



## **Top View**

Dear Industry Colleagues,

The science of today is the technology of tomorrow. - Edward Teller

All of us globally in the air cargo industry are deluged with technology jargon like Blockchain, Artificial Intelligence, Data Clouds, Driverless Trucks, Robotics, etc. However, rarely are the use cases of these technology buzzwords discussed in detail in the context of our industry.

We see the next generation air cargo community systems becoming the data backbones for the industry, on which several applications rendering an efficient and transparent supply chain will reside. Blockchain Technology will influence the processes from Certificate of Origin to paying the terminal charges to give accurate real-time information on shipment status. Robotics in Logistics will change the industry completely. Drones have already started showing its potential and very soon, we can see drone deliveries of small packages already becoming a reality. Technology surely will make air cargo move ever so smoothly!

It gives me immense pleasure to share the honour that Kale Logistics Solutions', state-of-art Port Community System -CODEX won the most prestigious 'Trade Facilitation Innovation Award' at the United Nations ESCAP: Asia-Pacific Trade Facilitation Forum 2019. CODEX was recognized for its contribution to the Maritime sector and Digital India for ease of doing business in addition to facilitating millions of dollars of tax refunds to exporters expeditiously. I sincerely thank you all for your continued support and patronage in all our endeavours.

We will be happy to receive any feedback at nfo@kalelogistics.com

Amar More Director

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REFLECTIONS Interview with Mr. Elliott Paige Director, Air Service Development, Atlanta International Airport



ARTICLE Port Community System 3.0



SPOTLIGHT Revolutionizing the Freight Forwarding Operations with Intelligent Freight Management System



ASK THE EXPERT Bhushan Kaki Practice Group Manager- Trade Facilitation Kale Logistics Solutions



Happenings @ Kale

Meet Elliott Paige, Director for Air Service Development at Hartsfield-Jackson Atlanta International Airport. He has a successful career in promoting trade and investment for over two decades, including serving 10-years as a diplomat in Geneva, Switzerland he worked as an international civil servant with the World Trade Organization and the United Nation's International Trade Center. He was a lead negotiator in the Trade Facilitation Agreement and was instrumental in getting support from many developing countries. Hartsfield-Jackson Atlanta International Airport is implementing the first cargo community system in the United States under his guidance.

## Mr. Elliott Paige

Director, Air Service Development, Atlanta International Airport



- CRUX Hartsfield Jackson Atlanta International airport is amongst the busiest airport in the U.S., it has handled almost 705,000 metric tons of air cargo and mail in the year 2018. What are the day-to-day challenges faced by the airport in handling such large cargo volumes and multiple stakeholders involved?
- We at Hartsfield Jackson Atlanta International Airport, work tirelessly to improve efficiency at the airport. We do our best to bring all stakeholders to the table to solve problems cohesively; which itself is a challenge as satisfying multiple stakeholders' interests is an uphill job. We face challenges like truck traffic, labour shortages, high turn-over of labour supply, which pushes up the costs of onboarding and training for our ground handlers; challenges with warehouse space, being able to build facilities fast enough to satisfy growth and being able to demand the construction of state-of-the-art facilities. Soon, we will have challenges with parking spaces for aircraft as we are growing at a way swifter pace.
- **CRUX** The Air cargo industry is at a very interesting phase today. How has the air cargo industry in the U.S. evolved in the last decade and where do you see it heading in the next five years?
- In the last decade, the Air Cargo industry in the U.S. is becoming more crucial due to the growth of the e-commerce sector. The industry is driven by the massive numbers of revenue gains from e-commerce being \$2.8 trillion and \$10.6 trillion for B2C and B2B trade respectively. With the advent of e-commerce, the U.S.A. is experiencing over 20% annual growth in e-commerce related businesses. With the same and next-day delivery becoming a norm, we recognize that to truly be a player in the air cargo industry we must bring our standards up and be at par with international airports.

Recently I met with stakeholders in a Supply Chain Logistics Advisory Board for the Georgia Institute of Technology, and we are realizing that production supply chains are changing towards greater speed and customization. There is more emphasis on Machine Learning, AI, and e-commerce, and merging the Internet of Things, Cyber Security with physical supply chains. In the next decade, air cargo will be smart and handling large volumes of cargo integrated with plane schedules, production supply chain and consumer customized orders. It's already happening. Let me quote an example.

