CILT Level 6 Advanced Professional Diploma

Strategic supply chain management

CASE STUDY

INSTRUCTIONS FOR CANDIDATES

You will be expected to demonstrate your knowledge and understanding of relevant theoretical principles, concepts and techniques; to apply these appropriately to the particular situation described in the case study; and above all, to make sound decisions. You will not gain marks by writing a general essay on the topic.

Please note that all work should be your own. Copying or plagiarism will not be tolerated and could result in no marks being awarded. If quotes or short extracts are used they should be attributed or the source of the information identified.

You should acquaint yourself thoroughly with the case study.

TESCO CASE

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The views and opinions expressed within the case are those of the authors of the reference material and are not necessarily the views or opinions of NIRTC or the companies mentioned. The case may not reflect the actual situations of the specific companies mentioned.

The case was written in August 2015 and may not reflect the current situation.

Candidates are advised to base their analysis, evaluation and critical review on the situation depicted in the case.

A bibliography can be found at the end of the case study.

Introduction

According to Marketline's Company Profile (2014), Tesco is the UK's largest food and grocery retailer. It operates retail stores that offer grocery items, general merchandise, and other non-food items, such as electrical products. The company operates in Europe and Asia. It is headquartered in the UK, and employs 537,784 people. The company recorded revenues of £64,826 million during the financial year ended February 2013 (FY2013), an increase of 1.4% over FY2012. The operating profit of the company was £2,188 million during FY2013, a decrease of 47.7% compared with FY2012. The net profit was £124 million in FY2013, a decrease of 95.6% compared with FY2012.

Tesco operates well over 3,000 retail stores. Besides the UK, the company operates in Turkey, Republic of Ireland, Poland, Hungary, the Czech Republic and Slovakia. At the end of FY2013, Tesco operated 1,507 retail stores in these countries. The company also has 2,131 retail stores in Asia, operating in South Korea, Thailand, China, Malaysia and India. In India, Tesco's operations include sourcing and its service centre, as well as a franchise arrangement with Tata Group. In Thailand, the company operates retail stores under the 'Tesco Lotus' banner, while in South Korea, it operates under the name of 'Homeplus'. In 1997 Tesco's international business generated 1.8% of profits, but this grew to 32% in FY2013. Thus, international diversification helps Tesco reduce its business risk, as well as facilitate growth through operations in emerging markets.

Tesco holds either number one or number two position in eight of the 12 markets outside the UK where it operates. International expansion has given the company momentum to grow well through the economic downturn. Furthermore, the company is replicating measures to gain market share on a global scale. Tesco has expanded its retail stores under the 'F&F' banner in 10 markets and became the market leader in clothing in the Czech Republic, Hungary and Slovakia. In 2012, the company opened its first F&F franchise retail store in Saudi Arabia. Widespread operations of F&F helped Tesco gain from economies of scale. In Central Europe, 95% of the company's clothing supplier base is the same as in Ireland and the UK, allowing Tesco to gain from bulk buying. Widespread operations enable Tesco to share global best practices and drive efficiencies and sales.

Tesco has increased focus on its retailing services which comprise online retailing, banking, telecommunications and market research. Tesco Bank principally focuses on offering consumer credit (including credit cards and unsecured loans), savings accounts, insurance and mortgages. The company also operates Phone Shops in Tesco's retail stores across the UK and in Central Europe, and Tesco Mobile, a mobile virtual network operator in the UK, Ireland and Slovakia.

The retailing services have complemented the core retail business in several ways. According to research conducted internally by Tesco in 2009, customers who use two retailing services spend four times as much in-store than those who do not use any services, and customers with a Tesco credit card spend 30% more on purchases compared with customers without a Tesco credit card. Furthermore, customers with two retailing services are 25% less likely to stop shopping at Tesco over a 12 month period than customers who do not use its services. Additionally, bank branches and phone shops attract more customers to Tesco's retail stores. The company's cost base is also positively impacted by these services. Tesco has to pay a significant amount of money to banks in interchange fees for card transactions. However, its own banking services save interchange fees on card transactions to some extent.[1]

Like-for-like sales at Tesco fell in all of its territories in the third quarter of 2013, with the Republic of Ireland, Thailand, Slovakia and Asia all reporting declines of more than 5%, although there have been signs of improvement in Poland and Turkey compared to previous months. Matt Piner, research director at retail analyst group Conlumino, said that Tesco has felt the impact of the economic downturn more than most, as it serves such a wide cross-section of consumers. Other supermarkets, such as low-cost Aldi and upmarket Waitrose, have been able to drive volume by providing an offering that resonates with their consumers.

