

# Supply Chain & Smart Contracts

...

Group 6

*R.A.H*

Hussein Ali — Reem AlQhatani — Afrah AlHarbi — Ahmed AlGhazal

# Supply Chain

Network(setps) where products/services supply to consumer

Products/Services  $\rightsquigarrow$  Consumers

Chain can be thought as newtok, where nodes transfer material from one form to another and links exchange product between nodes

Chain  $\equiv$  Network

- Nodes (Transformation)
- Links (Exchanges)

# Supply Chain

## Supply Chain Diagram



Raw Materials → Supplier → Manufacturer → Distributor → Retailer → Consumer

# Traditional Supply Chain

## Negative

- Lack of automation process
- Trust centralized
- Difficult to share securely across parties
- Communication and coordination can be complex
- Not transparency

## Positive

- Easy to set up (database server)
- No need for particular expertise
- Changes can be done quickly and corrected without hassle
- Low development cost

## Conclusion

Suitable for isolated application, but once we include interaction with other entities and groups, it gets complex and inefficient.

# Blockchain & Smart Contract

## Negative

- Need expertise in smart contract and blockchain
- Challenging to edit transactions

## Positive

- Allow automation and complex business logic to be implemented
- Shared across all parties
- Allow cooperation and communication
- Transparency and accessible

## Conclusion

Provide a more secure and transparent automation solution. However, you need expertise in the blockchain and smart contract.

# Examples

- IBM Blockchain & AI Solution([link](#))
- Obortech([link](#))

---

Demo