

Blockchain for Business

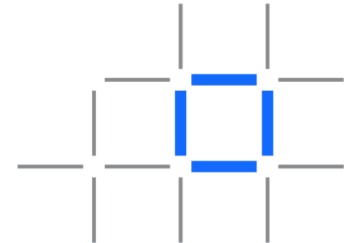
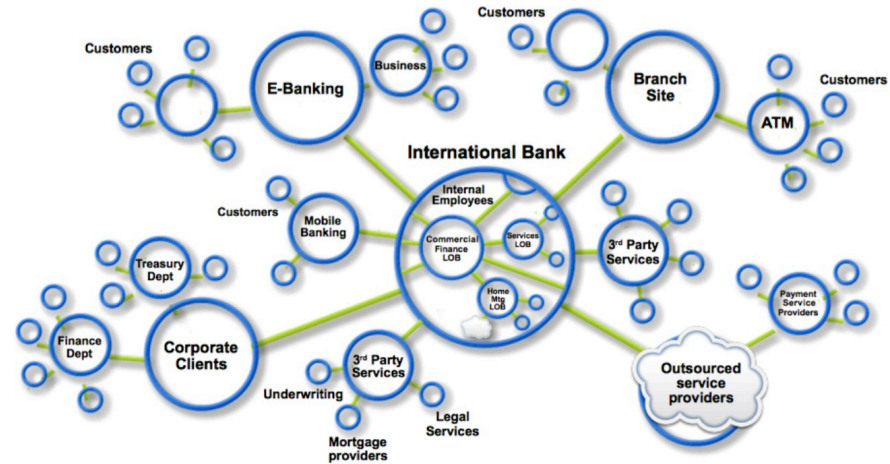
What is

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Business networks, wealth and markets

- **Business Networks** benefit from connectivity
 - Participants are customers, suppliers, banks, partners
 - Cross geography & regulatory boundary
- **Wealth** is generated by the flow of goods & services across business network in transactions and contracts
- **Markets** are central to this process:
 - Public (fruit market, car auction), or
 - Private (supply chain financing, bonds)



Transferring assets, building value

Anything that is capable of being owned or controlled to produce value, is an asset



