

North of Scotland KTP Centre Case Study

Knowledge
Transfer
Partnerships

ARR Craib

This project developed an electronic system linking flexible resource with varying demand using the latest advancements in technology within the road transport market. It was awarded the highest grade of Outstanding by the KTP grading panel.

Challenge

The KTP was designed to optimise ARRC's fleet to maximise vehicle utilisation and allow further business growth. Changing demands of ARRC's client base as a result of the reduction in oil price refocused the company's priorities to increase fleet effectiveness. The manual system previously used to control the fleet had reached capacity and off-the-shelf IT solutions did not suit ARRC's unique local market. RGU's knowledge was therefore needed to create a bespoke system and algorithm.

Results

The KTP achieved enhanced vehicle allocation through dynamic interaction using a modern electronic scheduling system. This has led to better communications between sales, controllers and drivers, and has had a positive safety implication by removing the need for phone conversations. Driver and vehicle downtime has been reduced, and customer satisfaction has been increased as a result of fewer missed deadlines.



Benefits

Use of the system allows a 17% fleet productivity gain with no impact on operations, worth approximately £1.5M per annum to ARRC. ARRC and RGU have developed a strong collaborative partnership with ongoing activity in which the KTP Associate has continued employment.



ARR Craib is the largest privately owned haulier in Scotland, providing UK haulage and specialised local haulage for the oil and gas industry.

"The KTP project provided us with an exciting real-world technical challenge in an application area in which we were able to have a high impact. It is highly rewarding to see direct application of our research in this way."

Professor John McCall
Professor of Computing Science