A friend of mine bought a customized rug online. Within 30-minutes of her order, a machine in a warehouse in The U.K. was making the rug according to a message she received on her phone. Within 24-hours, the rug was packed and shipped. In the next 5-years, we will see the entire house being fabricated using 3-D type printing technology, and same-day international payments for services using Blockchain to be the norm, making trade and data logistics corridors lightning fast.



CRUX

As you have worked in proximity with the WTO body, what role has WTO policies played in guiding the U.S. in establishing its policies and regulations to facilitate its air cargo industry and trade in general?

Elliott

CRUX

Negotiations were tough. While I was a trade negotiator, we could not come to agreements on many things like services trade, domestic regulations, fisheries subsidies, trade rules, reforming dispute settlement, development issues, agriculture, and non-agricultural market access and subsidies.

One vital and new agreement we did get passed was the Trade Facilitation Agreement (TFA), which came into force in February 2017. Though efficiency is the key determinant of whether a country participates in the global value chain or not, the Trade Facilitation Agreement is one agreement supported by all countries. The TFA cuts the red tape and bureaucracy and creates more transparency in domestic regulations. Generally, it's no secret that the U.S. government is of the viewpoint that this multilateral trading body has not been supporting its interest.

Comparative advantages always change over time and its evolution guided by recent globalization has meant that the U.S. has lost comparative advantages in some sectors to other countries, including many Asian countries. The USMCA (United States, Mexico, and Canada Agreement), often referred to as NAFTA 2.0, serves as a good example of the direction of U.S. trade interests. The agreement is geared to make American firms more competitive through greater mechanization and to protect the U.S. producers of intellectual property rights from being compromised. It's clear that USMAC, and turbulences like the trade war with China, will hurt small producers and farmers. The U.S.-China trade war has made the cost of production for small manufacturing producers higher, through higher bond rates, insurance as their risks increase, costs, even freight, etc. But this is what happens in any turning point in trade policy. No trade policy can remain unchanged forever, because of evolving comparative advantages. Where some small producers fail, others will rise. Trade will go on through other channels.

# Schiphol Amsterdam airport and Atlanta Airport are collaborating for the Trade Corridor. How will a robust Air Cargo Community System shape up the future of the supply chain at both the airports?

June 2019, Schiphol-Amsterdam and Atlanta Airport officially launched the trade and logistics corridor. The idea is to build equal high standards of service in both airports, utilize the connectivity we both have as hub airports, to make us preferred airports to move air cargo – thus the "corridor" bit. To make it function, we must have joint marketing strategies, advocacy on both sides of governments that see the value of trade in the jobs and business revenue it provides to the economy and an efficient cargo community system. One of our major challenges is that there is no platform for stakeholders in the supply chain to connect on single consignments.

A trucking company in Atlanta revealed that about 25 percent of their trucks go to the airport and because they have little information on the cargo, they leave the airport without picking up anything. That's wasted fuel, payments to drivers, and resources, not to mention congesting the roadways and warehouse dock doors with trucks that are not moving cargo. I did not mention the added pollution.

With Air Cargo Community System, the truck will know when the cargo will arrive, how many pieces it is, whether all the delivery payments have been made, and be able to negotiate exactly when to come to a precise dock door to collect the cargo.

The need for greater efficiency, the requirement by consumers for less costly freight and regulations being enforced on truck drivers and less and less space on our highways for trucks. It's vital to have a transparent system to manage these resources. Stakeholders in Atlanta are excited at the prospects.





Though ports have embraced automation more slowly than comparable sectors, the pace is now starting to accelerate. They are facing a shortage of human resources, poor data, siloed operations, and difficulty handling exceptions. Other challenges include poor hinterland connectivity with rail, road, highways, coastal shipping, inland waterways, and infrastructure woes.

Technological innovation plays a key role in developing solutions to boost productivity in the most cutting-edge ports in the world. Port Community System (PCS) is a good example. But, what is PCS? It can be defined as:

- A neutral and open electronic platform enabling the intelligent and secure exchange of information between public and private stakeholders in order to improve the efficiency and competitive position of the seaports' communities.
- Optimises manages and automates smooth port and logistics processes through a single submission of data and by connecting transport and logistics chains.

This is the tool not only brings together the stakeholders of the maritime sector onto a single platform it also facilitates government-tobusiness, business-to-government and business-to-business transactions in a highly secured environment. Customs, 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 aims to provide the business community with a streamlined process for submitting export and import information to customs and other government agencies. The electronic platform provided by a PCS is at the heart of the 'spider's web' of the logistics intelligence required for smooth trading, relaying messages and enabling the re-use of data wherever possible, so that the many stakeholders involved need enter their data only once. The alternative can be a sea of paper, allied with inefficiencies, inaccuracies and far too much duplication of work with manual intervention. Built on an open platform, the platform technology can integrate any new concept or module available without disturbing the existing ecosystem. This feature offers the platform unlimited scope for growth and expansion.

