

BUSINESS MODEL CANVAS



















Market

SENSOR DEVELOPMENT/ client requirement



Terminals



Ocean Carriers

Customs

Authorities

Ports and



Freight

Forwarders / 3PL



Agreed temperature, time,



Intermodal **Transport**



Shippers

Provide information about the disposition of shipments within the boundaries of the port / terminal Benefit from pre-built connections to shipping lines and other actors, end-to-end visibility across shipping corridors, and real-time access to more information to enrich port collaboration and improve terminal planning

Provide information about the disposition of shipments across the ocean leg

Benefit from pre-built connections to customers and ports / terminals around the world and real-time access to end-to-end supply chain events

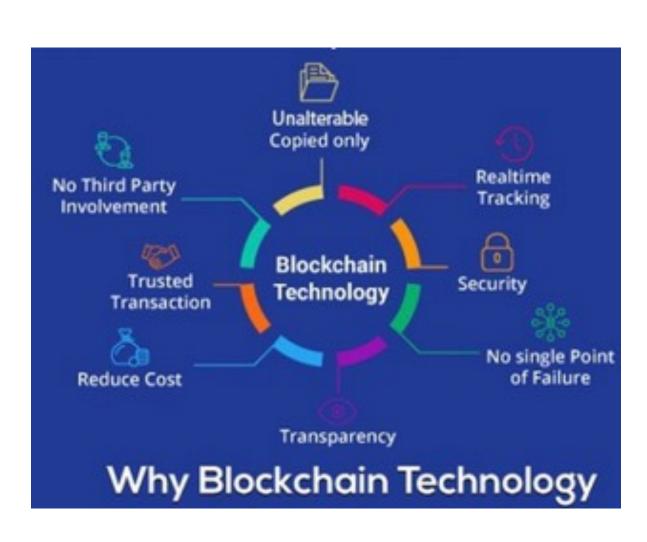
Provide information about the export and import clearance status for shipments into and out of the country Benefit from more informed risk assessments, better information sharing, less manual paperwork, and easier connections to national single window platforms

Provide the transportation plan, inland transportation events, information on intermodal handoffs, and document filings Benefit from pre-built connections to the ecosystem, improved tools for customs clearance brokerage function, and real-time access to the end-to-end supply chain data to improve effectiveness of track-and-trace tools

Provide information on the disposition of shipments carried on trucks, rail, barges, etc. Benefit from improved planning and utilization of assets (e.g., less queuing) given real-time access to end-to-end supply chain events for shipments

Engage with the solution as a consumer of the shipping information events and paperless trade capabilities Benefit from a streamlined and improved supply chain allowing for greater predictability, early notification of issues, full transparency to validate fees and surcharges, and less safety stock inventory

No cross contamination No adulteration Quality of product Freshness Sanitary specification EU/country requirements Certification of Origin Trusted collaboration



WHY INNOTEL

PARTNERS: Paradigma Innotel Tecnocal

ACTIVITIES: Telecommunications **Smart Contracts** Sensors

Developing Aap to use with Collaboration mobile phones to track

Micro Processor tracing

ADDED VALUE

- Very Competitive **PRICE** communication in remote areas.
- Automatic
- Increased Competitivity By reduction of time, cost & best trader/offer.
- Intelligent Mesh technology: always traceable
- No third party
- intermediation required. - Long Distance B2B product transactions: **Meeting Quality** agreements &
- increasing transparency - Reduce Paperwork

How:

Platform

Container and client management

CHANNELS

Port and Terminals Ocean Carrier **Custom Authorities** Freight Fowrders Intermodal Transport shippers Aviation and Train transport supermarket, Restaurants Traders, Logistic rental

companies, containers

Amazon / Bazaar

Cold Chain Management and Storage

Tank and Special

Containers

Rail Freight

Shippers /

Container Leasing

Container Trading and Resale

Cargo Owners

Equity Transport

Finance / Private

and Logistics

Shipping Lines / Carriers

Freight Forwarding / NVOCC

> One Belt One Road

Smart Shipping

Container Manufacturers and Components

Container Repair, **Modification and Conversion** **Ports**

Benefits of Blockchain

The blockchain is nothing short of a game-changing technology for anyone who chooses to use and master it. Let's discuss the benefits of blockchain-

Transparency:

Given that it is a type of a distributed ledger, all nodes in the network share a copy of the documentation. The data on a blockchain ledger is easily accessible for everyone to view. If a transaction history changes, everyone in the network can view the change and the updated record. Therefore, all information about currency exchange is available to everyone.

Security:

The shared documentation of transactions can only be updated and/or modified with consensus on a blockchain network. Only if everyone, or a majority of nodes agree to update a record, the information is edited. Moreover, when a transaction is approved, it is encrypted and connected with the previous transaction. Therefore, no one person or party has the potential to alter a record.

Efficiency:

With traditional, paperwork processes, completing a transaction is exhausting as it needs third-party mediation and is prone to human errors. Blockchain can streamline and discipline these legacy methods and remove the risk of errors. making trading more efficient and faster. Since there is only one ledger, parties don't have to maintain multiple documents, a fact that leads to much less clutter.

Traceability:

In complex supply chains, it is hard to trace products back to their origins. But, with blockchain, the exchanges of goods are recorded so you get an audit trail to learn where a particular asset came from. You also get to know every stop the product made on its journey. This traceability of products can help verify the authenticity and prevent frauds.

Auditability:

As each transaction is recorded for its complete lifetime in blockchain, there is an audit trail that already exists for you to see and check the authenticity of your



As blockchain eliminates the need for third-parties and middlemen, it saves huge costs for businesses. As you can trust the trading partner, you don't need anyone else to establish the rules and policies of exchange. The cost and effort spent on documentation and its revisions are also saved as everyone gets to view a single immutable version of the ledger.

Drawbacks of Blockchain

Each coin has a flip side. Blockchain is a notch above its infancy today, and there are a number of drawbacks with the technology that need to be handled before it can be widely used for everyday transactions.

Scalability:

Blockchain's application Bitcoin is massively popular. However, it can only handle 7 transactions per second, where Hyprledger can handle 10,000 and Visa 56,000. The practical use of blockchain gets a bit hard to imagine with the issue of scalability in view.

Since blockchain databases are stored indefinitely on all network nodes, the issue

Storage:

of storage surfaces. With the increasing number of transactions, the size of the database will only expand, and there is no way personal computers can store unlimited data which only gets appended. To put this in perspective, the Ethereum blockchain is expanding at the speed of 55 GB/year and as on 2017, it is at 180 GB.

Privacy:

Data on a public blockchain is encrypted and anonymous, but lies in the hands of all nodes in the network. So, everyone in the network has a rightful access to this data. There is a possibility someone could track down the identity of a person in the network through transactional data.

Regulations:

Regulatory regimes in the financial arena are a challenge for blockchain's implementation. Blockchain applications will have to lay down the process of pinpointing the culprit in case a fraud takes place, which is a bit of a challenge. Other regulatory aspects of blockchain technology will need to be laid down first in order to facilitate its wide adoption.

Security:

Satoshi Nakamoto highlighted the '51% attack' when he launched Bitcoin. The attack can be simply put like this- if 51% of the nodes in a network lie, the lie will have to be accepted as truth. Therefore, everyone in the network will have to constantly have a watch on it to perceive any unwanted influence.

