

### Overview

Blockchain technology has the potential to cause a paradigm shift in the manner in which private and public enterprises operate today. Using its core strengths of trust, immutability, transparency and privacy, blockchain provides the foundation to the core processes by making transactions fast, accurate and secure. Blockchain also holds the potential to expand traditional business reach across their value chain and redefine their business models.

# **Key Trends**

We analyzed technology trends over the last few years and have identified three strategic considerations for blockchain.

### Blockchain is no longer a hype. It has become integral to organizations' business operations

The journey with blockchain technology has evolved from popular discourse dominated by buzzwords to pragmatic applications of blockchain across enterprises. As business expectations become more realistic, companies have started exploring blockchain to solve core enterprise problems such as KYC, regulatory compliance and supply chain traceability. Organizations are considering blockchain for improved efficiency and optimizing their operational, audit and reconciliation costs. Large organizations and governments across the world have deployed private, permissioned blockchain solutions and established business networks.

### Blockchain networks should extend to the enterprises' value chain stakeholders to unlock business value

The true potential of blockchain requires enterprises to come together and form an ecosystem of value. Blockchain is not an 'over-the-top' technology that powers internal operations of an enterprise, running atop their existing IT systems. It is in fact an 'under-the-floor' invisible technology that provides an exclusive conduit to not just one enterprise, but to its entire value chain. It sends the relevant shareable data elements in near real time, for faster decision making – financial as well as operational, with less or no need for post-facto audits.

For an enterprise to gain maximum benefit from blockchain, they must mobilize their entire value chain to experiment and evaluate the technology after conducting multi-enterprise networked experimentation that is 'outside-in' in nature.

# To address core business problems innovation is at the intersection of blockchain with IOT/AI/ML

The real innovation will happen at the intersection of emerging technologies – AI, IOT, Blockchain. Enterprises need a right mix of digital technologies that address the core business problems, instead of force-fitting individual technologies into the existing IT ecosystem. This convergence is a solid foundation for streamlining existing processes and helps create innovative business models for digital consumers.

For example- In a supply chain scenario with blockchain as the underlying source of data connected with Al/ML/ IOT technologies, the entire lifecycle of a commodity can be recorded and monitored on an immutable, distributed ledger. Thus, providing a trustable source to accurately identify and differentiate a legitimate product from a counterfeit.



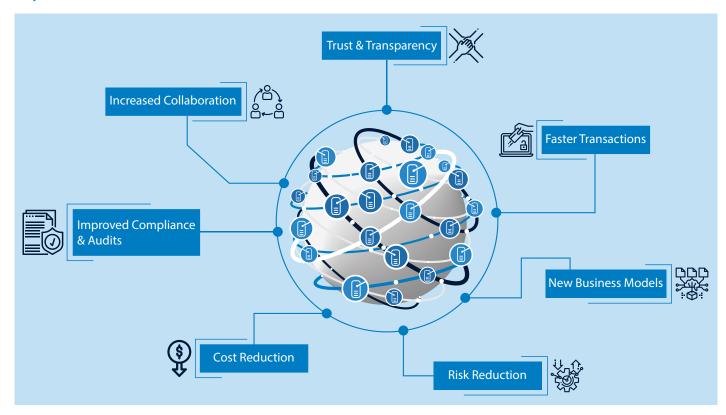
# Why Blockchain?

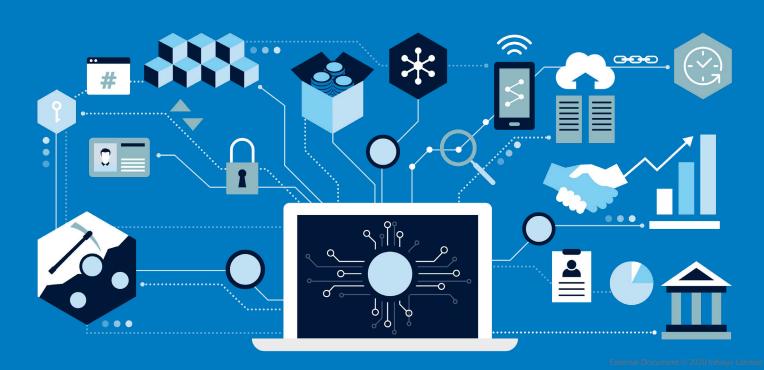
Blockchain is a distributed shared ledger of transactions, validated through a variety of consensus mechanisms, with key features of disintermediation, immutability and automation. As each transaction occurs on blockchain, it is validated by all parties and encoded into a block of digital data before