In terms of the positives for Tesco, Piner adds: *"The push on convenience has seen positive like-for-like sales in express retail stores, with the product range in each tailored to the needs of its local area. Online continues to go from strength to strength and Tesco is utilising more of its vast portfolio to provide click & collect services. The Hudl tablet [Tesco's own-brand computer tablet], with more than 300,000 already sold, isn't only a success in itself, but will help boost Tesco as a provider of entertainment content, competing with Apple and Amazon. However, unless Tesco can build a clearer identity for its core food proposition, it will continue to feel the squeeze."*[2]

Value Oriented Approach

Tesco was launched by Jack Cohen in 1919 on the famous slogan *"Pile it High, Sell it Cheap"*, and the company's value-oriented retailing approach has always been a big factor in its success. In September 2011, Tesco launched 'The Big Price Drop', investing more than £500 million in lowering prices on more than 3,000 everyday product lines. Big Price Drops target the products that customers buy on a weekly basis.

Through its value-oriented approach, Tesco is driving customer footfall which will facilitate continuous customer acquisition, even in a low growth environment. In April 2012, the company launched a new range of low-priced food under the new brand 'Everyday Value', replacing 'Tesco Value'. Through this new brand approach, Tesco is focusing on offering better quality, healthier food, and improved packaging at the same price.[3]

Value is not just about low prices. Tesco is also aiming for 10% of its sales to be from new products not currently stocked by 2016 across food and non-food. Tesco group commercial director, John Scouler, told an internal conference that new products form a key element of its strategy to breed customer loyalty. At the same event, Tesco's global capability managing director, Dion Roberts, identified that delivering *"outstanding value, creating a seamless experience, and helping with advice, inspiration and a smile"* were key to winning shoppers. The grocer is now looking to use loyalty and personalisation, alongside an improved retail store experience, to turnaround performance.[4]

[1] Tesco plc Company Profile, *Marketline*, 17 January 2014
[2] Tesco Focuses on Fulfilment as Like For Like Sales Dip, *Essential Retail*, 04 Dec 2013
[3] Tesco plc Company Profile, *Marketline*, 17 January 2014
[4] Tesco Urges Suppliers to Aid New Product Drive, *www.retail-week.com*, 30 September 2013

Business Transformation

A case study published by Birmingham City Council demonstrates how, in the 1980s, Tesco embarked upon a transformation of its entire organisation that would change the company's future for decades. The business transformation lasted for almost two decades, involving many different change programmes and projects. The business transformation was wide-ranging, impacting every area of operation within and outside the company.

Tesco reviewed the organisational structure of the entire company, from the checkout staff and retail store management to its head office functions:

- Head office functions were re-aligned with the retail stores' operational requirements and a new retail-focused department was set up to control the impact and interface of the head office functions on the retail stores' day-to-day operations. To further this, senior head office managers were seconded into retail stores and retail experience became a pre-requisite for any senior head office positions.
- Supply chain management was re-aligned to ensure that the distribution centres around the country more closely matched the requirements of the retail stores.
- Retail store management underwent a major re-organisation, with tiers of middle-management removed and staff empowered to serve their own customers. Human Resources (HR) managers were introduced into retail stores at a regional management level to ensure that the best people were in the right positions.

Tesco also underwent a major review of all its business processes, lasting a number of years:

- Business processes were changed to become more customer focused.
- Inefficient processes were stripped out.
- Meeting management was introduced to minimise staff time wasted in unnecessary meetings.
- Programme and project management was aligned to PRINCE2 and all programme and project managers received PRINCE2 training.
- Performance measures were introduced across every level of the company's operations.
- The supply chain was completely reviewed, with costs being stripped out and the company introducing lean thinking.
- Distribution centres were re-laid out to reflect retail store layouts in order to speed up in-store shelf replenishment. Funding was also transferred from the retail division to distribution in order to facilitate this massive change.
- Supplier management was completely overhauled, with score-carding introduced and joint initiative teams set up.[5]

Supply Chain Development

According to Sparks (2010), the UK is often considered to have the most efficient grocery supply chain in the world, comprising a key contributor to the success and profit margins of its grocery retailers. Therefore, it is no surprise that retailers from other sectors and countries have attempted to copy this approach to supply chains. The development of supply chain management and the consequent implementation of relationship initiatives have been identified as the fourth and final stage of the evolution of grocery logistics in the UK. This stage relates to a more collaborative approach to supply chain management after decades of retailer/supplier confrontation.

