	TDG	BAG	EGM	Status	Edit	Detach	Hold
	589-0000011	ACS TATA MOTORS LTD	DXB	24 Nov 18 12:32					<input type="checkbox"/>								
	589-52525266	ACS DHL LOGISTICS PVT LTD	DXB	23 Nov 18 19:56					<input type="checkbox"/>								
	589-52525255	ACS TATA MOTORS LTD	DXB	23 Nov 18 19:48					<input type="checkbox"/>								
	589-52525211	ACS TATA MOTORS LTD	DXB	23 Nov 18 19:35		9W558		405									
	589-52525244	ACS TATA MOTORS LTD	DXB	23 Nov 18 19:14		9W558		500									
	777-42424211	ACS DHL LOGISTICS PVT LTD	LHR	23 Nov 18 18:57		ZZ123		1455									
	589-52525270	ACS TATA MOTORS LTD	LHR	23 Nov 18 18:56		9W1234		165									

Export Import
AWB No. 176 12345675



Shipment Details:

Air Waybill No. 176-12312344
 HAWB No. Flight No./Date EK 111 09/08/2018 Delivery Date 20/08/2018
 Origin BOM Destination AMS Cargo Description CARPETS
 No. of Pkgs. 10 Gross Wt. (Kgs) 45.45 Chrg. Wt. (Kgs) 45.45
 Shipper ABC EXPORTS Consignee TEST CONSIGNEE

CZK Shipment Details

Door To Airport			Airport To Airport			Airport To Door		
Message	Status	Date & Time	Message	Status	Date & Time	Message	Status	Date & Time
Pickup from Customer(PUP)			Booking(BKD)			Received at Import Hub Warehouse(RH)		
Received at Forwarders Warehouse(REW)			Creation of MAWB(FWB)			Third party Notification(TPN)		
Truck Departure Export Warehouse(DEW)			Freight Checked in at Departure Airline(RCS)			Document Hand Over Third party(HDP)		
Received at Export Hub Warehouse(REH)			Goods confirmed on Board Flight(DEP)			Truck Departure Import Hub Warehouse(DIH)		
Truck Departure Export Hub Warehouse(DEH)			Freight Acceptance at Arrival Airport(RCF)			Received at Import Warehouse(RIA)		
Transfer of Electronic MAWB(FWB)			Freight Arrival at Destination Airport(ARR)			Goods Out For Delivery(OFD)		
Transfer of Electronic Manifest(FHL)			Documents Received at Destination Airport(AWR)			Proof of Delivery(POD)		
Truck Arrival at Departure Airport(DOC)			Freight & Docs ready for Forwarder Pick Up(NFD)			KPI - Promised Delivery(PDD)		
			Documents Delivery to Forwarder(AWD)					
			Freight Delivery to Forwarder(DLV)					

TRACK AND TRACE

Chhatrapati Shivaji INTERNATIONAL AIRPORT MUMBAI GMAX GVK MIAL Air Exchange

AWB No. * 071 32943035

ASI 19-Nov-2018 11:55
 CO Request 19-Nov-2018 13:35
 CO Approval 19-Nov-2018 15:03
 TSP 24-Nov-2018 19:24
 Cargo Acceptance 20-Nov-2018 16:36
 LEO 20-Nov-2018 18:36
 RCS Action awaiting
 EGM Action awaiting

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VEHICLE TRACKING

Chhatrapati Shivaji INTERNATIONAL AIRPORT MUMBAI GMAX GVK MIAL Air Exchange

AWB No. * 071 32943035

EVT Number	Vehicle No.
EVT1811200233	MH04FP3821

Line Area
 Gate-IN
 Dock-IN
 Dock-OUT
 Gate-OUT

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Applicable charges

Chhatrapati Shivaji INTERNATIONAL AIRPORT MUMBAI GMAX GVK MIAL Air Exchange

Applicable Charges

CARGO TARIFF

IMPORTS TARIFF

(A) TERMINAL CHARGES

Sl No	Type of Cargo	Rate per Kilogram	Minimum rate per Consignment*
(A)	(B)	(C)	(D)
1	General	Rs. 5.12	Rs. 138.00
2	Special and Valuable	Rs. 10.22	Rs. 270.00

(B) DEMURRAGE CHARGES

Sl. No.	Cargo Type	Up to 96 hrs incl. free period	Between 96 to 696 hrs	Beyond 696 hrs	Min. rate per consign*

