BLOCKCHAIN & FOOD SUPPLY

AUTOMATED EFFICIENCY AND TRACKING

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HOW DOES BLOCKCHAIN WORK

- **Distributed ledger technology (DLT)**

- **Data stored globally on thousands of servers**

- **Everyone on network can see entries made in real time**

- **Entries are time-stamped and immutable**

- **Hacking of system or retrospective changing of data is difficult because of distributed duplicate records**

ISSUES IN FOOD SUPPLY CHAINS

- **Complicated processes**

- **Many links in the chain**

- **Opportunities for corruption, theft, and loss**

- **Waste and inefficiencies not recorded**

- **Errors in communication**

- **Gaps or inconsistencies in record keeping**

- **Difficult to track large inventory**

- **Tracking and tracing not always possible**

HOW CAN BLOCKCHAIN HELP?

- **Keeps track of each step of the supply chain process**

- **Automatic progression of process**

- **Multiple records of each transaction or step reduces fraud, theft, loss and corruption**

- **Record of waste and inefficiencies**

- **Improves food safety**

- **Duplicate and multiple records reduce miscommunication**

- **Allows tracking and tracing throughout the supply chain to identify and investigate problems**

- **Can also be used for predictive analysis for downstream forecasting**

CASE STUDIES

- **Coffee supply chain in Brazil**
- **Bourbon vanilla in Madagascar**
- **Agricultural produce in India**