Accelerating Container Throughput with CODEX Port Community System at Tuticorin Port, India

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A key Port in India

V.O. Chidambaranar (V.O.C) Port is a key ocean port of India, strategically located at the southeastern coast with operations round-the-clock. Being a major feeder hub, V.O.C has been witnessing phenomenal increase in trade volumes.

The port has a dedicated container terminal operated by PSA International. V.O.C Port's traffic handling is more than 36.91 million tonnes as recorded in 2017. Its location which is close to East-West International Sea Route, offers direct connectivity to all major Ports in the world.

Some of the key operational challenges they faced include

Compromised shipment visibility:

There was no system that would report the status of a shipment as it moved from Shipper/CFS to Port and vice –versa. Additionally, there was limited or no access to the current status of shipment to monitor trade on real-time basis.

Autonomous system:

There was no unilateral system connecting various stakeholders of the shipping trade viz., the Exporter/ Importer, the CFS/Shipper, the Forwarder/CHA, Transporter, the Terminal Operator, Customs, Port authority etc. Each of the stakeholders were attuned to disparate systems.

High processing time:

Owing to the huge volumes of cargo and operations & documents procedures, authorities at V.O.C were challenged with huge amounts of haphazard cargo translating in increased dwell time. This led to unorganized information on shipments being percolated to the consecutive tiers of stakeholders which delayed the approval processes. This resulted in high turnaround time for trade transactions. Customs received non-cleared cargo at the terminal and faced difficulty in correlating the available terminal space with the container cargo accumulating at the Port Gate.

Duplicate entry and errors:

Lack of a unified point of data entry resulted in repeated data entry efforts giving rise to errors and data ambiguity.

Development and Implementation of CODEX Port Community System

Container Digital Exchange (CODEX) – Port Community Systems developed by Kale Logistics Solutions is the digital connection to smart ports. It is designed to automate and streamline container movement at the Port with proper communication, information exchange, connectivity and digitising transactions.

These stakeholders were looking for a solution that would not only address the current issues but also prove to be sustainable to the growing volumes of cargo operations. Chidambaranar (Tuticorin) Port Trust and Tuticorin CFS association joined hands with Kale Logistics Solutions to develop India's first Container Digital Exchange Platform – CODEX to automate and digitally streamline the container movement at the V.O.C Port.

Why CODEX Port Community System?

CODEX Port Community System is an Electronic Data Interchange (EDI) based digital trade facilitation platform. It has expedited seamless movement of EXIM Containers in and out of the port from/to the Tuticorin based CFS/ICDs. It electronically connected the pertinent stakeholders and ensured transparency and ease of operational coordination.

Though there were some initial hiccups pertaining to overall implementation of the application across all the peripherals of operations, realising the ease, flexibility and the accuracy offered by the application, all the operational stakeholders switched to complete adoption and implementation of CODEX.

The application was also made available in a mobile app form to enable on- the-go tracking of containers on a real-time basis making real-time container information availability a reality for all the stakeholders.

Some of the key features of CODEX are

Easy, fast and efficient EDI information exchange, re-use and centralisation, available 24/7

Electronic handling of all information regarding import and export of containerised,

general, bulk, liquid and RoRo cargo

Customs declarations

Status information and control, tracking and tracing through the whole Logistics chain

Processing of dangerous goods

Higher efficiency and agility

Improved security, cost reduction and more competitiveness for stakeholders

Improve information access for risk assessment of cargoes and passengers

Measurable Benefits

40%
Cost savings

75%
Reduced dwell time

75%
Reduced carbon emissions

55%
Reduction in gate congestion

How did CODEX PCS help the Port achieve sustainability goals?

CODEX Port Community System facilitated significant environmental, economical and social synergies. These synergies are calculated in terms of economical, social and environmental perspectives.

Economical:

CODEX Port Community System facilitated faster **IGST Refund**. The **process** that used to take **90-120 days** to complete now takes about **3-7 business days**. The challenge of liquidity for exporters was well addressed with CODEX Port Community System.