Two fundamental types of asset

- Tangible, e.g. a house
- Intangible, e.g. a mortgage



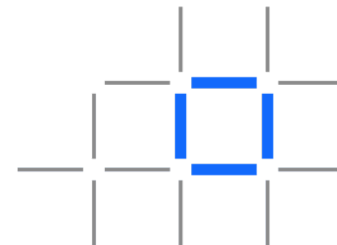
Intangible assets subdivide

- Financial, e.g. bond
- Intellectual, e.g. patents
- Digital, e.g. music



Cash is also an asset

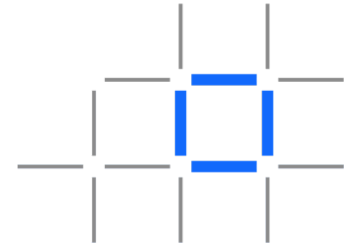
- Has property of anonymity



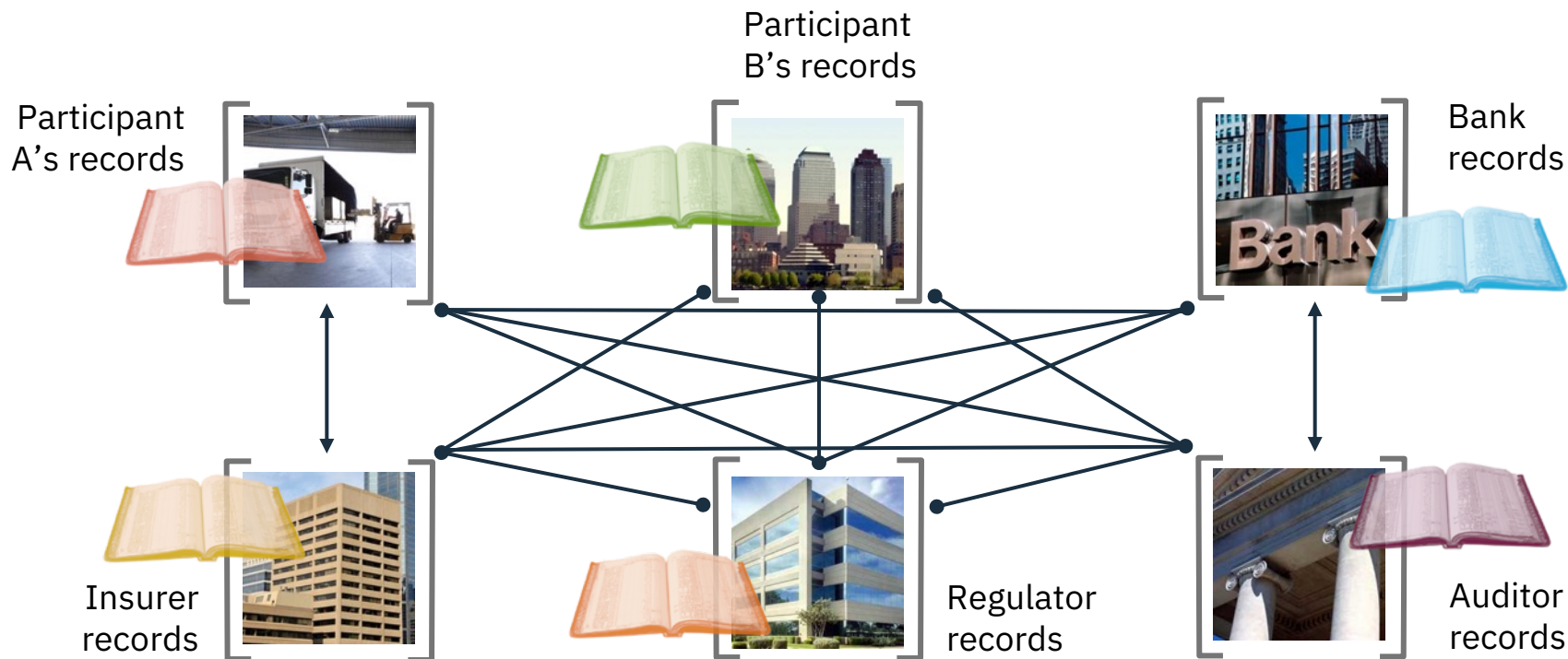
Ledgers are key

Ledger is THE system of record for a business. Business will have multiple ledgers for multiple business networks in which they participate.

- **Transaction** – an asset transfer onto or off the ledger
 - John gives a car to Anthony (simple)
- **Contract** – conditions for transaction to occur
 - If Anthony pays John money, then car passes from John to Anthony (simple)
 - If car won't start, funds do not pass to John (as decided by third party arbitrator) (more complex)

