食品業智能製造之研究
建立食品履歷追蹤追溯平台

毛穎崙

國立政治大學資訊管理學系

nhk4321@gmail.com

摘要

智慧製造旨在妥善運用生產數據與資訊整合，所以智慧製造帶動產業的數位化轉型是提升製造業競爭力的重要關鍵，而企業加快數位化轉型的動能，則來自消費者的需求，尤其是對食品業而言，消費者需求已經改變了企業所面臨的商業模式。隨著全球化的發展，各國間食品貿易頻繁，食品安全的管理複雜度增加，食品安全問題亦成為國際的重要議題，食品產業鏈上下游的交互影響更突顯食品價值鏈管理的必要性，目前政府的食品追蹤系統也僅能以事後追蹤下架為主要管理手段，食品業者亟需一套可由業者執行自主管理的食品履歷追溯平台，來保證產品品質與有效期並防止過期產品售出。本研究旨在依據消費者需求運用食品業智慧製造生產數據，開發設計食品履歷追溯平台，作為食品業者因應食安法規的第一級自主管理解決方案。

Industry 4.0 is based on smart manufacturing and can properly integrate production data and information. Therefore, the digital transformation of smart manufacturing to drive the industry is the key to improving the competitiveness of manufacturing. The kinetic energy of enterprises to accelerate the digital transformation is from the needs of consumers. Especially for the food industry, consumer demand has changed the business model that companies face. With the development of globalization, food trade between countries has been frequent, and the management complexity of food safety has increased, and food safety issues have become an important issue in the world. The interaction between upstream and downstream of the food industry chain highlights the need for food value chain management. At present, the government's food tracking system can only follow the post-tracking as the main management method. The food industry needs a set of food resume tracking platform that can be independently managed by the industry to ensure product quality and expiration date and prevent expired products from being sold. The purpose of this study is to integrate the "smart manufacturing" production data of the food industry and develop a design food history traceability platform based on the needs of consumers, as a first-level self-management solution for food industry responders to food safety regulations.

關鍵詞：工業 4.0、智慧製造、DSRM、食品履歷