

# Scientific Retailing and advanced analytics



**EY**

Building a better  
working world



## What is Scientific Retailing?

Most analytics is descriptive (understanding the past and present) or predictive (projecting a current operation into the future). Scientific retailing is prescriptive and identifies the best course of action, helping companies formulate the right strategy. This is critical where a step-change in performance is needed or 'business as usual' is no longer possible.

### **Use advanced modelling and econometric analysis to:**

- ▶ Develop a model of the operation that will allow specific questions to be answered.
- ▶ Capture the data, objectives for the business and appropriate business and practical constraints.
- ▶ Develop scenarios and apply the model to determine how to reduce cost or maximise profitability.
- ▶ Hand over the model for your ongoing use, integrated with your IT systems for ease of data refresh.

## Key questions Scientific Retail modelling can help answer...

- ▶ How can I maximise store performance in the context of direct competition and sales dynamics across my own store portfolio?
- ▶ How do I minimise supply chain and logistics costs?
- ▶ Currently, which locations present the best opportunities to capture new customers?
- ▶ What is the profit-optimal store footprint?
- ▶ What is the mix of products and prices by outlet type that would maximise my profits?
- ▶ What is the optimal promotion strategy to achieve desired level of sales and maximise profitability? How often should this be undertaken?
- ▶ Which are my most valuable customers and how can I retain them?
- ▶ What is the appropriate level and mix of staff that will maximise the customer experience while reducing operational costs?

### Why use Scientific Retailing?

Scientific Retailing is an advanced modelling and analytics based means of delivering significant performance improvement and it provides you with the enduring capability to improve as the future evolves. Our clients have successfully used Scientific Retailing to deliver the following benefits.

### Top line and profit enhancement

Optimising the retail network increasing annual profit by around

**2%**  
of turnover

Price optimisation, leading to an increase in revenue on selected products of

over  
**10%**

Optimising promotion strategy improving total annual revenue

by **1-2%**

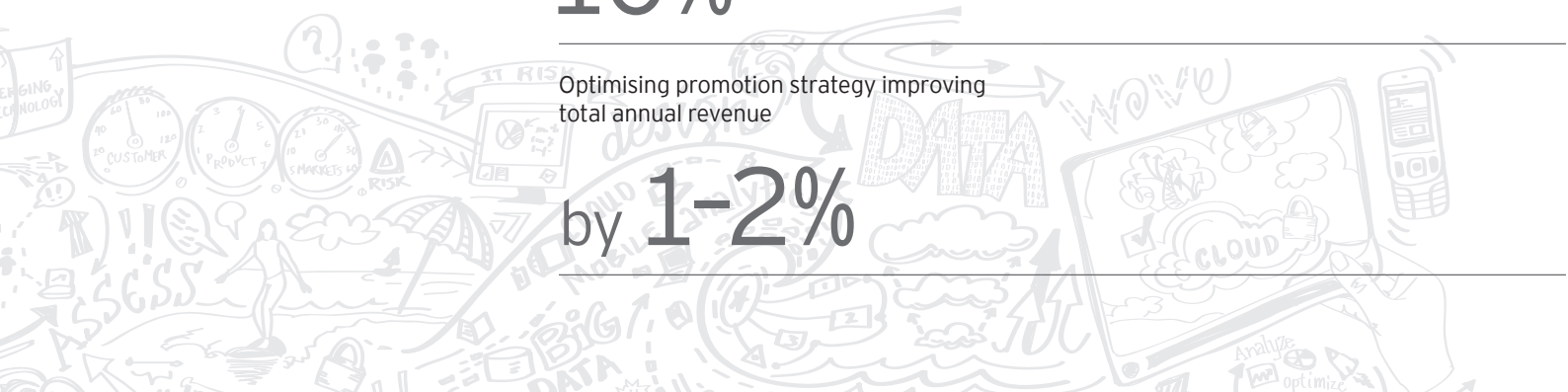
### Cost reduction

Recasting distribution channels through improved vehicle scheduling reducing logistics costs by

up to **15%**

Scheduling staff optimally to make the best use of full-and part-time staff (within operational constraints) reducing staff costs by

