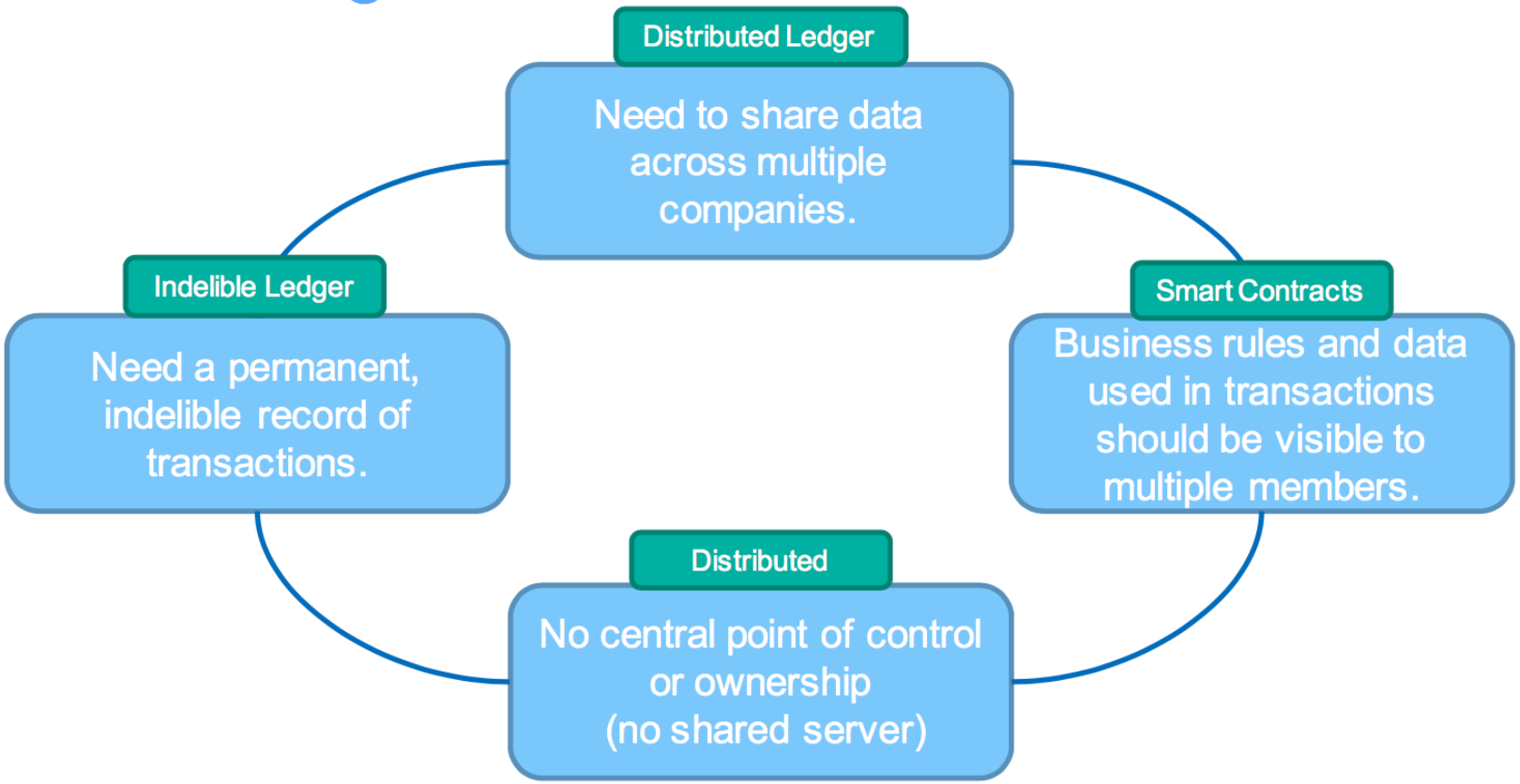
Attributes of a good blockchain use case



If the data is only used by one organization – it's probably not a good use of blockchain.

Use Case Selection (Business Requirements)

It is important to select an appropriate use case for blockchain projects.

