



# **IMPACT OF BLOCKCHAIN - RETAIL INDUSTRY**

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# RETAIL INDUSTRY IN INDIA

- Retail market expected to increase by 60% to reach US\$ 1.1 trillion by 2020
- World Retail Market expected to grow 12% per annum
- India's B2B e-commerce expected to reach US\$ 700 billion by 2020
- India is among the top 10 global destination for retail industry
- India's total potential of B2C is estimated to be US\$ 26 billion in 2020



# PROBLEMS FACED IN RETAIL

- Trust & Transparency
- Validity of Brands
- Supply chain & Inventory Management
- Payments & Transactions
- Third party Service charges
- Safety & Compliance
- Traceability & Visibility

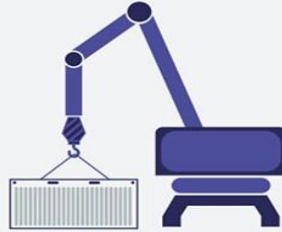
# INTRODUCING BLOCKCHAIN



The flower grower readies the product for international shipment. Shipment information is added to the blockchain.



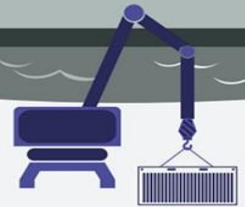
As the container awaits transfer to port, officials submit approvals electronically. Blockchain confirms the transaction and executes a smart contract releasing the shipment.



The container is loaded onto the ship.



All parties have end-to-end visibility of the container's progress through the supply chain.



The container arrives at the destination port and clears customs.

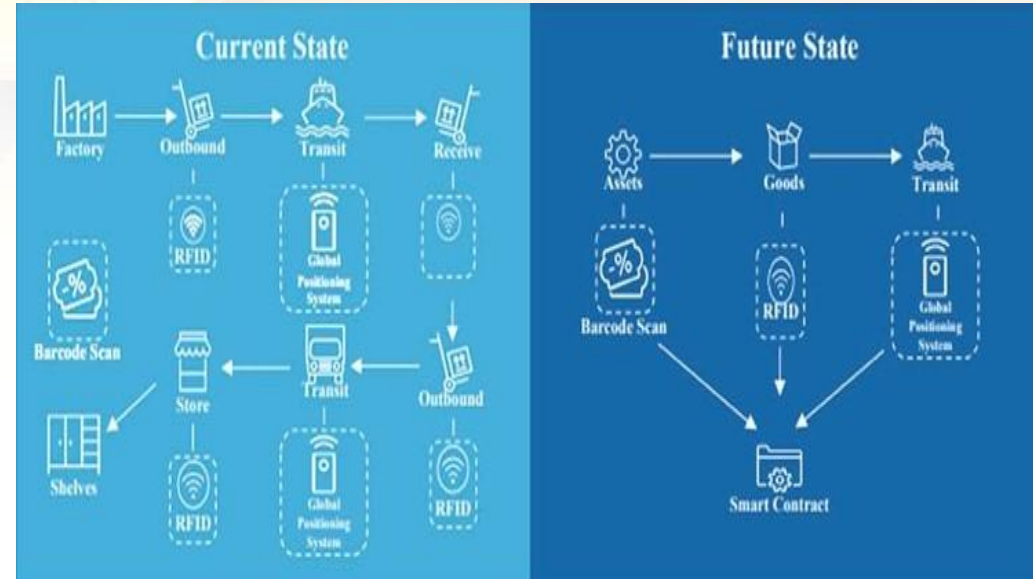


The retailer receives the flowers on time and signs electronically. Information is relayed back to the blockchain.

- Improves transparency in business
- Ensures the same brand gets delivered to customer
- Eradicates third party intervention to monitor
- Reduces complexity of supply chain operation

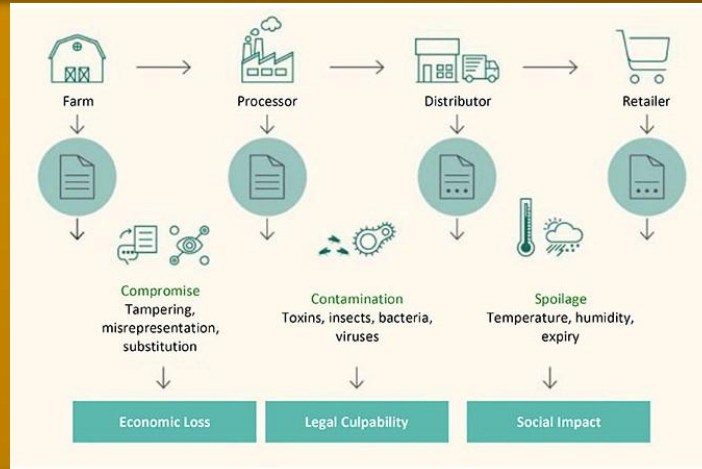
# INTRODUCING BLOCKCHAIN

- Manages lengthy records
- Retailers can keep track of goods from dispatching of product to final shipment and delivery
- Data recorded once cannot be manipulated by any means
- Decreasing fraud and improving security
- Product traceability, visibility, proof of origination, brand authentication is transparent for consumers



