Service ID S00228

Location Italy

Blockchain in agriculture traceability systems

Provider service

Università degli Studi di Napoli Federico II

Link to content

https://www.agrifoodtef.eu/services/blockchain-agriculture-traceability-systems

Type of Sector

Arable farming, Food processing, Greenhouse, Horticulture, Livestock farming

Accepted type of products

Data, Design / Documentation, Software or AI model

Type of service

AI model training, Business modelling, Certification, Collection of test data, Conformity assessment, Cybersecurity, Data analy

Description

The service focuses on testing and developing blockchain technologies to enhance traceability in the agri-food sector. By integrating blockchain with IoT devices, the service ensures a transparent and immutable record of transactions across the entire supply chain. This enables agri-food companies to improve transparency, accountability, and trust while ensuring the integrity and safety of food products. Additionally, it drives efficiency and sustainability throughout the supply chain.

How can the service help you

The service can help you by implementing blockchain technology to provide end-to-end traceability in your agri-food supply chain. This enhances transparency, accountability, and trust, ensuring the integrity and safety of your food products. By integrating IoT devices with blockchain, you can improve operational efficiency, reduce risks, and drive sustainability throughout your supply chain.

How the service will be delivered

Tailored Blockchain Solutions: The service can be customised to meet the specific needs of your agri-food supply chain, designing blockchain systems that align with your operational requirements and industry standards, whether it's for tracking raw materials, production processes, or distribution.IoT Integration Based on Your Operations: Customisation includes integrating IoT devices that are best suited for your products, whether it's sensors for temperature control, humidity monitoring, or tracking the movement of goods. These devices will work in tandem with the blockchain for real-time data capture.Scalability: The service can be adapted to different scales, from small-scale farmers to large industrial operations, ensuring the blockchain solution fits the size and complexity of your supply chain.Compliance with Regulations: The service can be tailored to ensure compliance with local and international food safety regulations, integrating necessary features for certification and reporting to meet regulatory standards.Data Privacy and Security: Customised blockchain protocols can be set up to meet specific privacy and security requirements, ensuring sensitive data is protected while maintaining transparency and accountability.

Service customisation

The service will be delivered by developing and implementing blockchain solutions tailored to your agri-food supply chain. This includes integrating IoT devices to capture real-time data, which will be recorded on an immutable blockchain to ensure traceability. The service will involve testing and deploying blockchain technologies to enable transparent, secure transactions and movements throughout the supply chain, enhancing product safety, efficiency, and sustainability.