

How Singular Intelligence is using AI to overcome supply chain challenges with Sainsbury's and Cranswick

<u>Singular Intelligence</u>, a startup that builds AI-driven data analytics solutions for the FMCG industry, and which was also part of Digital Supply Chain Hub's (DSCH's) first cohort has been working alongside supermarket chain Sainsbury's; and Cranswick, the retailer's pork supplier for its Taste the Difference Range, to improve supply-chain efficiency.

The startup used its funding from DSCH to develop an AI-driven supply and demand sensing model for SMEs that accurately interprets market signals (at macro and micro levels) to mitigate the risk of supply-demand imbalances.

<u>Watch how Singular Intelligence reduced food wastage</u>, future proofing success with their Catman AI supply demand sensing solution.

Delivering industry solutions for supply and demand imbalances

The UK pork industry has come under considerable strain as factors such as high inflation, global conflict and an uncertain economic environment have dampened demand, while labour shortages at farms and factories have compounded the problem. This uncertainty has meant the retailer and its supplier have experienced challenges to their planning and decision-making processes, which have resulted in revenue losses and food waste for Sainsbury's and a glut in the supply of pigs for Cranswick.

Singular Intelligence was tasked with predicting more accurate demand signals and supply risks, so both companies could make better planning decisions. Using CatmanAI, its flagship product that automates and augments the decision-making process using an algorithm, and data provided by both parties, the startup applied elements of its functionality to address the problem.

On the demand side its demand-sensing technology was used to track and forecast demand signals such as sales, product availability and the weather; while on the supply side, it conducted cost risk analysis, production risk analysis, supply shock analysis and more.

Challenges and successes

For Sainsbury's there was a 2-5% improvement in product availability and a 50-70% reduction of food waste.

Cranswick also recorded improved figures. It estimated that the oversupply of pork sent to the retailer fell by 15.25%.

What's next?

In collaboration with Digital Catapult, Singular Intelligence plans to build a supply and demand sensing solution that will be deployed into the DSCH testbeds and showcased as part of the Hub. "The challenge was to understand the complexity of the pork supply chain and how decisions were made. We did research, interviews, factory visits and meetings with supply chain teams to understand the supply chain decision-making process."

SARVESH KUMAR, CEO, SINGULAR INTELLIGENCE

