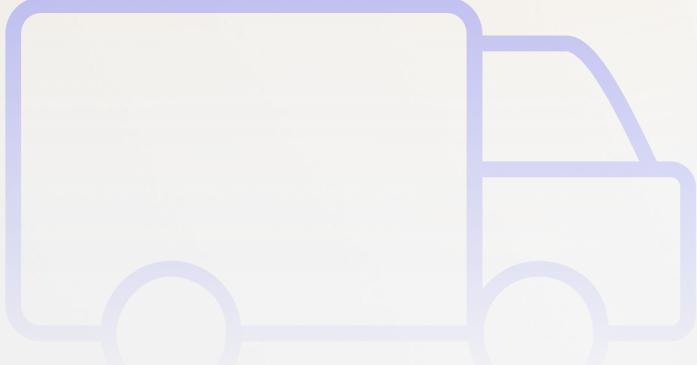


Blockchain Use Cases

Supply Chain and Provenance

Some ways that blockchain technology can benefit supply chains and provenance include:

Potential Use Cases



Traceability: Providing a tamper-proof and transparent record of the movement of goods through the supply chain.

Security: Verifying the authenticity of goods and preventing fraud and counterfeiting.

Collaboration and communication among participants: Improving collaboration across different organizations in the supply chain thanks to seeing all data transparently.

Real Life Example

Alibaba started using blockchain technology to improve traceability of customer orders.

Retail

Some ways that blockchain technology can be used in the retail industry include:

Potential Use Cases

- Inventory and product traceability: Real-time traceability of inventory and product movements from origin to consumer.
- Customer loyalty programs: Secure and tamper-proof customer rewards and points.
- Identity and access management: Secure authentication and access control for employees, suppliers, and customers.
- Data sharing and interoperability: Secure and transparent data sharing among different stakeholders.
- Anti-counterfeit measures: Secure tracking of products to prevent counterfeiting.

Real Life Example

Walmart Canada has been using DL Freight, a blockchain network, for the past two years as a single source of truth for all network participants. Invoice disputes decreased by 70 times after its implementation.

Manufacturing

Some ways that blockchain technology can be used in manufacturing include:

Potential Use Cases



Real Life Example

Quality control and assurance: Secure tracking of products to ensure quality and prevent defects.

Maintenance and service: Secure tracking of maintenance and service records for equipment and machines.

Inventory and product traceability: Real-time traceability of inventory and product levels.

Odometer is a device that measures the distance a vehicle has traveled. Odometer fraud results in the manipulation of the mileage on many vehicles. To prevent this, Bosch connected a car to a blockchain to read its mileage data.

Financial Services & Banking

Here are some ways that blockchain technology can be used in the financial services and banking industry:

Potential Use Cases



Real Life Example

Faster and more efficient transactions: Making cross-border payments and other transactions faster and less costly thanks to peer-to-peer transactions.

Improved settlement processes: Providing more efficient and secure way of clearing and settlement

Enhanced security: Secure record keeping of financial transactions, and reduction of fraud and errors.

Facilitating real-time auditing and monitoring

Wells Fargo and HSBC entered a strategic agreement to optimize settlement of foreign exchange transactions and reduce settlement risk.

Securities & Trading

Some ways that blockchain technology can be used in the securities and trading industry, which involves buying and selling of securities, include:

Potential Use Cases

Security and transparency: Providing a transparent and secure infrastructure for asset trading.

New instruments: It is effective in the emergence of new investment instruments such as digital assets.

Reliability: It can enable trade and agreements to take place in a more reliable environment through software.

Data recording: It can be used for safe and transparent recording of order information, trade data.

Real Life Example

Nasdaq has created Linq, a blockchain-based platform that enables private companies to issue and manage shares using blockchain technology.

Real Estate

Blockchain technology in real estate can be used in several ways:

Potential Use Cases



Real Life Example

Digital records of property ownership: Tamper-proof records of property helping to improve the efficiency and security of ownership transfer, as well as reducing the need for intermediaries.

