



Brunel
University
London



Case Study: Northumbrian Fine Foods

Knowledge Transfer Partnership



Case Study

Knowledge Transfer Partnership

An industrial partnership that helped a 'Free From' food manufacturer significantly boost its turnover has been recognised as outstanding by Innovate UK.

Northumbrian Fine Foods (NFF) were looking to improve sustainability in the manufacturing process of gluten free foods. The company decided to partner with Brunel University London to find a cost-effective way to achieve this goal. The company approached Dr Valentina Stojceska due to her experience within this business area and it was agreed that the business would benefit most from a Knowledge Transfer Partnership. Moreover, because we helped them secure funding through a government grant the company only had to pay for a small percentage of the project costs.

Dr Valentina Stojceska gathered a team of Mechanical Engineers from Brunel to advise on different areas of the project. Two associates, Mr Solomon Melides and Ms Chantelle Kleynhans, were selected by the University and were based at the company's headquarters. This highlights the unique nature of a KTP in that the associates worked on site in North East England to transfer the knowledge from the University directly to the company.

The firm was advised that they could reduce their energy consumption by 23%, unlocking significant savings and reducing greenhouse gas emissions. Following careful analysis, improvements were recommended in a number of areas, including the design of the factory's lighting system, the operational hours of the cooling equipment, and staff training.

After improving the efficiency of the manufacturing process the team decided to investigate NFF's commercial products. They developed an innovative system for manufacturing high quality 'Free From' food products by switching to new ingredients and making ratio adjustments to other ingredients, inviting members of Coeliac UK (a group who are adversely affected by the consumption of gluten) to offer feedback on sensorial and nutritional properties of the products, and quality of the packaging. They applied and subsequently passed an audit undertaken by the Association of European Coeliac Societies (AOECS) and are now fully accredited for coeliac supply to Europe.

"In terms of sustainability, we have improved energy efficiency and reduced food processing waste in the production process. In terms of innovations, we worked on improving nutritional properties of the existing gluten-free products by lowering sugar and fats levels and increasing dietary fibre.

We have also developed new 'Free From' products using novel ingredients that were intended for the UK and EU markets. There has since been an 80% increase in business, and turnover has doubled since the beginning of the project. NFF's work with Brunel enhanced the business outputs significantly."

Dr Valentina Stojceska speaking about the success of the KTP project.

To apply visit www.brunel.ac.uk/business/research