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[5] Tesco Business Transformation Case Study, Birmingham City Council, *http://www.champs2.info/elearning/assets/case_study.pdf*, accessed August 2014

The transformation of the UK grocery supply chain has occurred in a short period of time. In the first stage of evolution (pre-1980) the dominant method of distribution to retail stores was by manufacturers that stocked products at their factories or field warehouses for multiple drops to numerous small shops. As the retail multiples gained in prominence, retailers invested in regional distribution centres (RDC) to consolidate deliveries from suppliers prior to retail store delivery. This was the first step to changing the supply of fast-moving consumer goods (FMCG), in that buying and distribution became a head office function in the retailers, and the logistical infrastructure created a market for third party logistics service providers. To all intents and purposes, this change marked the removal of manufacturers and suppliers from controlling the supply chain and reinforced the switch of power to the retail end of the channel. This period of centralisation throughout the 1980s enabled retailers to reduce lead times, minimise inventory, and give greater product availability to customers in their retail stores.

The 1990s witnessed a consolidation of this process. In many cases inventory has been shifted only from retail store to RDC. By implementing just-in-time (JIT) and flow principles, retailers began to focus on their primary distribution networks (from supplier to RDC), demanding more frequent deliveries of smaller quantities. Clearly this created a problem for many suppliers in that they could not deliver full vehicle loads of product. To ensure that vehicle utilisation could be maximised, consolidation centres were created upstream of the RDC. Additionally, retailers had established supplier collection programmes to pick up products from suppliers' factories on return trips from retail stores. In the first part of this century, retail networks continued to be upgraded as efficient consumer response (ECR) initiatives were enacted, and grocery retailers accommodated the increase in non-food products through their distribution centres. Furthermore, greater sharing of information, especially through Internet exchanges, fostered collaborative planning, forecasting, and replenishment (CPFR) initiatives to reduce supply chain response times.

UK grocery retailers now not only control and organise the supply chain but also have taken over marketing and other responsibilities that were once the sole domain of the manufacturer, for example, product development, packaging, logistics, branding, and advertising as well as distribution. The high level of retail product brand penetration has enabled them to build up customer loyalty and diversify into other businesses, such as banking. Control of channels and relationship building with suppliers and consumers is a way of life for such companies. This is not to say that all is perfect in such supply chains and some UK retailers have faced problems. Disruptions to supply chains occur and are inevitably felt in product availability. Out-of-stocks remain an operational concern.

It is generally recognised that Tesco has one of the most effective and efficient grocery supply chains in the UK, if not the world. The transformation of the company has been remarkable since the early 1980s, and this has been supported and driven in part by its development of its supply chain management function. *Table 1* summarises the broad phases of development and shows the extensive change in approach and control that has been required. The increase in retailer control can clearly be seen. The outcome of this control has been a retailer-organised supply chain operating to maximise effectiveness and efficiency in supplying consumers.

As retailers such as Tesco internationalised their sourcing and retail store operations, so they have had to reorganise local, national and international supply chains. This retail transformation required a supply chain transformation that recognised the modern volatile and variable consumer demands and the lack of scalability of existing systems.[6]

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[6] Sparks, L; Supply Chain Management and Retailing, *Supply Chain Forum*, Vol11, No4, 2010

PHASE	KEY ISSUES
Direct to retail store delivery (1970s)	Supplier organised and controlled; Tesco not in control of range, price, or availability; retail store variability.
Centralisation (1980s)	New facilities and approaches; manufacturers' and suppliers' products are delivered to supply distribution centres, not retail stores; outsourcing; range, quality, and price control set by Tesco head office; distribution centres organised on product-line basis.
Composite (1980s and 1990s)	Multi-temperature regional centres and vehicles; productivity benefits; sharing of stock-holding; increased frequency of delivery to retail stores; better space usage; standardised retail stores make supply easier; quality and productivity increased and costs reduced; inventory holding reduced significantly.
Vertical collaboration and lean supply chains (2000s)	Primary distribution focus; mapping the value stream; flow principles and lean principles introduced (simplicity, transparency, and efficiency); stockless distribution centres; separation by product demand; sales-based ordering systems; supplier agreements and compliance; customer-focused with retail store-specific product ranges based on 'Clubcard' data; technology development and just-in-time principles; continuous replenishment; flow-through and network management; emphasis on handling and packaging logistics; shelf-ready merchandising.
Managing complexity (2000s)	Internationalisation of supply and retail store operations; multi-format retail store development with new sizes, approaches, and locational types; extension into non-food; internet-based retailing and home delivery utilising store-based picking systems; catalogue retailing and single-item picking and delivery; 24/7 operations; in-house operations extended; RFID experiments; localisation of product sourcing for some lines; green and sustainability initiatives; intermodal and reverse logistics; collaborative transport; vehicle and driver performance.

