Blockchain: What’s the problem?
**Problem** - Difficult to monitor asset ownership and transfers in a trusted business network

*Inefficient, expensive, vulnerable*
Solution – shared, replicated, permissioned ledger

Participants have multiple shared ledgers

Consensus, provenance, immutability, finality

NOTE: Participants same as before
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

Consensus

All parties agree to network verified transaction

Broader participation, lower cost, increased efficiency
Blockchain: Potential Use cases
Know Your Customer
Asset Transfers
Settlements
Public announcements from organisations

- **Deutsche Bank**
  Payments and settlement of fiat currencies, asset registries, enforcement and clearing derivative contracts, regulatory reporting, KYC, AML registries, improving post-trade processing services.

- **Western Union**
  Cross-border payments

- **UBS**
  Payments, trading & settlement, smart bonds.
  Utility settlement coin

- **BNY Mellon**
  Digital Currencies

- **Citi**
  Pre-IPO Trading

- **Nasdaq**
  Digital Currencies