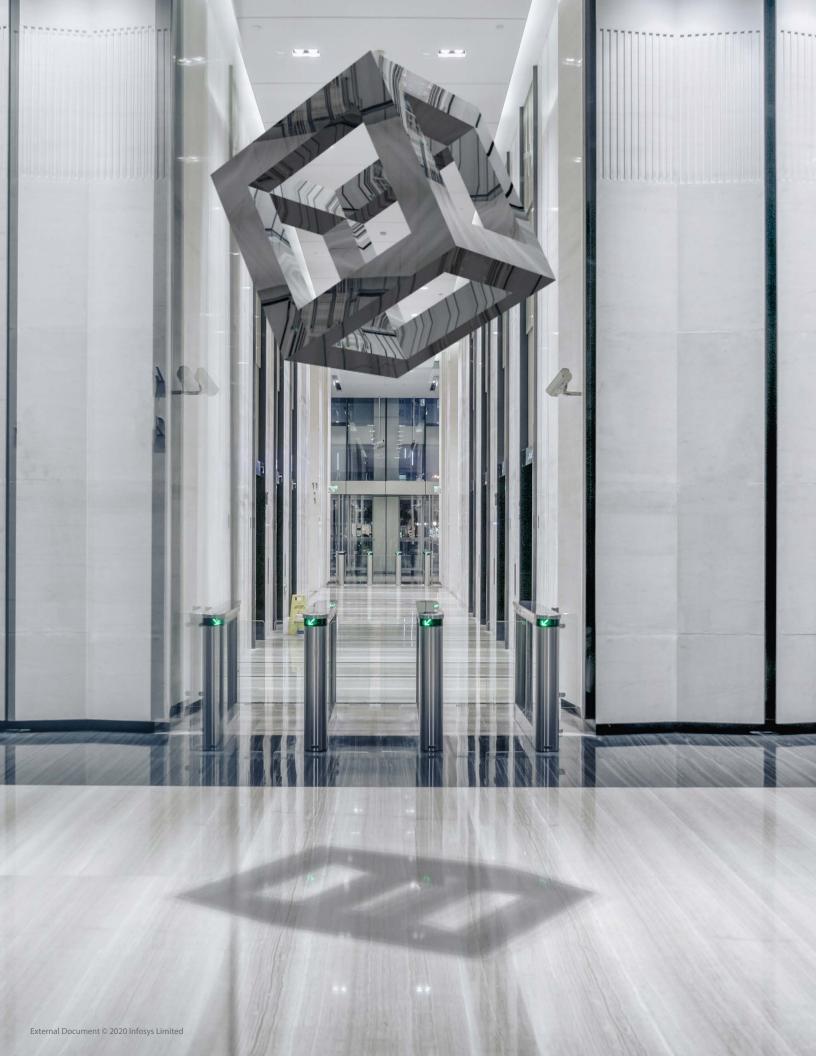
being added on to the network. The blocks of data are connected together to create an irreversible, immutable chain. All members of blockchain can see the end-to-end results of a transaction and share a single view of the truth.

Blockchain technology ensures data integrity across departments, enables smoother and faster workflow, helps lower the cost of coordination among stakeholders and facilitates consistent decision making.

# Key business drivers for blockchain







# Typical Use Cases in Financial Services

- P2P Security Lending & Trade Execution
- Security Lending and Borrowing Post Trade
- OTC Derivatives Trade Confirmation
- Trade & Supply Chain Finance
- Syndicate Lending

- Mortgages
- KYC
- Fund Distribution
- Corporate Actions Processing
- Proxy Voting

- Cross Border Payments
- Fund Valuation
- Cash Equities Clearing and Settlement
- Money Markets Post Trade
- Custody Services for Digital Assets

# **Typical Use Cases in Government Services**

- Digitization and Lifecycle management of legal & financial documents
- Tax Compliance and Fraud Management
- Title Management
- Medical Data digitization

- Royalty Management
- Professional Credentials Verification (for Pilots data)
- Company Registration and Background verification
- Customs Duty: Traceability of 'Certificate of Origin'
- Cross Border Payments

# Typical Use Cases in Insurance

- Commercial Insurance
- Weather Index Based Insurance (Parametric)
- Marine Insurance
- Subrogation

- Syndicated Claims Processing
- Multi Party Claims processing
- Usage Based Insurance
- Reinsurance

### INSUKANCE PROVIDE EXPERT GUIDANCE

- Life insurance policy: Purchase and Activation
- Agent Contracts Management
- Tradeable Insurance
- Automated Claims Adjudication

# Typical Use Cases in Manufacturing, Retail & Logistics Provenance Quality Certification Ecosystem wide Track and Trace Trade Finance Parametric Insurance Preventing Compliance Violations Parametric Insurance Supplier Incentivization

# Typical Use Cases in Healthcare Sector

- Provider Data Management
- Patient Health Record
- Clinical Trials

- Health care claims adjudication
- Prevention of counterfeit drugs and medical devices
- Pharma Regulatory Compliance
- Prescription Sharing
- Patient Case Management
- Prescription Drug Claims

# Typical Use Cases in Energy, Utilities, Telecom & Media

### **Energy & Utilities**

- Wholesale Energy Supply
- Peer-to-Peer Energy Trading
- Exchange Margin Calls
- Distributed Energy Generation
- Large scale Turnkey Projects
- Autonomous Vehicle Charge Stations

- Asset Management
- Renewable Energy Credit Management

### Telecom

- Digital Identity
- Roaming & Settlements
- SLA Monitoring
- Number Porting

### Media

- Content Distribution
- Royalty Payments
- Ownership Rights
- Direct to Consumer



For more information, contact askus@infosys.com

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