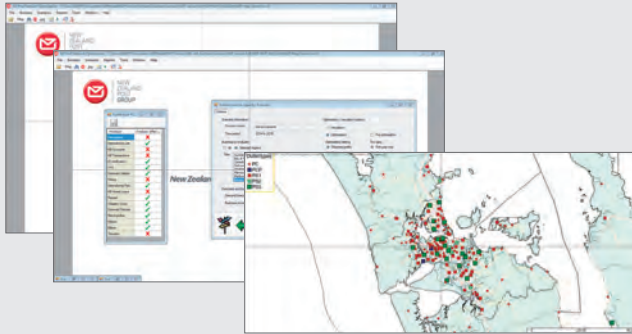
up to **25%**





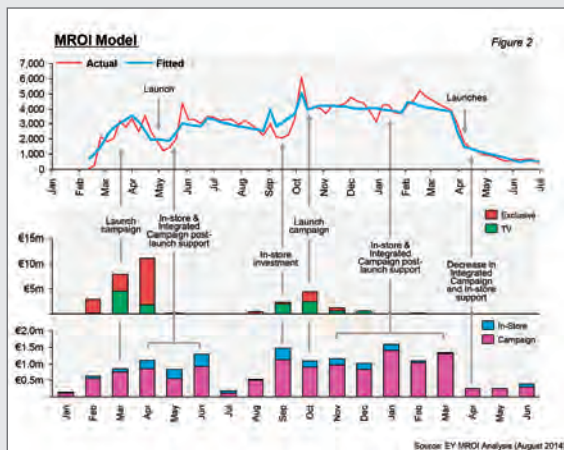
## Retail Network Optimisation

A national retailer witnessed a step change in performance by implementing a bespoke network optimisation tool developed by EY. The tool allowed them to fully investigate the mix of outlets and test the impact of opening and closing stores on profitability and demand for services across the country. The outcome was a new future proof strategy that resulted in a step change in profitability.



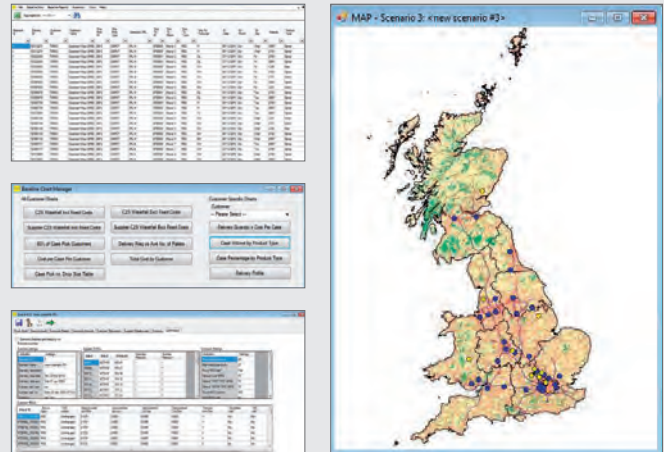
## Promotion

Global drinks retailer saw an increase on total annual revenue of 2% through deploying a new optimised promotion strategy. EY created an unconstrained view of consumer demand by removing the effects of non-promotional factors on sales and analysing the impact of various promotion types on sales volume, following this specific promotional levers were identified to drive sales such as volume uplift, brand building and margin improvement.



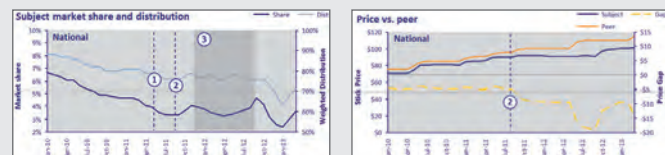
## Cost to Serve

A global consumer product firm reduced distribution costs through adoption of our leading edge Cost to Serve Model. EY developed a bespoke user friendly decision support model covering the supply chain from factory warehouse to shelf, storage, handling, movement and inventory costs. The model enabled our client to evaluate strategies involving new distribution networks, minimum order quantities and direct delivery options. Our client was able to identify millions of dollars annual benefit and identify a strategy that is win-win for supplier and retailer alike with no reduction in customer service levels.



## Pricing

EY developed a proprietary Consumer Pricing Optimisation Tool for a global retailer; the tool evaluated own-price and cross-price elasticities taking into account both physical and business constraints. The model analysed nine markets to give our client a detailed understanding of the pricing dynamics between various channels and how best to respond to price changes in the market. The analysis resulted in a new pricing strategy for our client which enabled them to increase market share and revenue by more than 10% for certain products.





Scientific Retailing  
can deliver significant  
performance  
improvement.



## Contacts

John Hopes	<i>Partner</i>	<a href="mailto:jhopes@uk.ey.com">jhopes@uk.ey.com</a>
Tony Lewins	<i>Executive Director</i>	<a href="mailto:tlewins@uk.ey.com">tlewins@uk.ey.com</a>
Paola Apruzzese	<i>Assistant Director</i>	<a href="mailto:papruzzese@uk.ey.com">papruzzese@uk.ey.com</a>
Jessica Clayton	<i>Partner</i>	<a href="mailto:jclayton@uk.ey.com">jclayton@uk.ey.com</a>
Bob Ward	<i>Partner</i>	<a href="mailto:bward1@uk.ey.com">bward1@uk.ey.com</a>

Scientific Retailing enables you to continually improve as the future evolves.





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