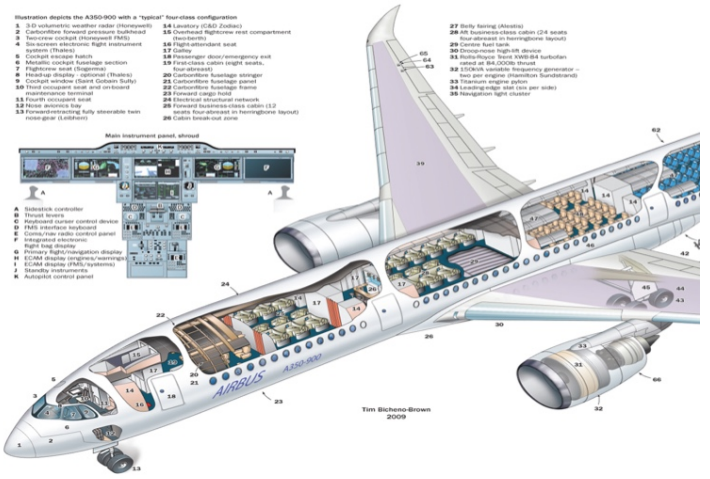
Use Case Attribute	Explanation
Enterprise Impact	• The use case should have significant impact on the enterprise and be supporting key goals of the organization (e.g. supply chain optimization)
Business Network	• Blockchain does not really make sense unless multiple entities are collaboration around shared information (e.g. an OEM, suppliers, end customers, regulatory). For only one organization, a database centered application likely makes more sense.
Industry Impact	• Blockchain may be a good approach for industry wide problems, such as information shared amongst partners in a consortium or for a marketplace (e.g. cloud manufacturing services).
Shared ledger	• A use case involving multiple parties using transactions (e.g. EDI) to synchronize ledger information is a good candidate for blockchain.
Immutable record	• Use cases that require "immutable" records to be shared amongst parties (e.g. Pharmaceutical manufacturing or distribution) are good candidates.

Consensus Use Case – Shared Routing Codes

- What?
- Competitors/collaborators in a business network need to share reference data, e.g. bank routing codes
- Currently each member maintains their own codes, and forwards changes to a central authority for collection and distribution
- How?
- Each participant maintains their own codes within a blockchain network
- Blockchain creates single view of entire dataset
- Benefits

1. Consolidated, consistent dataset reduces errors
2. Near-real-time of reference data
3. Naturally supports code editing and routing code transfers between participants

Provenance Use Case – Vehicle Maintenance



What?

- Provenance of each component part in complex system hard to track
- Manufacturer, production date, batch and even the manufacturing machine program

How?

- Blockchain holds complete provenance details of each component part
- Accessible by each manufacturer in the production process, the aircraft owners, maintainers and government regulators

Benefits

1. trust increased no authority "owns" provenance
2. improvement in system utilization
3. recalls "specific" rather than cross fleet

Immutability Use Case – Financial Ledger

What?

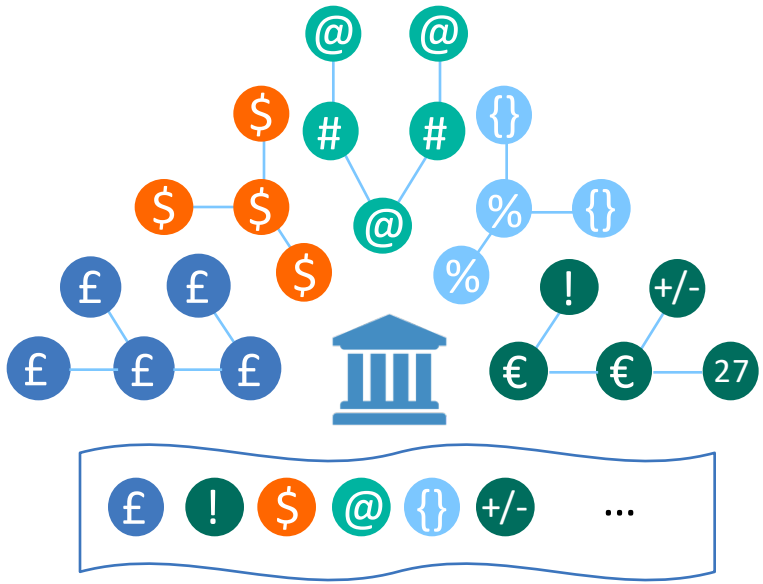
- Financial data in a large organization dispersed throughout many divisions and geographies
- Audit and Compliance needs indelible record of all key transactions over reporting period

How?

- Blockchain collects transaction records from diverse set of financial systems
- Append-only and tamperproof qualities create high confidence financial audit trail
- Privacy features to ensure authorized user access

Benefits

1. Lowers cost of audit and regulatory compliance
2. Provides “seek and find” access to auditors and regulators
3. Changes nature of compliance from passive to active



Finality Use Case – Letter of Credit

What?

- Bank handling letters of credit (LOC) wants to offer them to a wider range of clients including startups
- Currently constrained by costs & the time to execute

How?

- Blockchain provides common ledger for letters of credit
- Allows all counter-parties to have the same validated record of transaction and fulfillment

Benefits

- Increase speed of execution (less than 1 day)
- Vastly reduced cost
- Reduced risk, e.g. currency fluctuations
- Value added services; e.g. incremental payment