



How **PALLETMANAGER** helps a Leading Drinks Business Optimise its Product Distribution

Diageo, a leading premium drinks business, is the thirteenth largest publicly quoted company in the UK. Most of the Diageo's Guinness products sold in the UK come from production facilities in Ireland, with the 'bulk' products being conditioned and packaged in bottles and cans in a major plant in Runcorn, Cheshire. This acts as the supply centre for UK, Ireland and numerous international markets.

In order to remain competitive in these markets, consideration has to be given to the design of the bottles and cans, packaging, efficiency of supply line transport, minimisation of product damage and potential environmental impacts. Pack

designs resulting in wasted warehouse storage or failing to make maximum use of delivery vehicle space will result in higher costs, additional vehicle journeys, and a negative environmental impact.

The Runcorn plant deals with more than 100 main product formats and over 15 Million cases of product per year. The scale of the operation means that failure to package just a single product line in the most efficient manner could result in losses of £100,000 - or far more.

The Solution

Operational Research techniques are ideally suited to making sense of such problems, and Diageo consulted **Gower Optimal Algorithms Ltd (GOAL)** based in Swansea, UK about possible solutions. This company has a number of software products including **PALLETMANAGER** and **CARGOMANAGER** that focus on achieving improved utilisation of storage and transport whilst minimising packaging costs.

GOAL believed that **PALLETMANAGER** would solve Diageo's packaging, storage and transportation problems. Their recommended tool was constructed to a modular principle, each module of which could be applied to specific problems. Diageo have now been using **PALLETMANAGER** for many years to design the optimum product sizing and packaging dimensions, and to produce appropriate formats for loading their products on distribution pallets.

The Value:

Efficient packaging, warehousing and transport results in considerable cost benefits for Diageo. As a responsible business they are keen to ensure the quality and integrity of their products for their customers, and want to ensure their product arrive undamaged, whilst maximising load efficiency. **PALLETMANAGER** provided the solution to these aims and also helped to minimise their environmental impact.

Based on a scienceofbetter.co.uk case study – Operational Research Society.