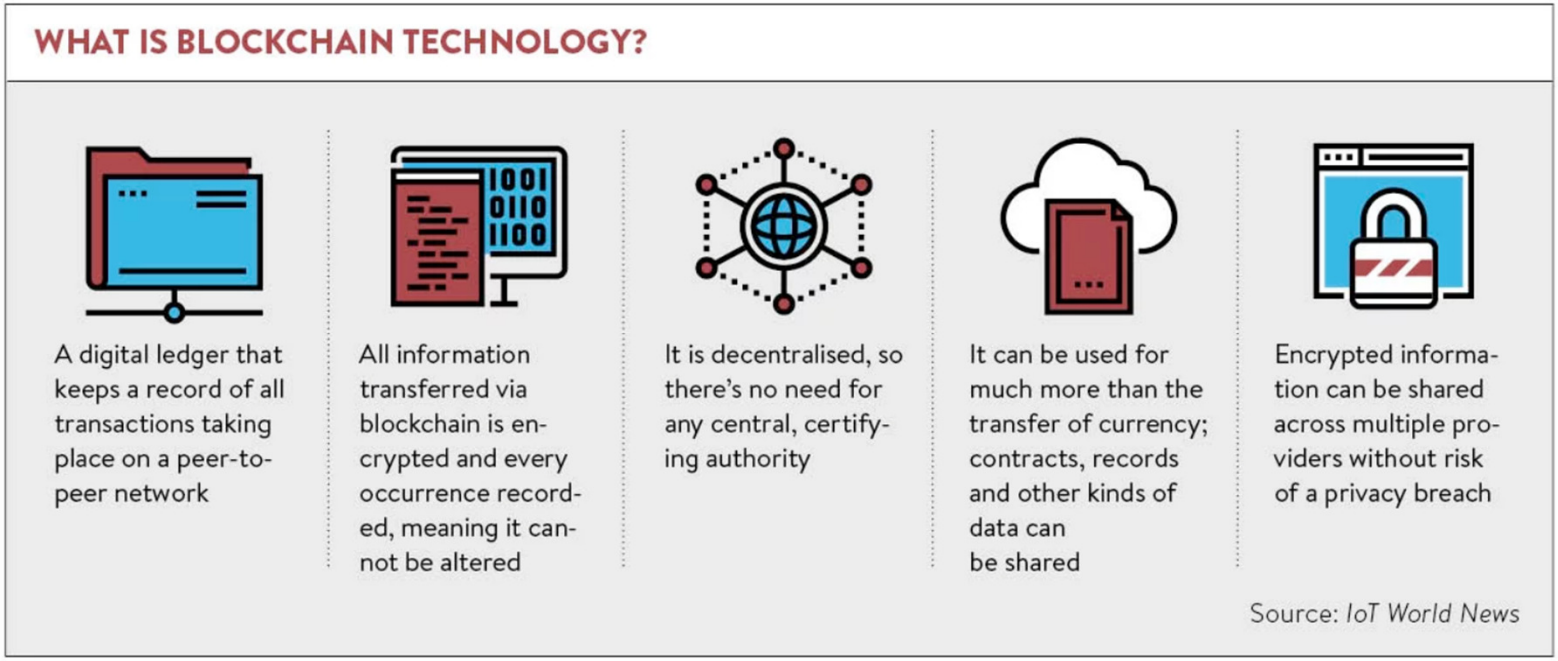
Blockchain Basics

Agency of Digital Services

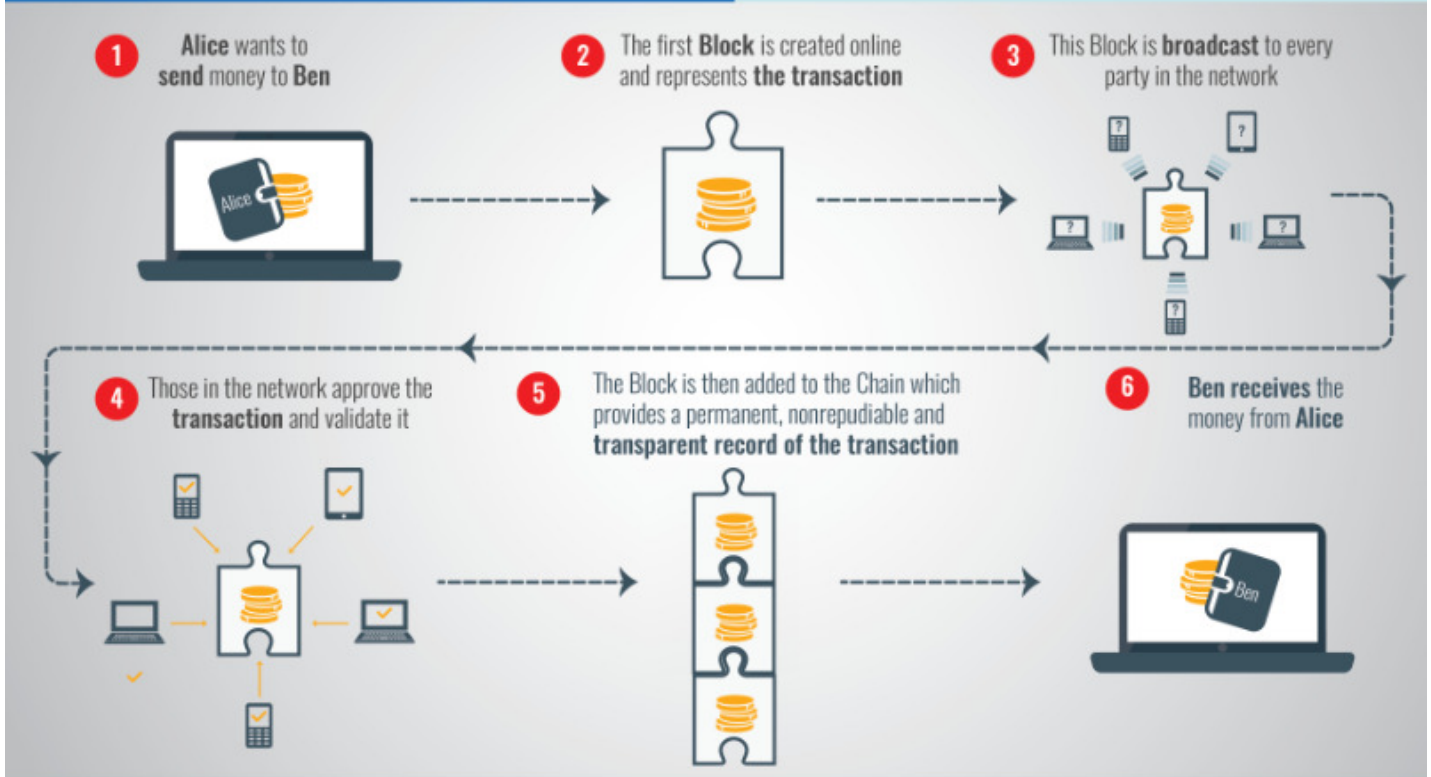
VERMONT

Blockchain is a decentralized "append-only" peer-to-peer public ledger, where transactions (Blocks) are linked and secured using cryptography. Participants all receive complete copies of the ledger and reconcile the ledger through group polling.



HOW BLOCKCHAIN WORKS

> A Blockchain is a cloud based database shared by every participant in a given system, in the case of this exemplar, its a currency trade. The Blockchain contains the complete transaction of the cryptocurrency or other record keeping in other applications. Think of it as a cloud based peer to peer ledger.



Notes: Transactions are not valid until added to the Chain. Tampering is immediately evident.

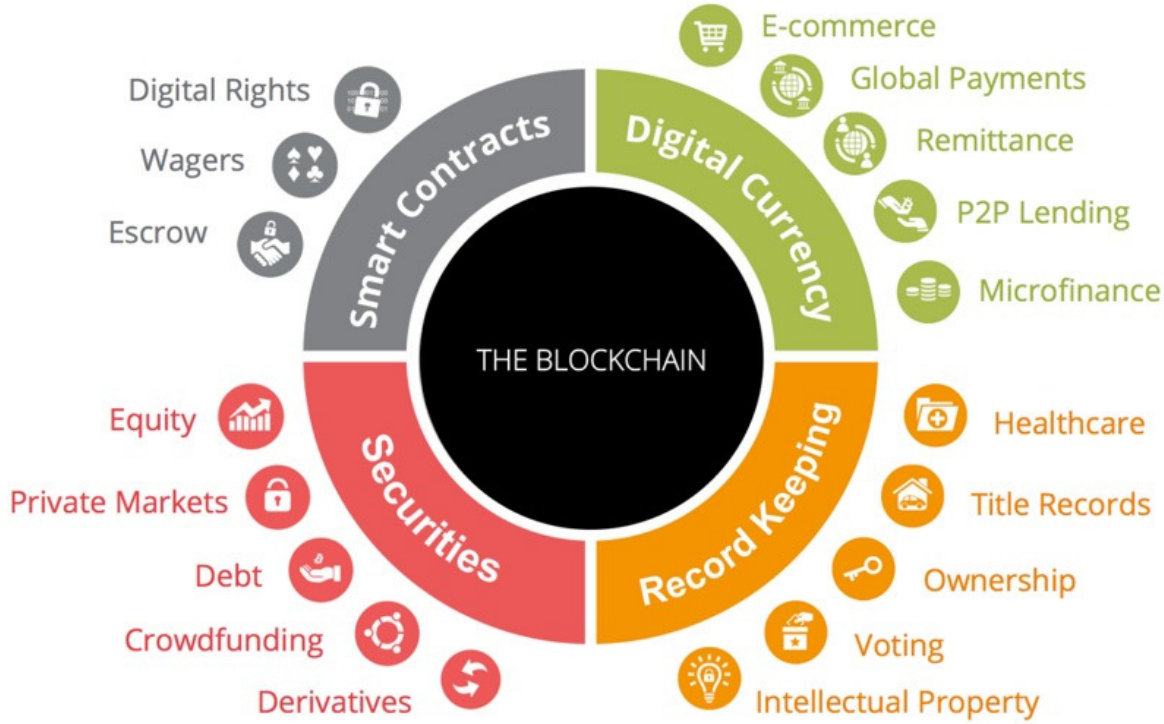
The Blockchain is regarded as safe as everyone in the network has a copy. The Source of any discrepancies are usually evident immediately.

@PDForrest

Details to Know

- Transactions are broadcast to all participants
- "Miners" are participants who provide additional computational resources to settle, audit and reconcile transactions.
- With Bitcoin – Miners are compensated for their resource allocation.
- Without Bitcoin or another asset to reward miners – appointed validator officials/systems are required.
- Blockchain is ill-suited for storing large amounts of data; inefficient data insert/retrieval compared to Relational Databases

Where is Blockchain Useful



Blockchain Startups

Top Blockchain startups disrupting non-financial markets

Venture Radar

PAST

THE WALL STREET JOURNAL.

THE TIMES

HM Government

Hilton

PRESENT

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UBER

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FUTURE

Cloud storage
Filecoin
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BLOCKVERIFY

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