With the implementation of CODEX Port Community System, ease of doing business in the Port ecosystem improved and so did the Logistics Performance Index.

Moreover, the platform has put an **end to the long prevailing manual processes**, multiple data entries and improved transparency in the supply chain. The resultant efficiency is in turn providing **tangible savings in both time and money**.

Social:

CODEX Port Community System offers a **host of benefits** for the community in terms of **proper resource utilisation**, **saving manual efforts** for the community and **business continuity** during the COVID-19 pandemic.

Environmental:

With the implementation of CODEX PCS, the Port stakeholders such as transporters and container freight stations realised substantial **fuel savings** of **5 litres** per trip.

Most importantly, by **reducing heavy truck waiting time**, a significant amount of **CO2** was reduced that allowed the Port to achieve **sustainability goals** for the Port ecosystem.

Other than that, with the reduction in paper-based documentation driven by digital intervention, the Port could save nearly **1000 trees annually**.

Recognition

CODEX Port Community System is among the most celebrated initiatives in the world of logistics. Here are some of the accolades CODEX received are mentioned below.

APTFF award 2019

Container Digital Exchange Platform – CODEX won the **most prestigious 'Trade Facilitation Innovation Award' at the UNESCAP: Asia-Pacific Trade Facilitation Forum 2019**. The **APTFF award recognised the benefits CODEX has brought to the Maritime community**; like a common central platform for trade to exchange information, monitor transactions, make trade paper free and enable error-free filing of EGM on ICEGATE. The error-free EGM filing has facilitated the exporters to get their **IGST refunds without any delay in 7 days** from erstwhile 90 days.

The platform is designed to offer several fulfillment mechanisms as per the guidelines around Trade Facilitation Agreement (TFA), outlined by the World Trade Organization (WTO) and United Nations TFA Recommendation no. 33. It connects the entire community of MLO, Feeder Operators, CFS/ICD operators, Customs Port, and Terminals on a common highway this is in keeping with the Kale's commitment to catalyse Trade Facilitation, empower ease of doing business, and enable trade through single window systems, globally.

Journey Towards Excellence

The **Indian Customs** has **showcased** the CODEX project as an **innovative platform** developed in the Indian Maritime sector and the same has been presented by the Finance Ministry to the **Honourable Prime Minster of India** as one of the innovations around Trade Facilitation in 2017.

The CODEX platform was also **mandated** by **Tuticorin Customs** and is mentioned in the **customs journal Journey Towards Excellence**. It has also been recognised as one of the most innovative platforms by Confederation of Indian Industries (CII) at the **CII Industrial Innovation Awards 2018**.

The CODEX platform has been adopted as a mandate not only across the Port but has also been appreciated as a standard document by Tuticorin Customs. In another first, Tuticorin Customs has achieved the unique distinction of getting vessel clearance before vessel departure, since the 100% EGM is being submitted before vessel departure. This is as per the Sea Cargo Manifest Regulation which is likely to be implemented / mandated in the near future.

Testimonials

PENGUIN APPARELS (P) LTD.

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To
Tuticorin CFS Association,
108A, VE Road,
Opp. to DSF Grand Plaza,
Tuticorin.

Kind Attention: J David Raja – The President.

Dear Sirs,

Sub: Appreciation for CoDEx Implementation at Tuticorin Trade -Reg.

The CoDEx (Container Digital Exchange) has implemented by your association at Tuticorin connecting Steamer Agents, Customs, Port & Terminals has virtually shown the results and we take this opportunity appreciate the innovative technology implemented exclusive at Tuticorin. As an exporter, the liquidity is a major impact on any business. Since CoDEx has connected all the stakeholders the filing of general manifest has become accurate IGST Refunds process from the Customs get speedy refund. This has improve our competitiveness and boost our working capital with VOC Port taken great step of deepening the berths for the attraction of Mainline Vessels especially to US and Europe. VOC Port will move towards a major Transshipment Port.