#### Some of the benefits of PCS are:

- Faster customs clearance as documents and data submitted in PCS is readily available to the immigration officers.
  Efficient collection of customs duties from traders and effective detection of smuggled goods.
- Faster approval of clearance certificates for quarantined agriculture.
- Port authority develops the capability to provide various port-related services online to the shipping companies and agents, including tracking of cargo movement beyond the port.
- Improved management and optimal use of vessel space.
- Better coordination for shipping agents in terms of booking, procurement, and document processing activities via a single electronic interface with the common portal. Faster declaration of goods by agents through online submission for customs processing and electronic payment.
- Time saving and higher efficiency as information can be submitted to port authorities electronically.



#### Real-time berth planning

Berthing slots and labor can be better used by forecasting ships' arrival times more accurately, resulting in up to 8 percentage points of EBITDA<sup>1</sup> potential for terminals

### Predictive maintenance for key assets

Predictive and remote crane and vehicle maintenance can lead to a 30–50% reduction of total machine downtime, increasing the availability of critical port assets, such as STS<sup>2</sup> and RTG<sup>3</sup> cranes

#### Automated yard planning

Advanced analytics and modeling make it possible to swap assets, reroute containers dynamically, and adjust routing and speed in real time

# Demand planning at gate

More accurate predictions of consumer and production behavior can help terminals better estimate demand for gate arrivals

With technologies like Blockchain, Machine Learning, the Internet of Things (IoT), and 5G PCS can take a giant step further. This PCS 3.0 the next generation PCS is expected to cut operating expenses by 25 to 55 percent and raise productivity by 10 to 35 percent as per recent reports. PCS 3.0 will enable the shift from asset operator to service orchestrator, part of a larger transition to Industry 4.0. Thereby providing grounds to digitally-enabled efficiency gains throughout the world trade and economy. PCS 3.0 will generate more value for port operators, suppliers, and customers alike.

In the model for the future, PCS 3.0 powered ports will enlarge their role by synchronizing physical and information flows inside and outside terminals to enhance the port ecosystem's broader, system-wide efficiency. Forward-looking ports will push toward this next horizon, beyond automation, in the coming era. Every player—shippers, terminal operators, trucking companies, railroads, shippers, logistics companies, freight forwarders, and consignees will be connected to optimize the entire supply chain ecosystem. Ports can experience optimization through advanced analytics, and dynamic scheduling. The cornerstone of PCS 3.0 will be automation, which—if implemented and configured appropriately—can transform ports into highly reliable, efficient and flexible logistics hubs. It can ensure direct predictable physical flows and the use of extensive data with advanced analytics to buffer many variables in the transportation network. Ports, now often seen as constraints in transportation networks, could then actively resolve problems in other parts of the value chain.

This journey from Port 1.0 to Port 3.0 has been evolutionary, but PCS 3.0 requires a leap into the future and bold changes in the operating model with technology as the backbone. It is essential to involve the relevant stakeholders and to develop, together with them, a new business and governance model for collaboration, trust, and communication. Only then will PCS 3.0 unlock its full potential. Port community systems can, and will, play a major role as the world moves towards the Single Window concept.





Freight and Shipping Logistics comprises of highly fragmented Logistics processes. Operations are often constrained by the abundance of paperwork and redundant operating procedures. Inability to exchange information seamlessly between forwarders, shippers, Customs Brokers, carriers, airport/port terminals. The overseas agents and consignees aggravate the situation. This builds up operational inefficiencies and acts as a roadblock to proactive and informed decision making.

As per industry estimates, the global third-party logistics (3PL) market is expected to cross \$1,513 billion by 2025, with an estimated CAGR of 7.1% between 2018 and 2025. To reinforce this kind of growth it is imperative to implement an acutely cohesive system that offers enterprise-wide business functionality and security at an affordable cost. From Kale Logistics Solutions suite of logistics software solutions, CORVI is one of the most intelligent software for the freight forwarding operations with some state-of-art capabilities. CORVI is a web-based freight forwarding software system, specially designed to meet the end-to-end needs of the modern-day Freight Forwarders/Agents. It integrates every aspect of freight forwarding operations like consolidation, imports, and exports, transshipment, on-forwarding, etc., and drives complete automation.