Fractional ownership: Tokenization of real estate enabling fractional ownership, making it more accessible for individuals to invest in properties.

Automation: Smart contracts automating the process of buying and selling real estate, reducing the need for intermediaries and increasing transparency.

A city in Vermont, U.S. implemented a pilot study to test the blockchain technology on recording real estate sales. One of our goals is to eliminate title insurance need and make the title transfer secure.

Education

Potential use cases of blockchain technology in the education sector include:

Potential Use Cases



Digital credentialing: Enhancing security, transparency, and portability of educational credentials.

Data sharing and collaboration: A secure and faster way of sharing student information, such as grades and attendance records, between different educational institutions.

Real Life Example

The University of Bahrain started issuing digital diplomas to make it easier for graduates to share their educational credentials with employers, and for employers to verify the authenticity of the diplomas in a secure and transparent manner.

Legal Industry

Some ways that blockchain technology can be used in the legal industry include:

Potential Use Cases



Real Life Example

Smart contracts: Automating legal agreements using blockchain-based smart contracts.

Document management: Securely storing and sharing legal documents.

Intellectual property (IP): Registering and protecting IP rights using blockchain technology.

Identity verification: Authenticating and verifying identity of parties using digital identities for remote legal proceedings.

OpenLaw is a blockchain-based platform that uses smart contracts to automate the creation, execution, and management of legal agreements.

Insurance

Some potential applications of blockchain technology in the insurance industry include:

Potential Use Cases



Claim processing: Automating the claims process using blockchain-based smart contracts.

Fraud detection: Detecting and preventing fraud using blockchain's immutability and transparency.

Identity verification: Verifying the identity of policyholders and providers.

Reinsurance: Automating reinsurance contracts using blockchain, reducing operational costs and increasing efficiency.

Real Life Example

Allianz uses an enterprise blockchain platform with 24 European subsidiaries to streamline cross-border auto insurance claims.

Healthcare

Some potential use cases of blockchain technology in the healthcare industry include:

Potential Use Cases



Real Life Example

Secure medical records: Secure, tamper-proof and transparent storage of electronic medical records (EMR).

Identity and access management: Secure authentication and access control for patients, doctors, and other healthcare professionals

Medical billing and claims management: Secure and transparent management of medical billing and claims.

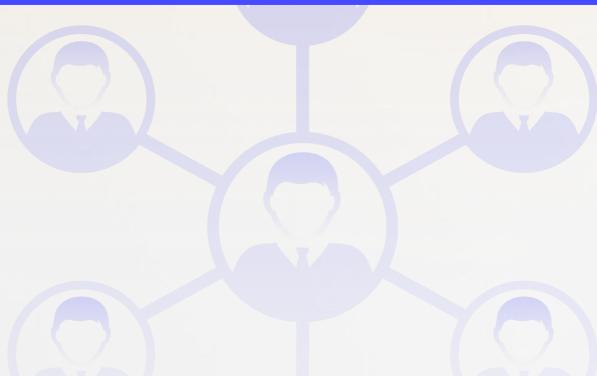
Medical research: Secure and transparent sharing of medical research data among researchers and institutions.

Aetna, a U.S.-based health insurance company, is experimenting with a blockchain-based system that enables the exchange of databases, handling claims and payments, and keeping directories.

Public Sector

Potential use cases of blockchain in the public sector include:

Potential Use Cases



Real Life Example

Digital identity management: Creating safe and unchangeable digital identities for people, companies, and organizations.

Electronic voting systems

Land and Property Management: Systems for the safe and transparent registration and transaction of real estate.

Management of taxes and benefits: Systems that are secure and transparent for disbursing benefits and collecting taxes.

The Republic of Estonia has implemented a blockchain-based digital identity system to improve the security and efficiency of its public services.