I wish to state that with the CoDEx system monitored by Customs and Port digitally the time taken from all the CFS/ICD into the terminal including the customs formalities at Port Green gate at the average of 90 Minutes to 100 Minutes (This is visible to us through the CoDEx App), which is clearly at par with international standard of Congestion-free port.

I wish all the best as an exporter reduction of any transshipment cost to any other country will be a greatest saving.

Thanks and Regards,
Yours faithfully,
For PENGUIN APPARELS (P) LTD.

M.ANBUKANI
MANAGING DIRECTOR
CC: The Chairman, VOC Port Trust

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PUBLIC NOTICE NO. 21 /2016

Sub: Issuance of Gate Pass under CODEX (Container Digital Exchange) for movement of export containerised cargo from CFSs/ICD to VOC Port - Reg.

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Attention to all Exporters / Clearing Agents / Trade and Industry and Public is invited to above subject.

2.   CODEX (Container Digital Exchange) is a digital platform being adopted by Tuticorin CFS Association and VOC Port to enable seamless movement of containers from CFSs/ICD to VOC Port. This system works on the basis of online real time data getting uploaded on a digital platform which is made accessible to all approved viewers and the container movement can be tracked as well as authenticated at various points on its way to VOC Port by means of unique barcode attached to each container and corresponding shipping document. This would ensure faster and secured movement of export containers as clearance at various gates as well as the movement related data would be readily available in system and no manual entry would be required.

3.   Currently, the CODEX system is being utilized by Custodians to capture the movement of export containers from CFSs/ICD to VOC Port.

4.   As per the present practice, there is no standard format of Gate Pass and every CFSs/ICD issues the Gate Pass with different format. The CODEX Gate Pass will bring the uniformity and standardisation in gate pass. Accordingly, it has been decided to declare the CODEX Gate Pass as standard document for Customs permission to move export containers from to VOC Port.

5.   Therefore, it is hereby informed that the current practice of issuance of gate pass by CFSs/ICD which is duly signed by Gate Officer (Inspector) is being replaced by uniform Codex Gate Pass which needs to be duly stamped & signed and gate out time authenticated

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FACILITY INTIMATION NO. 31 /2018

Sub: Furnishing of appropriate Rotation No in the Gate Pass-reg..

Attention of the Custodians/Customs Cargo Service Providers/Custom Brokers / Exporters and all concerned is invited to the CODEX Gate out pass generated from the CFS/ICD during the gate out of the export containers.

2.   It has been brought to the notice that the Customs brokers/Custodians/Customs Cargo Service Providers are not entering the exact vessel name and rotation number corresponding to the container covered under the Gate pass. More often than not, the gate passes are prepared in a haste and rotation numbers entered in the Gate Pass are not representing the corresponding containers to be loaded. The entered rotation number in the gate pass, on many occasions, have been found to be pertaining to some other vessel or some other voyage of the same vessel. It is further noticed that sometimes the container number and shipping bill numbers are also entered wrongly.

3.1.   This office has issued a Public Notice No.17/2018 dated 14.06.2018 requiring mandatory filing of EGM before the departure of vessel under Section 41 of the Customs Act, 1962. Section 41 provides for filing of the Export General Manifest (EGM) before departure of the Vessel from the customs station and Section 42 provides for issue of order permitting departure of vessel. The order permitting departure of vessel can be issued only after compliance of the provisions of Section

How can Port Community System change the world of Ports and the ecosystem?

Here are some potential benefits that Port Community Systems can offer to the world of Ports and the Maritime ecosystem.

Adherence to e-FAL Compliance

A Port Community System can play a huge role in helping Ports adhere to the FAL Convention since it helps you integrate the electronic flow of trade-related documents or information while functioning as the centralised hub for the Ports in the country for exchanging electronic messages in a secure manner.

A Port Community System also works for other stakeholders like shipping lines or agents, surveyors, inland container depots, customs brokers, importers, exporters, railways or CONCOR, government regulatory agencies, stevedores, banks, container freight stations, etc.