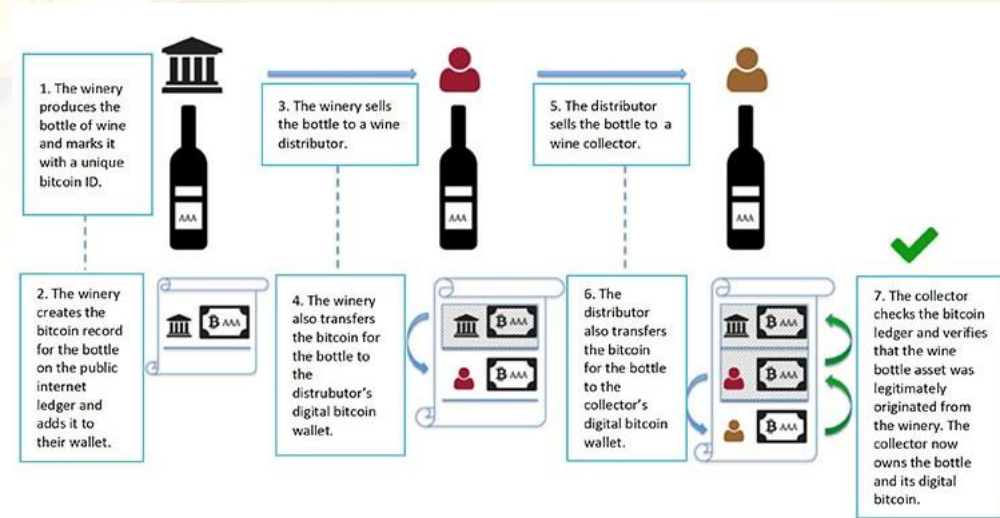


# BLOCKCHAIN IMPLEMENTED

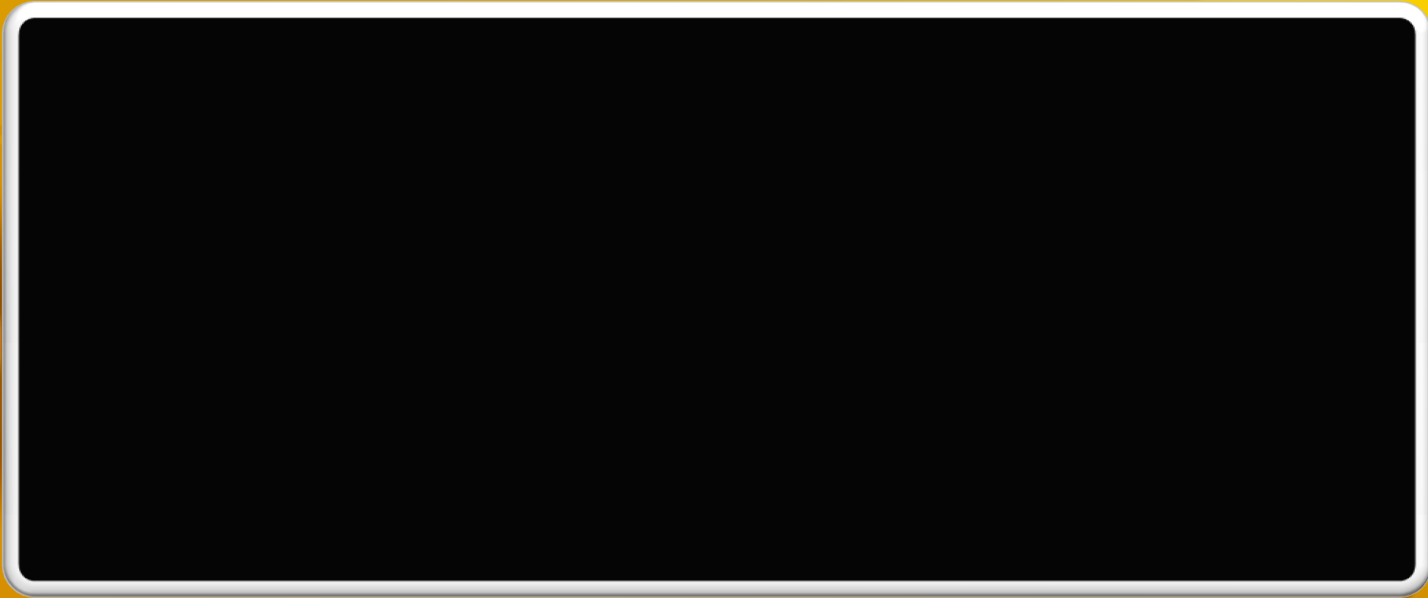


# CASE STUDY

- Case study of wine delivered from winery to end consumer
- Smart contract is between Winery, Distributor, Consumer
- Bitcoin transaction is taking place
- Each and every new element introduced gets recorded in ledger
- Complete loop is validated