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Close



e-Booking



e-AWB



e-Certificate of Origin



e-Customs



e-DO



AWB Stock Management



Advance Shipment Information to Terminal operators



Online Carting Order Request



Online TSP and handling payment



MAWB/ HAWB



Vehicle Token Management



SIR (Shipment Information Record)



e-Manifest



EDI Messaging



Issuance of CONSOL DO



ACS – Key Benefits





Freight Forwarder/ Custom Brokers

- Paperless processing of shipments thus eliminating the risk of losing valuable commercial information
- Eliminate travelling to various airline offices / airports for getting the carting stamps, paying terminal charges, submitting advance shipment information & getting vehicle tokens
- Savings in paper handling cost by elimination of multiple copies of AWB generated for acceptance at truck dock, Cargo screening & Carting Order
- Supports electronic Certificate of Origin
- Supports community initiatives like ACAS, PRECISE, PACT etc.
- MIS and reports of business activities



Airport Operator

- Better productivity of trade/airport staff at the airport
- Digital records of events for audits
- Faster document and cargo processing at the airport
- Better security for the airport
- Possibility of reduced dwell time
- Reduction in malpractices / errors at the airport which results in loss to exchequer
- Advanced shipment visibility
- Efficient planning of warehouse activities
- Regulatory Compliance like e-freight
- Online updates to stakeholders and e-payment of terminal charges reduces footfall at airport



Carrier

- Implement initiatives like e-freight successfully
- Higher efficiencies in booking processes
- Cost reduction in documentation
- Reduction of papers & data entry errors
- Better operations planning
- Opportunity to become a preferred carrier with the community leading to better business opportunities
- Single Window for Digital documentation



Before

- Truck congestion is an issue at cargo airports. The arrivals and departures are not coordinated which leads to higher dwell time.
- Effect on high-value and time-sensitive cargo
- Shipper/consignee charged penalty for wait time and storage cost
- Neglected air cargo community, the cargo might land elsewhere



After

- When freight forwarders share shipment data and pre-identified errors earlier, cargo handlers can anticipate and prepare for the required checks.
- Better warehouse management to handle more trucks per hour.
- Availability of accurate and complete information before the truck arrival leading to clarity, cooperation and understanding.
- Reduced dwell time
- Terminal now handles 40% more cargo with advanced planning



Before

- Manual and complex paperwork and data re-entry at every stage.
- Cost to export for documentary compliance \$ 60 for USA as against \$35 for OECD countries and cost to import for documentary compliance \$ 100 as against \$24 for OECD. Trading Across Borders report from World Bank 2019
- Increased cargo processing time
- Non-compliance
- Loss of revenue and goodwill
- Customers not presenting proper documents at right time



After

- Paper-less air cargo supply chain with cheaper, accurate and reliable electronic messaging
- e-Freight & e-AWB , ONE Record – Compliance to industry standards
- Eliminates data re-capture, reduce freight wait-time, quality electronic data for tracking status of freight
- Contribute to nation's Ease of Doing Business ranking with World Bank
- Interfaces with Customs, Airlines, and other security agencies
- Services available 24*7
- Contribute to environment by reducing paper consumption



Before

- Cyber attacks
- Terrorist attacks and explosives
- Lack of ACI, PLACI, Single Window, e-AWB, e-Freight
- Laggards in technology adoption and innovation



After

- Secured platform – Azure Cloud, site recovery service, encrypted database back-up
- Role-based access control
- Air Cargo Advance Screening (ACAS)
- Pre-Loading Advance Commercial Information (PLACI)
- TIACA – strongly supports automation and paper-free transactions
- IATA – e-Freight, e-AWB, Advance Cargo Information (ACI)
- WCO – Single Window
- Artificial Intelligence, Blockchain, Internet of Things, Cargo Connect, Interactive Cargo



Before

- Multiple IT systems which do not communicate with each other
- Limited information sharing
- Poor quality of data
- No data to predict/forecast
- Outdated technology platforms



After

- Online portal for terminal, agents, cargo handlers to have complete visibility throughout the shipment lifecycle
- Accelerate the movement of goods, achieve quick clearances from customs
- HHT, RFID tags, Mobile Application for real-time information
- EDI Linked
- Digital Corridor



Before

- Below industry average productivity rates
- Increasing labour costs
- Lack of qualified resources
- Not an attractive career option