Be it freight forwarding, sales & CRM, multimodal operations, document sharing, invoicing or EDI, CORVI manages every aspect singlehandedly and eliminates the need for isolated systems to perform disparate forwarding functions. It thus ensures time-efficient, cost-efficient operations and improved bottom-line results. With a singular platform, modular design freight forwarders can assure their customers of escalated levels of service and transparency.

#### Some of the key functions of CORVI:

- Support for multi-modal operations
- Support for strategic decision making through the in-built Business Intelligence tool
- Helps to manage customer complaints and feedback
- Support for international trade documentation such as BL, AWB, CMR, etc.
- Enables General and Transit warehouse management
- The e-Docket feature facilitates document sharing within stakeholder network and online approvals
- Easy integration with leading financial Enterprise Resource Planning (ERP) systems like SAP, Oracle, etc.
- Comprehensive expense management

#### **Business Benefits:**

- Sales and operational control
- Informed decision making
- Optimal resource utilisation
- Operational security
- Complete business visibility
- Regulatory compliance



**CLEAR VIEW 4.0**, the industry's most awaited Air Cargo Thought Leadership Summit comes to Cape Town this year. Last year the summit was held in Bangkok, Thailand, which was a great success and was rated 'excellent' by all the delegates in terms of quality of discussions and overall summit experience. The summit witnessed some of the stalwarts of the industry from across the globe who shared transformative insights on industry challenges, needs, and possible solutions. The key participants included IATA, Alibaba, Swissport, Saudi Airlines, TIACA, IAG, Siginon Aviation, Mitchell Cotts, Cargogate, Dnata, Frankfurt-Hahn Airport, Aeroporti del Garda, Oman Air Sats, Aviance Ghana and many more. At the conference, delegates enjoyed lively, forthright debates focussing on Air Cargo Handling Infrastructure, Regulatory and Industry Initiatives along with Trade Facilitation and Impact of e-Commerce on Air Cargo. Kale Logistics Solutions aims to keep the momentum going.

CLEAR VIEW 4.0 an exclusive invite-only summit of a distinguished gathering of CXOs from Air Cargo Ground Handling, Leading Airlines, Airports, Customs and representatives from trade bodies like Shippers Council, Airport Services Association and IATA. This year it is scheduled from 4th to 5th November 2019 at The President Hotel, Cape Town, South Africa. It will demonstrate that the event is the chief forum for industry leaders to get together and discuss in a round table format the pertinent topics in the industry. The summit discussions will cover key areas such as Future of Air Cargo, Digital Transformations and Emerging and new Business Models for Air Cargo and much more. Networking will complement the event with coffee mornings, lunches and exclusive gala dinner that will be a night to remember. The previous editions of the summit held in Dubai, Athens, and Bangkok were a great success.

With top executives attending from leading companies and Trade Bodies, forums like CLEAR VIEW will enable the Logistics industry to come out with participative and practical solutions for small and big issues concerning the Air Cargo business.





Uber Technologies, along with setting up self-driving cars in Pittsburgh has also announced Uber Freight. Meanwhile, the company lost \$800 million in Q3 2016 despite its \$60 billion valuation.

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# Government of India has initiated discussion on making India Logistics e- marketplace ready. What according to you is the objective of undertaking such an initiative?

India's logistics costs (14% of GDP) are much higher compared to developed nations and the government aims to reduce this to 10% by 2022. The logistics industry in India is very complex and fragmented and faces multiple challenges, in terms of inefficiencies in cargo movement and planning, coordination and transparency amongst various stakeholders. Lack of single window clearance, multiple regulatory authorities, inadequate visibility of cargo and slow rate of digital adoption, data silo are other hindrances faced globally by the logistics industry. The Government of India estimates that a reduction of 10% of indirect logistics costs will lead to a growth of 5-8% increase in exports.

Ministry of Commerce & Industry, Government of India, has recognised the need to develop the logistics market and has undertaken a major initiative for the creation of a National Logistics Portal, incorporating the Logistics e-Marketplace to build a platform to connect buyers of services with logistics stakeholders across the supply chain such as Freight Forwarders, Carriers, Air and Sea Port Terminals, Railways, Importers-Exporters-Traders, Infrastructure Providers etc.