# CASE STUDY



## Existing Challenges in the Supply-Chain Industry

1. Centralized database risk
2. Counterfeit goods risk
3. Traceability in the supply chain
4. Incompatible databases across different supply-chain nodes

## Solutions

## Characteristics of Blockchain

- An encrypted, decentralized and distributed database
- Immutable records
- Complete transaction history
- Interoperability and smart contracts

## Benefits

- Open to all users with a high degree of security
- Immune to tampering
- Can produce traceability
- Streamlines transaction processes



# IMPLEMENTATION

## Blockchain Decision Path

1. Need for a shared common database?

Yes

2. Multiple parties involved?

Yes

3. Parties involved have conflicting incentives and/or are not trusted?

Yes

4. Rules governing participants are not uniform?

Yes

5. Need for an objective, immutable log?

Yes

6. Rules of transactions do not change frequently?

Yes

7. Are transactions public?

Yes

Public Blockchain

No

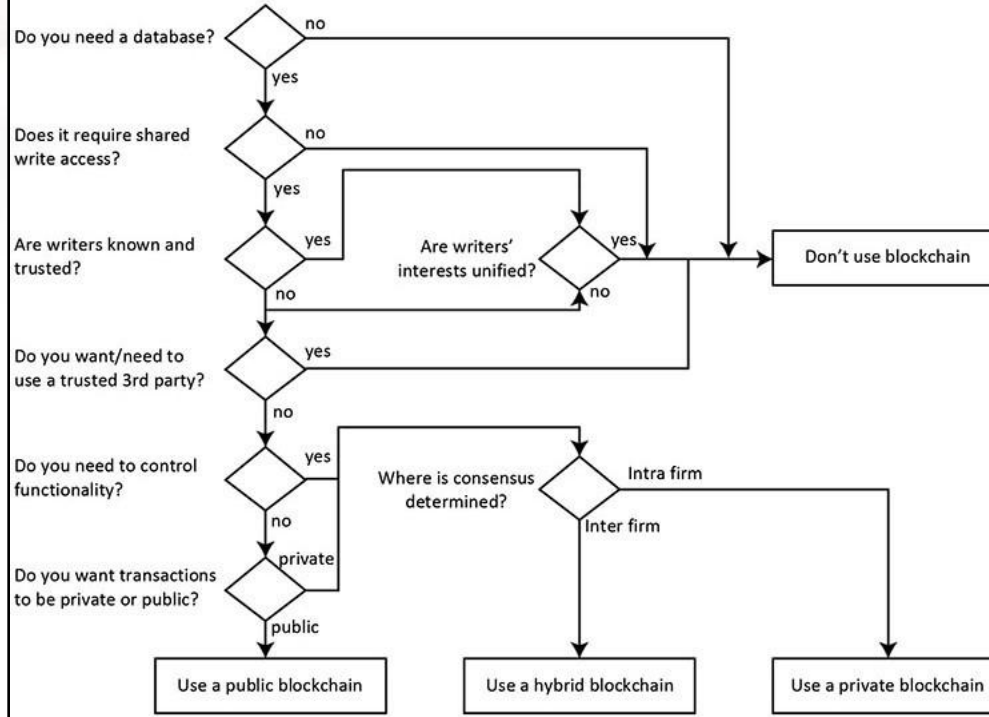
Blockchain is **not** required

Permissioned Blockchain

No

# IMPLEMENTATION

## Do you even need Blockchain?



# COMPANIES CONSULTED

## Param Projects Pvt Ltd.

- Pioneered specialized features of E-commerce integrated with security and big data
- Handled 600 clients since 2007 across Europe and North America
- Handled various services pertaining to E-commerce
- Research work on progress building their Blockchain Platform



# COMPANIES CONSULTED



## Thulir Software Technologies Pvt Ltd

- Offers smart, efficient technology solutions to corporates, start ups, MSME's
- Budget friendly Solution provider
- Proven track of record on efficient pricing structures
- Provides Knowledge base on Niche technologies



**THANK YOU**