A holistic frameWork with Anticounterfeit and inTelligence-based technologieS that will assist food chain stakehOlders in rapidly identifying and preveNting the spread of fraudulent practices



#### **Practice Abstract**

# **Blockchain deployment and smart contracts**

#### Description

The Watson project focuses on implementing the Watson platform for data storage and use by various stakeholders of the food supply chain by leveraging blockchain technology.

Critical information regarding the authenticity of food products will be stored in the blockchain. This information cannot be tampered with, thereby ensuring traceability and food fraud prevention. Different supply chains have similar steps and stakeholders, but the information can vary in each one. Information collection can be carried out using IoT devices and smart sensors, through interfaces with the information systems of the involved parties, or by recording control measurements such as DNA tests.

Each stakeholder (farmer/primary producer, processor, packager, distributor, wholesaler, retailer, etc.) enters the critical information they are responsible for and can access the critical information of others to ensure transaction transparency. Smart contracts will help automate transactions, while a digital passport will provide the necessary information from the blockchain in a simple and user-friendly manner for every platform user. Using appropriate technological solutions to keep usage costs low or having the main stakeholder/ dominant player in the supply chain bear the cost, can make the platform more acceptable in practice by the involved parties.

In addition to those involved in the food supply chain, regulatory authorities can also utilise the blockchain platform to control the authenticity of food products.

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#### **Stakeholders**

Food Industry
Food Safety Authorities
Policy Makers
Consumers
Academic and Research
Community
Industry Association
Trade Organizations
Technology and Data
Analytics Experts
Supply Chain Partners

#### Country

Worldwide



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### About Watson Visit us

Watson is a 3-year project funded by the Horizon Europe programme, aimed at tackling fraudulent practices in the food supply chain. Our interdisciplinary consortium of 47 partners from 20 EU and non-EU countries is collaborating to develop a holistic traceability framework that integrates data-driven services, intelligence-based toolsets, and risk-estimation approaches, enabling food safety authorities to detect and prevent food fraud more effectively.



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