

Practice Abstract

Food scanning tools to augment democratisation and food chain coverage

Description

Concerns about food safety and traceability have increased significantly due to greater awareness about climate change and news about food fraud. In addition to the societal aspects, there is also the economic axes with food fraud amounting to billions of euros per year in the EU alone. For example, according to the European Commission's science and knowledge service, wine fraud costs the regular EU wine sector an estimated 1.3 billion euro per year, around 3% of the total sales value. Public authorities are seeking to overcome these issues by performing controls and checks, resorting to food analysis in a laboratory context. While these are precise and robust, they are expensive, destructive, and done on a sampling basis.

Watson aims to research and assess the applicability of a set of food scanning tools to complement current procedures, through flexibility, democratisation, and augmented coverage of the value chains. These tools are diverse in scope, including:

- Target specific food products (meat, olive oil, honey, wine)
- Technology (from RGB images to mass spectrometry)
- Cost and flexibility (from mobile apps to infra-red sensors)
- Precision (coarse analysis for assisting visually impaired consumers to DNA analysis)
- Portability (from mobile devices to lab equipment)

The potential of the tools is augmented by their integration in the Watson platform, acting as data sources for triggering actions from food safety authorities and promote traceability by covering different stages of the value chains. The tools being researched along with acquired data will also undoubtedly promote further developments and promote the cross-food product applicability.

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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



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



About Watson

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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