After

- Automation and less manual intervention
- Enable collaboration for dispersed workforce
- Improved productivity and efficiency
- Improved communication through technology
- Attract talent



Before

- No new products
- Unable to attract more cargo
- Stagnant market share
- Unable to facilitate trade



After

- Improved business confidence
- New solutions and services offered - including time and temperature-sensitive cargo such as pharmaceutical and health care products, live animals, dangerous goods and perishables
- Partnerships and tie-ups
- Increase revenues and market share



Our Success Stories








Pioneering Air Cargo Trade through a Single Window at Mumbai International Airport

BUSINESS CHALLENGE

 Low Cargo visibility

 Lack of an online platform for information exchange

 Duplicity and redundancy of work

 Inadequate information for planning and security





Reduced no. of documents to 81%





Reduced document handling time by 80%

ACS SOLUTION

Single Window for digital documentation 

Better Supply Chain planning 

Better productivity of trade and airport staff 

Reduced dwell times 



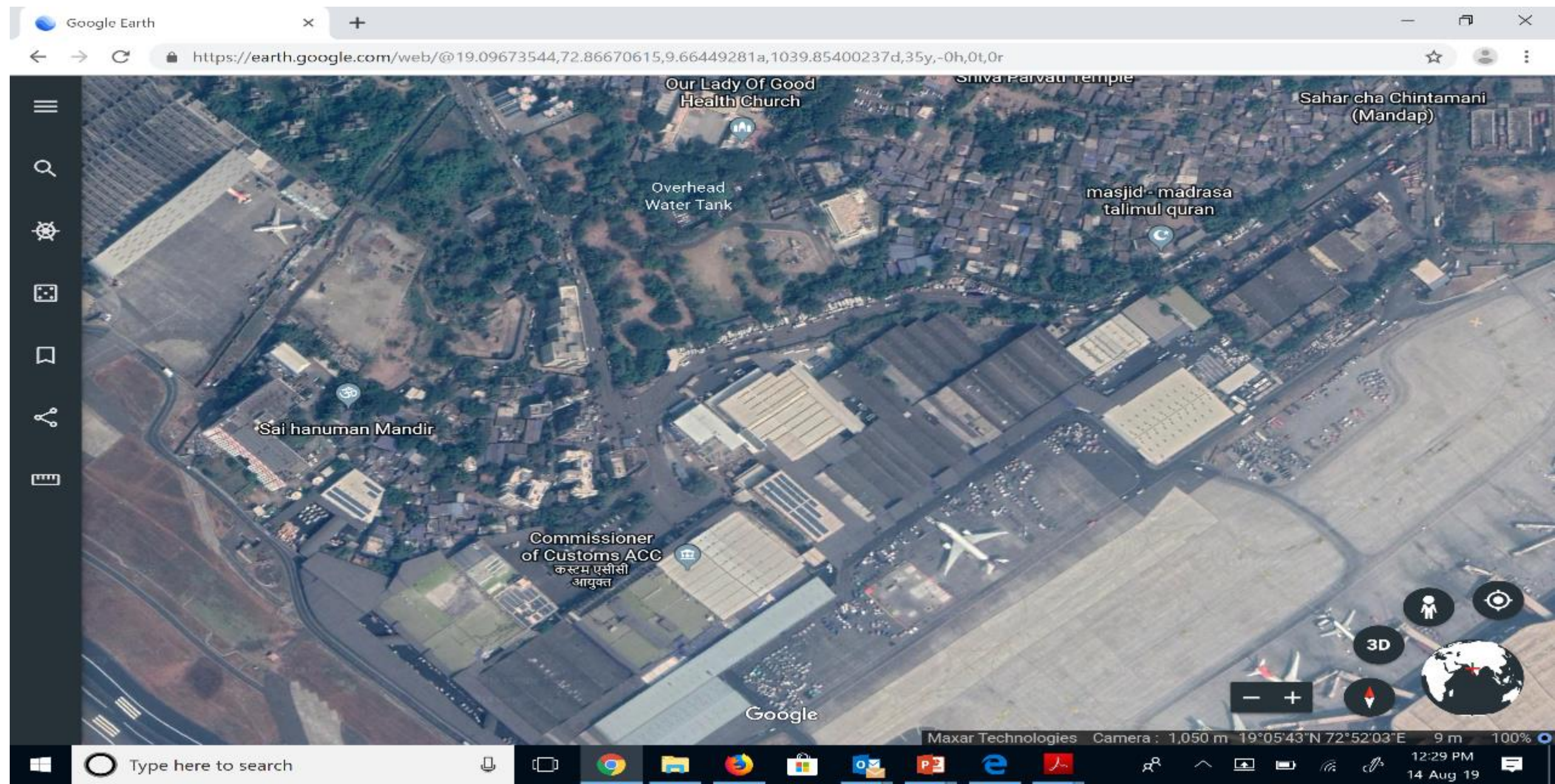
Reduced truck dwell time by 75%

Complete Visibility