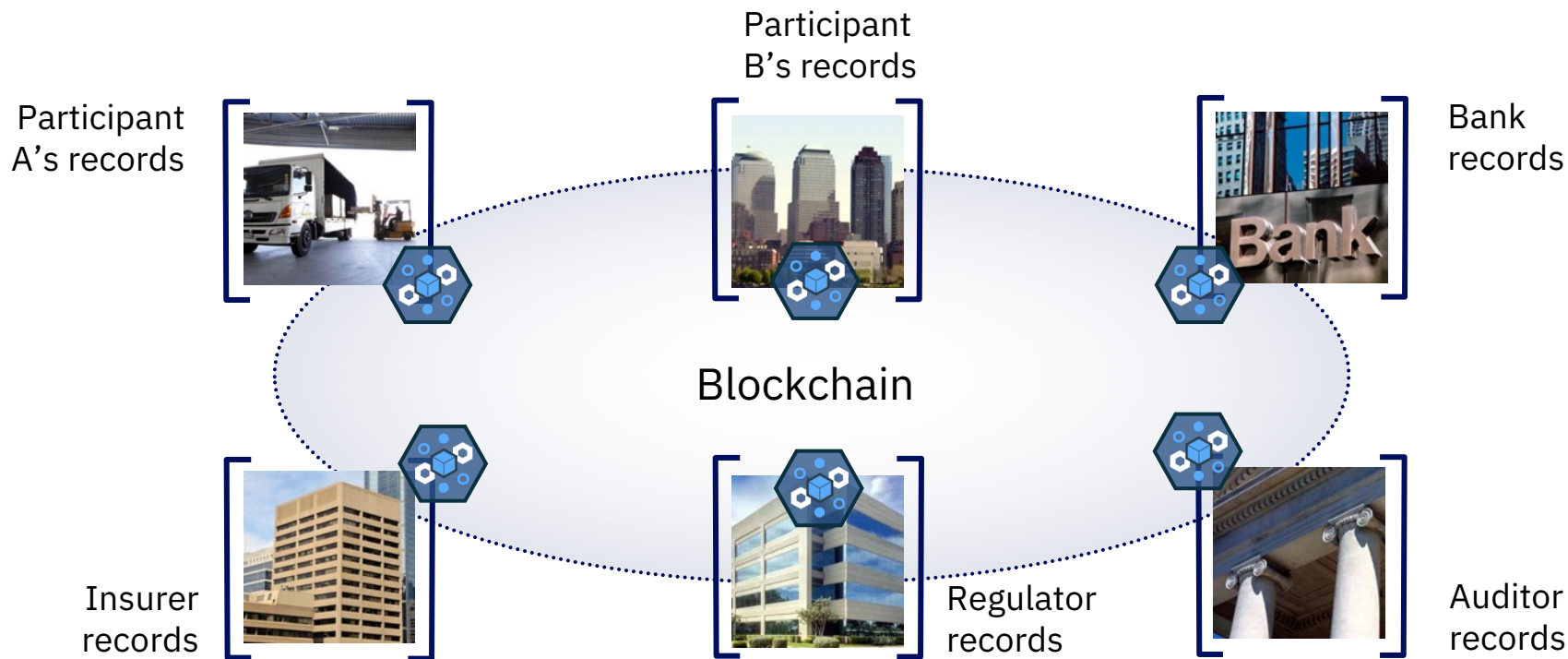


Problem ...



... inefficient, expensive, vulnerable

A shared, replicated, permissioned ledger ...



... with consensus, provenance, immutability and finality

Blockchain underpins Bitcoin

 **bitcoin** is:

- An unregulated shadow-currency
- The first blockchain application
- Resource intensive

Blockchain for business differs in key areas:

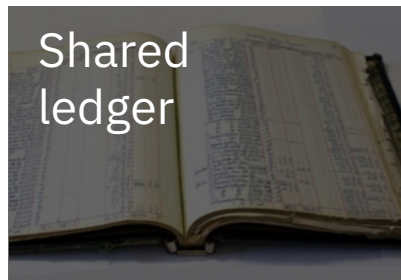
- Identity over anonymity
- Selective endorsement over proof of work
- Assets over cryptocurrency



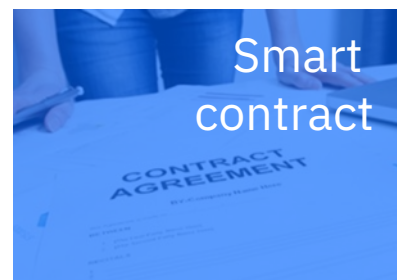
Requirements of blockchain for business

Append-only
distributed system of
record shared across
business network

Shared
ledger



Smart
contract



Business terms
embedded in
transaction
database
& executed with
transactions

Ensuring appropriate
visibility; transactions
are secure,
authenticated
& verifiable

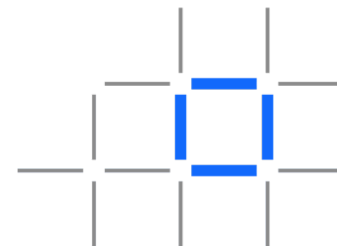
Privacy



Trust



Transactions are
endorsed by
relevant
participants



Blockchain is creating extraordinary opportunities for businesses to come together in new ways

Create New Value

Exploit new business models and eliminate inefficiencies

Optimize Ecosystems

Streamline business processes and the exchange of value along your ecosystem

Reduce Risk

Replace uncertainty with transparency and a trusted decentralized ledger