Overcoming Staff Shortage

In order to make the freight moving from the exporter's warehouse to the empty dock, there's documentation work involved. Beginning from a bill of lading to delivery order, every document involves manual efforts for hours by the staff from shipping lines and forwarders. Due to staff shortage, submitting documents and obtaining approvals for the same has taken a backseat.

Also, the freight movement of essentials and medical supplies too are affected. Even though some of them are managing with fewer staff members, it is not efficient enough to cope up with the processes. A Port Community System can streamline the entire process and perform it seamlessly.

Integration of Port Side and Land Side Operations

In recent years, the inland component of the Port system has become a key factor in shaping performance and competitive strategies of seaports. But physical and capacity constraints at berths, along with the trend of optimisation and standardisation of quayside operations, suggest that more focus must be placed on land-interface Logistics operations.

Reported inefficiencies in Ports indicate that landside Logistics operations are far behind their optimal efficiency, with most observed malfunctions (unproductive moves, congestion, delays, etc.) taking place at inland and intermodal Port interfaces. This calls for integration of land side operations with a robust digital infrastructure with Port Community System.

Cost Reduction and Efficiency Improvement

Through conglomeration, Shipping Lines large and small have benefitted with cost synergies on the seaside. Yet, when it comes to the landside, each carrier has terminal agreements, trucking contracts, and operations management on a standalone basis. While operating on a standalone basis here, carrier's operating expense could add up and the savings made on the seaside subsides.

Whereas with Port Community System, trucking contracts, and terminal agreement along with operations management are all performed digitally with an advance information sharing capability. With this, delays in vessel berthing and even truck congestion can be sorted simultaneously. Moreover, Port Community System improves inter-entity operations.

Maximising Container Throughputs

A port community system integrates disparate processes across the seaport ecosystem in a secured digital format. Shipping Lines, Container Yards, Forwarders/Consolidators, Transporters, Consignee, and various other stakeholders are connected in a common portal to offer visibility of data and the entire operations across the ecosystem. Functions such as container tracking, vessel berthing, online document generation, electronic payments to name a few can be digitised with Port Community System.

Data Accuracy and Transparency

As the data exchange is in physical format across the ecosystem, accuracy takes backseat in various scenarios. Due to these inaccuracies, the forwarder needs to go back and forth to obtain accurate documentation. Reportedly, these iterations are causing unprecedented delays in the entire value chain.

Moreover, the disparate nature of the legacy operation voids transparency. With a Port Community System in place, accurate documentation and transparent data sharing among all stakeholders is instantly enabled. Therefore, unprecedented delays and unwanted iterations in document correction can be avoided.

About Kale Logistics Solutions

Kale Logistics Solutions Pvt. Ltd. is a trusted global IT solutions partner for several Fortune 500 companies worldwide, offering a comprehensive and award winning suite of IT solutions for the Logistics Industry. With in-depth domain knowledge and technical expertise, Kale offers IT enterprise systems and Cargo Community Platforms, which offer a single electronic window capable of supporting operational flows, percolating data to various stakeholders and facilitating paperless exchange of trade-related information between stakeholders.

Connect with us
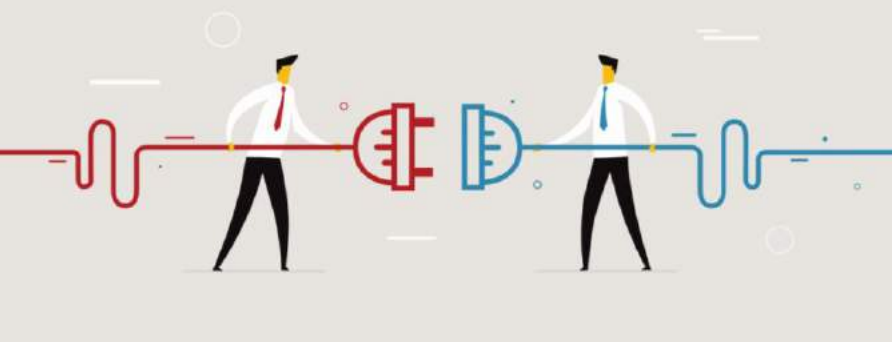
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