Post implementation of ACS, Customs amended messages get updated in the system on time. A wide range of standard and MIS reports are available in the easy to use reporting module. These include reports for operational activities, tonnage, revenue etc. Hundred percent transactions can be carried out through this web portal enabling web track and trace with timely status updates.






Mumbai – World's most constrained airport





Pre and Post GMAX :Benefits Comparison

Parameter 	Pre GMAX 	Post GMAX 
Document handled (including copies)	100+	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

100% adoption in a year's time



Moving from our legacy system to a web-based solution like GMAX, we realised multiple benefits like compliance with industry regulations; enhanced customer satisfaction with regular consignment status update; data integrity facilitated by single point of data entry and a wide range of MIS reports that support decision-making. Post implementation of the GMAX there has been a complete transformation in the way cargo is processed at Mumbai airport. 100% transactions are being carried out through web portal enabling web & mobile based track and trace with real-time status updates. Customs amended messages are getting updated in the system on time.



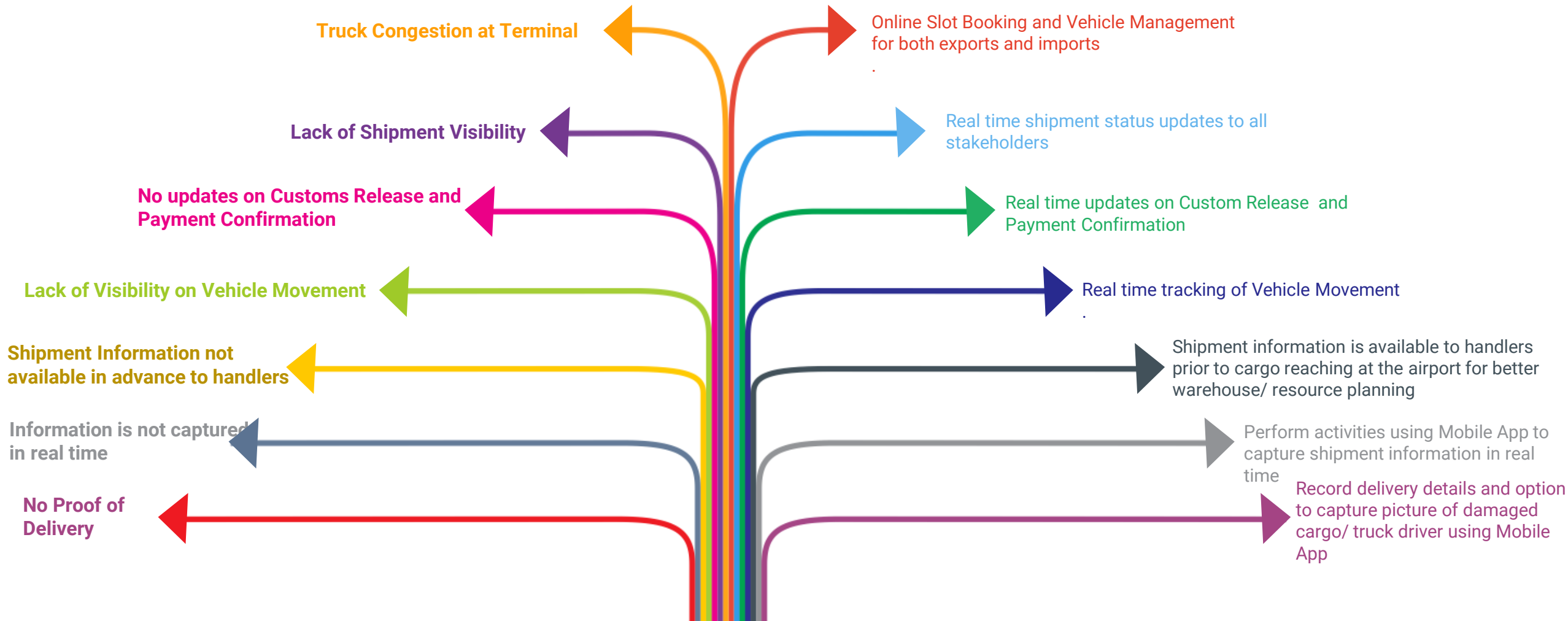
- Mr. Manoj Singh, Senior VP & Head-Cargo, Mumbai International Airport



