Blockchain for Supply Chain Finance

How can a blockchain platform improve trust and timeliness of payments?

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“A purely peer-to-peer version of electronic cash would allow online payments to be sent directly from one party to another without going through a financial institution.”

- Satoshi Nakamoto
2008
Blockchain as a Next Gen SCM Platform
Blockchains consist of three key components:
1. a transaction
2. a transaction record
3. a system that verifies and stores the transaction
   • when it took place
   • the chronological order of all transactions
   • information about the transaction
     • this results in a chain of information, stored in so-called ‘block’; hence the name ‘blockchain’.
Smart Contracts

- attached, by using hashes
- accessed via a web interface
- a "wallet" is used to hold contract info
- data storage is decentralised
- the information is tamper-proof and visible for all parties involved
- can represent...
  - a contract
  - ownership / title
  - physical goods - via a barcode or quick response (QR) code
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What is it?

The blockchain is a decentralized ledger of all transactions across a peer-to-peer network. Using this technology, participants can confirm transactions without the need for a central certifying authority. Potential applications include fund transfers, settling trades, voting, and many other uses.

How it works:

1. Someone requests a transaction.
2. The network of nodes validates the transaction and the user's status using known algorithms.
3. The requested transaction is broadcast to a P2P network consisting of computers, known as nodes.
4. The new block is then added to the existing blockchain, in a way that is permanent and unalterable.
5. A verified transaction can involve cryptocurrency, contracts, records, or other information.
6. Once verified, the transaction is combined with other transactions to create a new block of data for the ledger.
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1. Blockchain allows for 2 parties to transact without the need of a central authority. No banks needed.

2. Letters of credit used largely today to guarantee payments. Not needed in blockchain scenario.

3. It also allows for payments to be recognized sooner and in a more trusted fashion so goods can be shipped without the worry of payment arriving.

4. Smart contracts can automate payment at the appropriate time.
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