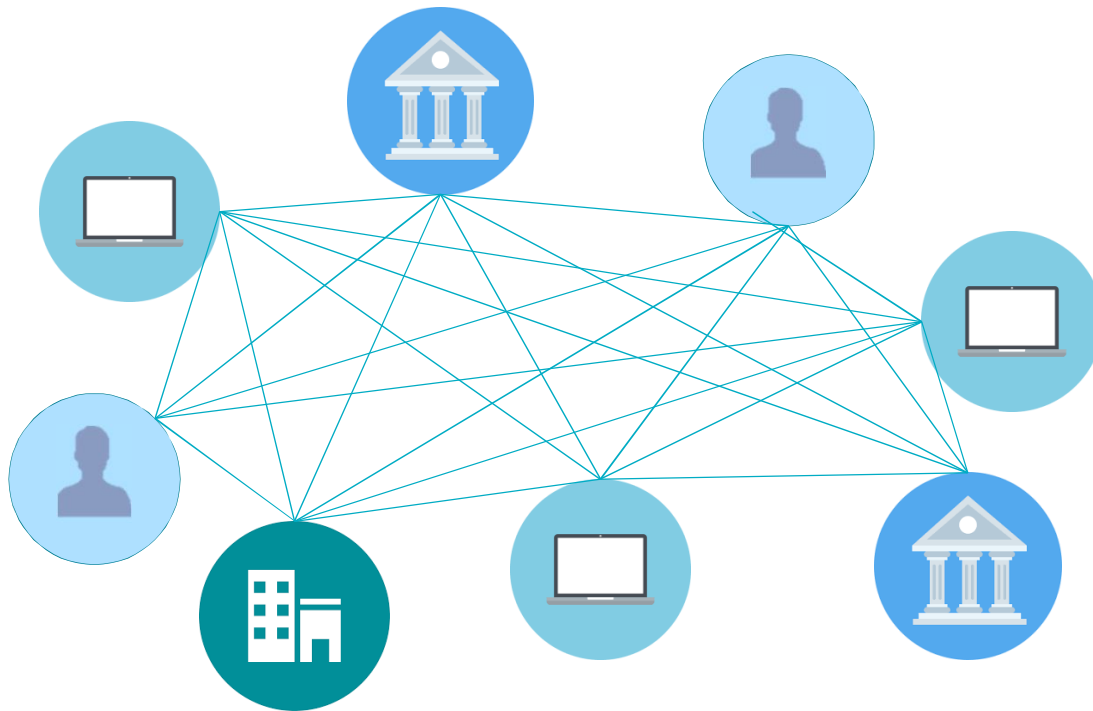


DISTRIBUTED LEDGER TECHNOLOGY (BLOCKCHAIN)

Talkbook
2018

INTRODUCTION



Blockchain is a platform that enables to transact peer to peer, using consensus mechanism in a trustless environment and stores the information in an electronic ledger that is available with all participants.

KEY CHARACTERISTICS



DECENTRALISED

- Reliance on a single entity eliminated



IMMUTABLE

- Cannot be altered once verified and authorised



HIGHER RESILIENCE

- Recoverable Can be reconstructed based on distributed information



TRUST

- Authentication of transactions by independent nodes



TRANSPARENT & AUDITABLE

- Transactions can be retraced to point of origin

POTENTIAL APPLICATIONS

BLOCKCHAIN APPLICATIONS IN FINANCIAL SERVICES

TRADE FINANCE

- International transfer of goods/services
- Invoices and accounts receivable

CAPITAL MARKETS

- Trade capture, validation and matching
- Settlement and clearing

INSURANCE

- Protection against risk of uncertain loss
- Underwriting and claims management

CASH & PAYMENTS

- Digital cash issuance and accounts
- Domestic and cross-border payments

DIGITAL IDENTITY

- Representation of market participants
- Supporting KYC process flows

SECURITIES SERVICES

- Asset registries and servicing
- Valuation and risk
- Collateral management and margining
- Liquidity access and risks