Current Pain Areas for Stakeholders and ACS Solution

Current Pain Areas for Stakeholders

ACS Solution





ACS- Implementation Process

Meeting all selected pilot members stakeholders to understand their existing process, pain areas

Arrive at a common agreed process flow

Identify high level integration points

Document and develop ACS as per common agreed process flow

Do pilot run with identified pilot run members

Understand the missing gaps, functionalities

Further discussions with stakeholders for integration

Make changes as per new identified missing functionalities, process

Implement the ACS

We are here in the process now

PLAN

- Objectives
- Sponsor/champion
- Funding
- Governance
- Identify participants and communities
- Quantify and qualify potential benefits
- Awareness campaign

PREPARATION

- Document systems and processes
- Regulatory framework
- Readiness survey
- Re-engineer systems (triage)
- Plan complete reengineering
- Publish Blueprint/SLAs

DESIGN PROTOTYPE

- Plan for "single" principles
- Simplify, harmonise, standards, data modelling
- Initiate Governance groups
- Define technology TOR
- Define business model
- ICT Procurement process
- Select vendor
- Plan pilot/prototype

IMPLEMENT

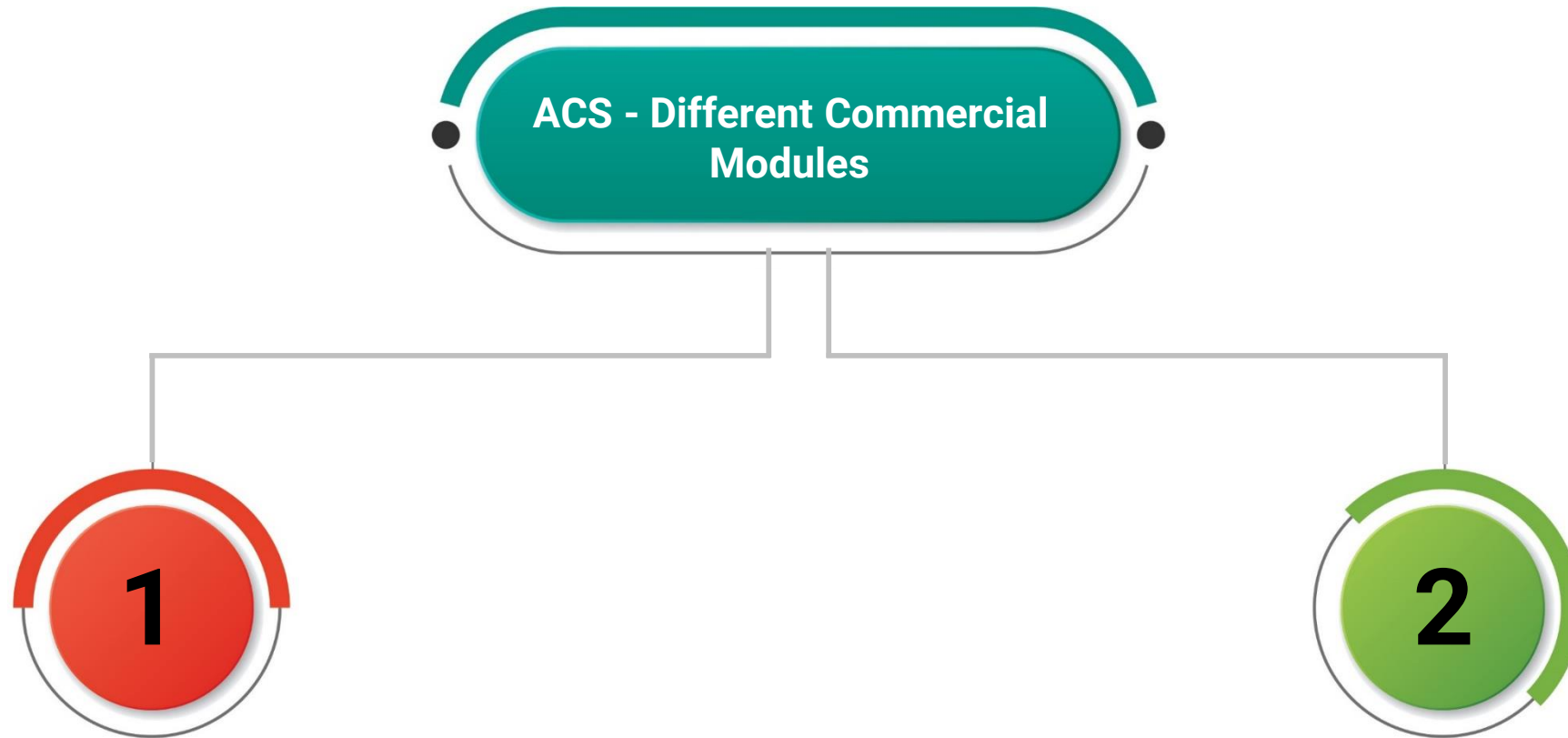
- Implement initial user
- Revise plans based on early experiences
- Progress legal/regulatory changes
- Follow through on re-engineering