Table 1 – Tesco's supply chain development phases[7]

Tesco's supply chain performance is rigorously monitored through its 'steering wheel' approach, whereby distribution centres are assessed on their operations (safety and efficiency), people (appointment, development, commitment and values), finance (stock results, operating costs) and customer satisfaction (accuracy, delivery on time). Through such performance measurement, quality standards are maintained and enhanced.[8]

Logistics

According to a case study by Thomas in 2010, the product range held by Tesco's retail stores has grown rapidly in recent years (a large retail store can hold up to 20,000 products), as the company broadens its presence in the non-food market for electrical goods, stationery, clothing and others. This massive range is supported by thousands of suppliers, who are expected to meet agreed service levels (correct time and quantities) by delivering to Tesco within specific time windows. Volumes are impressive. In a year, some 2.1 billion cases of products are shipped from suppliers to the retail stores.

[7] Sparks, L; Supply Chain Management and Retailing, *Supply Chain Forum*, Vol11, No4, 2010
[8] Fernie, J & Sparks, L; *Logistics and Retail Management: Emerging Issues and New Challenges in the Retail Supply Chain*, 01 May, 2009

Tesco states that its core purpose is *'to create value for customers to earn their lifetime loyalty'*. A wide product range and high on-shelf availability across that range are key enablers of the core purpose. This is achieved by efficient material flow and effective information flow. As mentioned previously, an early reform for Tesco's operation was to have suppliers deliver to a depot rather than to every retail store. During the 1980s, distribution to retail stores was handled by 26 depots. These operated on a single-temperature basis, and were small and relatively inefficient. Delivery volumes to each retail store were also relatively low, and it was not economic to deliver to all retail stores each day. Goods that required temperature-controlled environments had to be carried on separate vehicles. Each product group had different ordering systems. The network of depots simply could not handle the growth in volumes and the increasingly high standards of temperature control. A new distribution strategy was needed.

Many small depots with limited temperature control facilities were replaced by 'Fresh Food' depots which can handle many products at several temperature ranges. The opportunity is to provide a cost-effective daily delivery service to all retail stores. Typically, a Fresh Food depot can handle over 80 million cases per year on a 40-acre site. The warehouse building comprises 36,000 square metres divided into three temperature zones: minus 25°C (frozen), 1°C (chilled) and 12°C (semi-ambient). Each depot serves a group of between 48 and 335 retail stores. Delivery vehicles for Fresh Food depots use insulated trailers divided into chambers by means of movable bulkheads so they can operate at different temperatures. Deliveries are made at agreed, scheduled times. Grocery and non-food goods such as cans and clothing are delivered separately.

As well as the method of transporting goods from supplier through to the retail stores, Tesco also had to consider how much produce should be sent to each retail store. With such a huge product range, it is impossible for the individual retail store to manually re-order across the whole range. Instead, sales of each product line are tracked continuously through the till by means of electronic point of sale (EPOS) systems. As a customer's purchases are scanned through the barcode reader at the till, the sale is automatically recorded for each stock-keeping unit (SKU). Cumulative sales are updated every four hours on 'Tesco Information Exchange' (TIE). This is a system based on internet technology that allows Tesco and its suppliers to communicate trading information. The aim of improved communication is to reduce response times from manufacturer to retail stores and to ensure product availability on the shelf. Among other things, TIE aims to improve processes for introducing new products and promotions, and to monitor service levels.

