

Demand forecasting along the supply chain: a mutual benefit

FOODRUS

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#ReduceFoodWaste,
#Collaborativedemandforeca
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The FOODRUS project introduces an innovative method to tackle food waste and improve inventory management across food product supply chains. By promoting cooperation between producers and retailers, it emphasizes the importance of precise demand forecasting to reduce waste and ensure optimal stock levels. This approach is particularly beneficial as it considers the distinct challenges faced by both groups. Producers deal with variables like weather, technological changes, and consumer preferences that influence how much they produce.

Retailers, on the other hand, must consider stock requirements, seasonal demand changes, and factors such as holidays and inflation to meet consumer expectations effectively. Recognizing the difficulties of making perfect demand predictions, FOODRUS leverages the latest in statistical analysis, machine learning, and deep learning to aid in decision-making. These advanced techniques help understand the factors driving demand, enabling businesses to refine their stock strategies, make smarter purchasing decisions, and better meet the needs of their customers. A key innovation within the FOODRUS project is a user-friendly web tool, part of a larger platform that includes 11 other solutions aimed at reducing food waste. This tool is notable for its secure environment, which safeguards sensitive company data. This aspect was a critical challenge, given the need for companies to share information while retaining control over their proprietary data. The tool not only forecasts demand but also offers access to valuable insights, such as previous year trends and the ability to review historical data for accuracy. This functionality is crucial for identifying and correcting any errors in past data, thereby improving the forecasting accuracy.

Implemented through pilot studies in diverse sectors—vegetables and prepared salads in Spain, meat and fish in Denmark, and bread in Slovakia—the FOODRUS project



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demonstrates the effectiveness of its forecasting models. These models are specially adapted to each sector's unique needs. Beyond just providing forecasts, the application offers a wealth of additional information, enhancing the decision-making process for businesses. This approach not only significantly reduces food waste along the supply chain but also presents a model that can be adapted to other sectors, leading the way toward more sustainable and efficient supply chain management practices. The FOODRUS project illustrates the shared benefits of collaborative forecasting for all stakeholders in the supply chain.

About

Coordinated by the University of Deusto and comprising 27 partners from 10 different European countries, the EU-funded FOODRUS project aims to limit food losses and waste, and to promote resource efficiency across all stages of the agri-food value chain. FOODRUS is working to tackle the food waste and losses by creating resilient food systems across nine European regions. To achieve this, the project will test 23 circular solutions through diverse forms of collaborative innovation.

Consortium



www.foodrus.eu



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