OPERATE

- Public/private sector dialogue
- Manage vendors
- Refine collaborative governance model
- Refine business and marketing models
- Strengthen SW institutions

ROLL OUT

- Adapt to all types of user
- Aim for 100% electronic system-devise variations
- Develop roll out/marketing campaigns
- Metrics/quantify benefits/remedial actions
- Regional/Global SW plans and actions



ACS - Different Commercial Modules

1

2

▪ Airport appoints Concessioner for ACS:

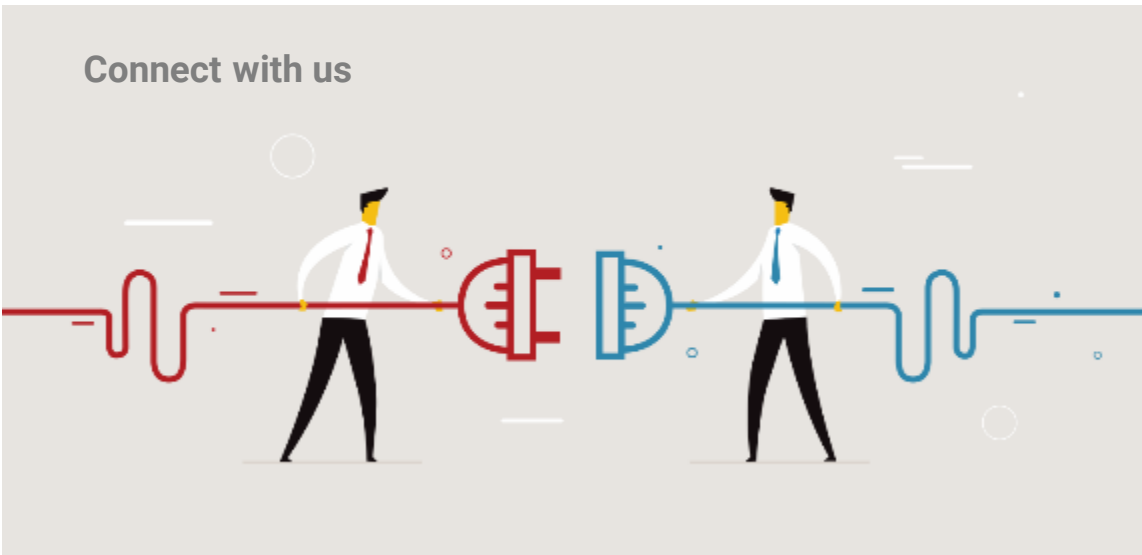
- Kale and Airport operator enter into agreement to develop, maintain, support ACS
- Airport appoints Kale as concessioner for ACS
- Kale makes all investment for ACS. There is no additional expenses to the airport operator
- ACS fee is charged to end users stakeholders like Freight Forwarder
- Kale and Airport operator share the revenue as per agreed percentage
- Thus, airport operators gets additional revenue without making any investment. Also it is recurring revenue

▪ Airport operator acts as a facilitator

- Airport operator and Kale enters into agreement to develop, maintain and support ACS
- Airport operator enters into agreement
- Airport operator along with other stakeholders form steering group, which consists of representatives from all stakeholders
- ACS fee is charged to stakeholders as per agreed rate
- Revenue is shared with airport operator as per agreed percentage

Thank You

Connect with us



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