Based on cumulative sales, Tesco places orders with its suppliers by means of electronic data interchange (EDI). As volumes and product ranges increased during the 1990s, Tesco aimed to de-stock its depots by ordering only what was needed to meet the following day's forecast sales. For most products the aim is day 1 for day 2: that is, to order today what is needed for tomorrow. For fast-moving products, the aim is to pick to zero in the depot: no stock is left after retail store orders have been fulfilled. This means that the same space in the depot can be used several times over. Deliveries to retail stores are made in two waves, at specific times and within defined windows. This helps to improve product availability at retail stores throughout the day, and thus supports changes in demand.[9]

Customer Targeting

In 1995 Tesco introduced the loyalty card, 'Clubcard', in the UK. This was initially ridiculed by its competitors as a marketing ploy and yet, by 1996, Tesco had the largest customer database of any retailer in the UK.[10] Clubcard currently has about 16 million active members[11] and 85 percent of Tesco's revenues are accounted for by customers who have these cards.[12]

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[9] Tesco logistics case study, first published in Harrison, A & van Hoek, R; *Logistics Management and Strategy: Competing Through the Supply Chain 3rd Edition*, Pearson, 2008, and updated by Thomas, J (Tesco) in 2010

[10] Tesco Business Transformation Case Study, Birmingham City Council, *www.champs2.info*, accessed August 2014

[11] Tesco plc Company Profile, *Marketline*, 17 January 2014

[12] Mukerjee, K; Strategizing for CRM to Leverage its Benefits, *Business Strategy Series*, Vol14 Iss4, pp118-122, 2013

The database of customers has played a key part in the ongoing transformation of the company:

- The introduction of the Clubcard allowed Tesco to really understand its customers: to understand every individual's shopping habits and patterns, demographics, geographical spread, services utilised and products bought.
- Data collection was one part of the information transformation; the second was using the data. Following the introduction of Clubcard, Tesco was able to utilise the data in every part of its organisation; head office buyers could now target product ranges by geography or demographics, retail stores could target their best customers and the supply chain could be matched to anticipated shopping patterns.
- For the first time, a retailer could target its customers as individuals, rather than purely through media advertising, proactively contacting them to provide information on products and services most suited to their needs. The introduction of Clubcard vouchers created a whole new way for retailers to encourage customer loyalty.[13]

Mukerjee (2013) states that Tesco used the data that were generated from Clubcard transactions to develop an understanding of the psyche of its customers and to segment them according to their psychographic profiles. For example, based on the eating habits of customers, it segmented customers into categories like: Finer Foods, Healthy, Traditional, Mainstream, Convenience, and Price Sensitive. Tesco's brands were developed to cater to the needs of these segments. Apart from this initiative, to ensure good customer engagement, Tesco appointed customer champions in its retail stores and also instituted a policy that required employees at all levels to spend time in contact with customers.

Tesco followed up the segmentation by launching various clubs that customers could join based on their interests and aspirations. The clubs were: Wine Club, Baby and Toddler Club, Healthy Food Club, and the Christmas Savers Club. The communication that Tesco sent out to customers was personalised to suit the psychographic profile of the individual customer. The Clubcard data also enabled Tesco to keep track of the changes in customer tastes and preferences and ensure that its merchandise was contemporary.

The success of the loyalty card can be attributed to the innovative methods adopted by Tesco to reward loyal customers. In 2003, Tesco instituted the 'Me Time' scheme which was targeted at its women customers and offered free sessions at leading health spas, luxury gyms and beauty salons, as well as discounts on designer clothes, perfumes and cosmetics. Tesco has also innovated on the design of the Clubcard's physical dimensions. By offering a card that could be attached to a key-ring, it made it easy for customers to ensure that they brought the card along whenever they visited the retail store. Also, the barcode reading facility made the process quick and easy for its staff.[14]

Supply Chain Analytics

According to an article in Information Age (2013), Tesco's partnership with retail analytics provider Dunnhumby through its Clubcard initiative is held up as a textbook case study for customer data analysis. However, in the last five years, Dunnhumby (now wholly-owned by Tesco) has also been applying sophisticated analysis to its supply chain data. Tesco's supply chain analytics function has saved the company many millions of pounds by identifying opportunities to cut waste, to optimise promotions and to match stock to fluctuations in demand.

It all started in 2006 when an executive from Tesco Direct, the company's online retail division, moved over to the supply chain department. He spotted an opportunity to run a small sales forecasting project, and persuaded one of the company's directors to give him some budget. The project saved the company £16 million in one year. *"That project built the engagement with the business,"* says Duncan Apthorp, supply chain systems development programme manager at Tesco. Since then, Tesco's supply chain analytics team has grown from five people to 50. It is staffed mainly by science and engineering graduates, whom Tesco trains up in retail expertise and programming skills and who mostly use mathematics application 'Matlab' to conduct their analyses.

