

## 1. How Blockchain is Enabling New Ways of Doing Business

### Context:

- Blockchain solutions are transforming the way companies and individuals do business, locally and globally, by simplifying transactions and increasing their efficiency.

### What is Blockchain Technology?

- **A Blockchain is a decentralized, distributed, and oftentimes public, digital ledger that is used to record transactions across many computers** so that any involved record cannot be altered retroactively, without the alteration of all subsequent blocks.
- The technology supports crypto currencies and the transfer of any data or digital asset.

### How it Operates?

- Blockchain works by establishing a peer-to-peer network where each participant maintains a database—a ledger—of all the network's transactions.
- Compiled into “blocks”, transactions are then linked together using cryptographic hashes forming a “chain”.
- The cryptographically-connected blocks create an underlying data layer that provides a common, unified view of information for parties who can access the data.

### Need of Blockchain Technology:

- As the world becomes more interconnected, opportunities for companies and individuals to interact and transact across borders, time zones and channels grow quickly.
- To make sure these run smoothly, proactive management—to ensure minimisation of cost, lowering of risk and elimination of inefficiencies—is needed.

### Advantages of Blockchain Technology:

- Distributed ledger technology (DLT) such as blockchain helps simplify transactions and conduct efficient, secure interactions with multiple independent parties around the globe, without the need for a third-party intermediary.
- As a public ledger system, blockchain records and validate each and every transaction made, which makes it secure and reliable.
- All the transactions made are authorized by miners, which makes the transactions immutable and prevent it from the threat of hacking.
- Blockchain technology discards the need of any third-party or central authority for peer-to-peer transactions.

- It allows decentralization of the technology.

### **Blockchains enabling new ways of doing business:**

- **Case Study:** Farmers collect large volumes of data during planting and harvesting.
- Licensed data—it qualifies as intellectual property of a farmer such as which crops to plant or how many seedlings—can be anonymised, sold to third parties and offers the agricultural industry with real-time insights on farms across the world. However, farmers are unsure how to monetise this crop data.
- Farmobile (start-up) addresses these challenges through a blockchain-based exchange.
- The solution empowers farmers to licence data to approved buyers and includes account set-up, creation, confirmation, execution of the offer, and delivery of the digital asset. They can sell single-use licences while keeping their farm's identity anonymous.

### **Conclusion:**

- Blockchain solutions are transforming the way companies and individuals do business, locally and globally, by simplifying transactions and increasing their efficiency.
- Those looking to take advantage of the technology should partner with cloud providers capable of scaling up while delivering cyber security controls and standards to protect from external attacks.

**Source: Financial Express**