GLOBAL TRENDS & PERSPECTIVES

DUBAI GOVERNMENT'S BLOCKCHAIN INITIATIVE

1st
Govt

World's first blockchain powered government

25.1
million

Reduction in hours for processing documents

AED 5.5
million

Potential savings on document processing

114
MT

Potential reduction in CO₂emission



EFFICIENCY

- Creation of a paperless digital layer
- Savings in man hours for document processing
- Reduction in CO₂ emission



INDUSTRY CREATION

- Facilitate creation of new businesses using the Blockchain technology
- Spanning across real estate, fintech, banking, transportation etc



INTERNATIONAL LEADERSHIP

- Improve safety convenience and security for international travellers
- This will be implemented through efficient passport and security clearance, mobility and payment solutions

CHALLENGES

KEY CHALLENGES

- 1 Nascent Technology**

Challenges such as slow transaction speed, verification process, and data limits are limiting blockchain wide applications.
- 2 Uncertain Regulatory Status**

Since modern currencies have always been created and regulated by national governments, blockchain and Bitcoin face a hurdle in widespread adoption by pre-existing financial institutions if its government regulation status remains unsettled.
- 3 Large Energy Consumption**

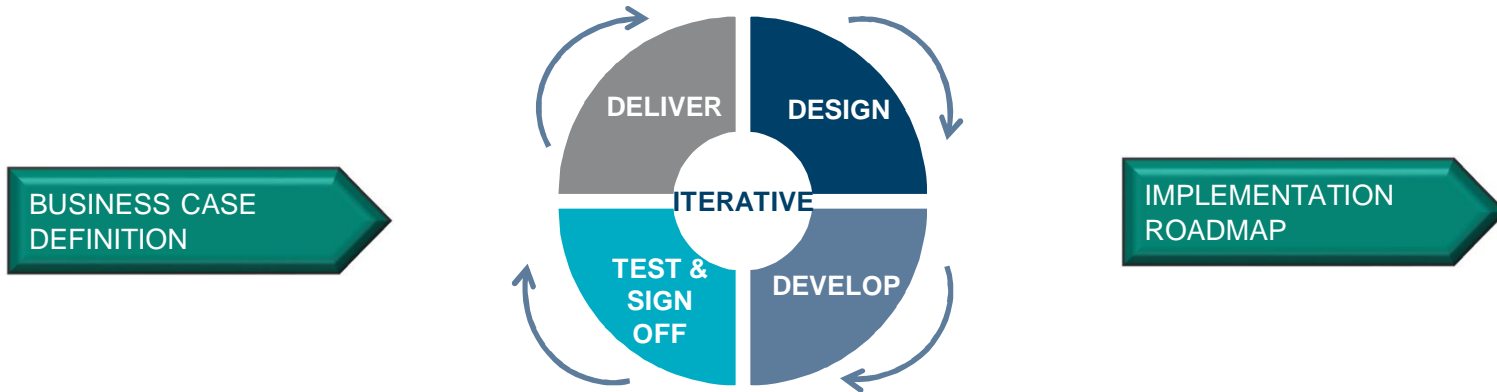
The Bitcoin blockchain network's miners are attempting 450 thousand trillion solutions per second in efforts to validate transactions, using substantial amounts of computer power.
- 4 Integration Concerns**

Blockchain applications offer solutions that require significant changes to, or complete replacement of, existing systems. In order to make the switch, companies must strategize the transition.
- 5 Cost**

Blockchain offers tremendous savings in transaction costs and time but the high initial capital costs could be a deterrent.

KEY CONSIDERATIONS

PREPARING FOR ADOPTION



Requirements definition

- Key activities:**
- Identify existing business processes to be considered
 - Define existing process measurements for the business process
 - Develop demonstrable business case
 - Determine the business scenarios to be demonstrated
 - Identify potential stakeholders

- Business case
- Business scenarios

Proof of Concept

- Key activities:**
- Set up the demo environment and define the configuration parameters
 - Define the participating entities
 - Provide training on the set up
 - Conduct testing of the platform
 - Simulate the defined business scenario in multiple sprints
 - Update iteratively

- PoC framework
- PoC report

Implementation roadmap

- Key activities:**
- Define the initiatives for implementation
 - Develop roadmap and timeline
 - Identify key program milestones

- Implementation roadmap
- Milestone definition

Face the Future with Confidence