Apart from enabling seamless multi-modal trade, the Platform shall to a large extent reduce and eliminate manual processes, expand the market options, ensure payment assurance. Logistics e-Marketplace will help boost trade competitiveness by bringing together all logistics stakeholders on a single platform that will cut down on transaction cost and time for business activities. It will allow a user to plan and execute end-to-end shipment, check availability, inquire rates, create bookings for a wide range of services such as Ocean Freight, Trucking, Warehouse, Air Freight, ICD, and Packaging, generate and exchange e-Contract, Invoice Generation, e-Payments and monitor the physical flow of goods. This whole process will culminate into ease of movement of cargo and reduce Logistics costs, thereby generating jobs, increasing trade competitiveness and helping the country transform into a logistics hub.

#### What are the global trends in respect to the Logistics e-marketplace platforms?

e-Marketplaces are more than twenty years in the making and it's now going through a systematic metamorphosis. According to the Indian Economic Survey, 2017-18, it is estimated that the Indian Logistics Market size would increase from USD 160 billion at present to USD 215 billion in the next two years.

Currently, there is an influx of global trends coming our way. e-Marketplaces today are capitalizing on technologies like Artificial Intelligence (AI), Machine Learning, Internet of Things (IoT), enhanced GPS Accuracy, Predictive Analysis, and Cloud Platforms to create trusted, virtual trading platforms and more innovative business models.

Mr. Bhushan Kaki, is a multi-layered personality with expertise from tracking financial frauds, accounts, taxation to mastering systems design in Logistics industry. The Chief System Architect for Logistics e-Marketplace at Kale Logistics Solutions shares his vision on the subject.

CRUX

Blockchain, which is enjoying a rapid rise to prominence in corporate agendas especially banking, insurance, and financial services, promises the huge potential to optimize time and cost associated with trade documentation. It is widely expected that the Logistics e-Marketplace model will continue to outmaneuver the traditional model. Some of the noteworthy drifts which will continue to expand and drive the service experience and make e-Marketplace the future of logistics world are Mobile Design and Progressive Web Apps, Hyper Personalisation, Voice Search, Augmented Reality, Mobile Payments, Platooning, Customer Involvement, Drone Delivery for last-mile delivery and much more.

# Kale Logistics Solutions is proposing to come out with its new Logistics e-marketplace portal. Can you give some details on this platform?

Continuing with the pioneering tradition of bringing the latest technologies to the logistics industry, Kale Solutions' latest offerings include next-generation, multimodal 'Logistics e-Marketplace'. This is in line with our commitment to facilitate and digitize the Logistics industry and our multimodal Logistics e-Marketplace will be a single portal that will catalyse trade facilitation, ease domestic and international trade, empower ease of doing business to enable seamless trade, thereby ensuring better planning and trade competency. It will enable stakeholders in the Logistics of the supply chain to engage and interact with each other, creating business opportunities. Kale's multimodal platform will enable digitalisation of processes with e-approvals, bring in operational efficiencies, minimise paperwork, and time needed to execute transactions in import, export and domestic shipments. Blockchain, as available on the Logistics e-Marketplace, will help achieve cost savings by adopting more automated and error-free processes for information sharing. This will enable data transparency and access between relevant stakeholders in addition to adding visibility and predictability to the logistics processes. This platform will open-up large market access to both service providers and service seekers. Acting as a one-stop- solution, the platform will provide Interactive Maps, Digital Signature, Heuristics Predictive Analysis, Business Intelligence, Dynamic Routing and much more.

Kale believes India is standing on the cusp of the logistics revolution, and streamlining and optimization of processes is just the tip of the iceberg and Logistics e-Marketplace will encourage and enable the industry to move from the traditional approach of managing logistics to a more mature goal of improving quality of customer service, optimise asset utilisation thereby contribute towards improving India's ranking in 'Ease of Doing Business Index' and 'Logistics Performance Index'.





Companies that outsource their logistics reduce shipping costs, on average, by about 13 percent.



#### Past events



Global Pharma Logistics Summit 2019 ITC Maratha, Mumbai. September 19, 2019.



11<sup>th</sup> ACHL 2019 Paris, France. September 24-26, 2019.



Asia-Pacific Trade Facilitation Forum 2019 Hyatt Regency Hotel Delhi. September 17-18, 2019.

#### Forthcoming events

PAA.net



TIACA'S EXECUTIVE SUMMIT 2019 Budapest, Hungary. November 19-21, 2019.



## ACAAI - 45th Annual Convention

Phuket, Thailand. November 21-24, 2019.

Kuala Lumpur, Malaysia. November 12-14, 2019.



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