Tetley keeps tea on the shelves

Predicting demand in food and drink retail is notoriously difficult, and never more so than during the COVID-19 pandemic.

In March and April 2020, panic buying in supermarkets in the UK, caused a spike in demand of up to 100%. Many manufacturers and distributors simply struggled to meet demand, which caused many basic products like toilet rolls, tea and pasta to disappear from the shelves.

John Burdett, Global Operations Director for Tata Consumer Products Ltd. (TCPL), leads the end-to-end supply chain operations for TCPL’s tea and coffee businesses. Tata Consumer Products Limited is a focused consumer products company uniting the principal food and beverage interests of the Tata Group under one umbrella. Its key beverage brands include Tetley in UK, Eight O’Clock Coffee in USA and Tata Tea in India.

Manufacturers often strive for high levels of asset utilisation to maximise the return on their capital investment. This may run assets harder in the short-term, but can mean they are left with little capacity to play with in the case of sharp spikes in demand. The principles of supply chain management are simple. To deliver on time, in full to the customer at lowest possible cost, in a sustainable and responsible way. If customer demand is stable, it is easy to predict. This means that buffers (inventory or capacity) can be minimised. Promotional strategies such as Buy-One-Get-One-Free (BOGOF) distort the demand signal, making it less predictable. Larger buffers need to be put in place to ensure that customer demand can be fulfilled. Understanding demand patterns for individual products and the commercial strategies that drive them (demand profiling) is an essential aspect of supply chain management.

“Many manufacturers apply this ‘rule of thumb’ of operating their assets at 85-90% utilisation, whereas I wanted to take an approach that was tailored to our business and customer needs, and the work of Jan and her team helped us do that,” John explains.

Through their membership of the Supply Chains in Practice (SCIP) industrial forum, John and his team at TCPL undertook collaborative research with Prof Godsell, over five years. This explored different configurations to optimise the supply chain through buffer management. They examined the trade-offs between inventory and capacity buffers and the alignment of buffers with commercial strategy.
Using sales and stock data, the demand profile for TCPL’s products were analysed at a sku (stock keeping unit) level.

Models were developed which tested different configurations of supply chain, stock level and investment. They identified an optimal level of utilisation that would keep the business competitive, while allowing spare capacity to deal with fluctuations in demand.

John used these recommendations to help shape the supply chain set-up and strategy. The true test of this came when panic buying, triggered by the COVID-19 pandemic, resulted in a huge wave of demand for tea in supermarkets.

“We could react extremely quickly to the rapidly moving market conditions, and gain competitive advantage.”

**IMPACT**

Applying this work, TCPL had spare capacity, optimal stock levels and a highly flexible and committed workforce who could transfer their skills to multiple lines.

They were able to take the lead in market share during this period, showing how a flexible supply chain can be used to react quickly to the market and gain competitive advantage.

John reflects: “For me, this was the perfect test bed. It was our supply chain competing against our competitors’ supply chain with no influence of brand or advertising. It demonstrated the effectiveness of our approach which we had been researching and developing for five years.”

Data driven determination of buffers is critical to ensuring a sustainable and responsible supply chain. TCPL are seeking to become the market leader in their tea business and John sees supply chain optimisation as a critical part of this delivering this vision.

For more information about our Supply Chain research, visit: www.warwick.ac.uk/fac/sci/wmg/research/transformation/supply_chain