Blockchain In Logistics

Powered by Hyperledger Fabric



Unlocking Value in Logistics

Achieving excellence in logistics involves working collaboratively with others to optimize the flow of physical goods as well as the complex flow of information and financial transactions



There is a significant amount of trapped value in logistics, largely stemming from the fragmented and competitive nature of the logistics industry.

 With multiple stakeholders involved, in supply chain/freight management, there is a possibility of low transparency, un standardized process, data silos and diverse levels of technology adoption Many parts of the logistics value chain are also bound to manual processes mandated by regulatory authorities.

 Companies must oftentimes rely on manual data entry and paperbased documentation to adhere to customs processes All this makes it difficult to track the provenance of goods and the status of shipments as they move along the supply chain, causing friction in global trade.

 Lack of governance leads to high possibilities of fraud and delay in shipment which leads to losses

Technology to Solve Logistics



Blockchain advantages



Blockchain/AI Potential in Transportation

- Big players in transportation are recognizing the opportunity blockchain represents for the industry. The <u>Blockchain in Transport</u> <u>Alliance (BiTA)</u>, for example, was created as a forum for blockchain education and standards development for the freight industry.
- One major application transportation players foresee is smart contracts between shippers and carriers.
- With smart contracts, conditions are predefined and recorded on the Blockchain.
- Once conditions are met, the smart contracts are automatically created. Then, after transactions are recorded and validated on the blockchain, payments are immediately sent.
- This streamlines the process by automating steps and eliminating intermediaries and their associated costs.
- Shippers would also have complete visibility of the entire supply chain with blockchain since each party validates and records transactions throughout the process.
- This increased transparency and tracking ability would in turn discourage cargo theft. In addition, there would be a heightened level of trust in the entire shipping process.
- For freight brokers, blockchain technology can provide solutions to some of the biggest challenges in the logistics and transportation industry: protecting commodities and maximizing delivery efficiency.

Blockchain Use-Cases in Logistics

- Domestic Freight Domestic Freight/Trucking is a big part of logistics for any company where multiple parties are involved with lot of manual paper work along with government rules/policies
- International Freight International Freight management involves various parties like supplier, Broker, Shipping department, Government/customer and actual Industry which is importing/exporting the goods
 - FREIGHT BROKER SHIPPER CARRIER USERS DRIVERS APPOINTMENT Master Data TIMES Management (MDM) TRACKERS System & TRAILERS WARRANTY FREIGHT ORDERS LOCATION INFORMATION including distribution centers. warehouses, service centers, etc.
- Supply chain

How Blockchain Works



Current Logistics Flow

This is how the current process looks like:



Future Logistics Flow

Here is the future state process on Blockchain/ AI



How to Decide: Blockchain or Not



SIMPLIFIED BLOCKCHAIN DECISION TREE

 $\bullet \bullet \bullet \bullet \bullet$

Thank You !!