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[13] Tesco Business Transformation Case Study, Birmingham City Council, *www.champs2.info*, accessed August 2014

[14] Mukerjee, K; Strategizing for CRM to Leverage its Benefits, *Business Strategy Series*, Vol14 Iss4, pp118-122, 2013

One of the team's biggest contributions is a statistical model that predicts the impact of the weather on consumer buying behaviour. By comparing historical weather data with sales records in its retail stores, Tesco can now adjust its stock levels based on the weather forecast, so its retail stores do not run out of the goods people want. There are goods that sell more when the weather is hot, such as barbecue meat, and goods that sell more when is cold, such as cat litter (cats are less likely to leave the house in the winter, Tesco has found). There are other products that sell when it is neither hot nor cold, such as firelighters.

It is not simply a matter of increasing or decreasing stock as the temperature rises and falls, however. Context is also important. What is considered a hot day in the north of the country may be nothing special in the south. Furthermore, people are more likely to have a barbecue when a sunny day follows a prolonged cold spell. *"By adding this effect to the model,"* Apthorp says, *"we reduced out-of-stock for good weather products by a factor of four. That means there is a 97% chance of customers who come into the retail store finding what they want, whereas other supermarkets might not have it."* The weather modelling project took five people a couple of years to develop. So far, Apthorp says, it has saved Tesco £6 million.

An even bigger win has come from analysing discounts and promotions. Tesco runs thousands of promotions every day, and needs to predict how popular they will be in order to ensure the correct amount of stock to meet demand. Until recently, it was up to each retail store's stock controller to estimate how popular each promotion would on a daily basis. But with so many promotions running at any one time, the accuracy of their predictions was understandably limited.

The supply chain analytics team took all the data Tesco had about its historical promotions, and built a detailed predictive model. This pulled in all manner of variables, including the positioning of a discounted product in a retail store and what other offers were operating at the same time. This revealed some interesting insights. For example, a 'buy one, get one free' offer works better than a 50% discount for non-perishable goods, such as cooking sauces, but the reverse is true for fruit and vegetables. To push these insights out into the retail stores, the supply chain analytics team built a web-based workflow system that allows stock controllers to access a sales uplift forecast for their specific retail store, and use it to plan their orders. This system, Apthorp says, has allowed Tesco to take £50 million-worth of stock out of its depots.

All of this was possible, he explains, because Tesco sorted out its data infrastructure 15 years ago, when it implemented a 'Teradata' enterprise data warehouse alongside its IBM mainframe. As it happens, though, the supply chain analytics team recently bought its own Teradata data warehouse, which replicates the primary data set, which Apthorp says has increased the frequency and complexity of the analyses it can do. Now Tesco is helping its non-UK divisions build the same infrastructure so they can analyse their supply chains in as much detail. Unfortunately, Apthorp says, not all of them have their data in such good order as its UK division. *"In one European market, we asked them where their data is,"* he recalls. *"They said that 'some of it is in Excel, and some of it is sitting under this desk'."*[15]

Supply Chain Problems

In 2013 beef-labelled products sold by Tesco and other food retailers were found to contain horse meat due to the fraudulent activities of supply chain intermediaries. Tesco found itself embroiled at the centre of the controversy, despite having checks in place designed to test the quality of the food. Tesco had a plethora of controls in place to ensure the quality of its meat products, including regular audits and tests on the species of animal used, as well as approved sub-contractor lists backed by the British Retail Consortium's accreditation scheme. Tesco carried out 22,000 specific tests a year covering 40% of its products for quality and adherence to strict product specifications. It had visited Silvercrest, the supplier responsible for producing burgers found to contain horse meat, three times in the year to audit the company's practices. Yet the supplier somehow slipped through the net, apparently buying meat from an unapproved Polish supplier for as long as a year. Tesco's technical director, Tim Smith, told a government review panel: *"It was impossible to check the supplier in Poland, as we didn't know it existed."*

[15] Tesco Saves Millions With Supply Chain Analytics, *Information Age*, 16 April 2013

Tesco de-listed the supplier at the heart of the horse meat controversy and revealed that it will introduce DNA testing checks to *"set a new standard"*. It estimates the new regime could cost between £1m and £2m a year, with each test sample costing it about £450.[16] Tesco also created a new supplier list and reduced the number of abattoirs it uses by around 30 sites.[17]

Tesco also announced that it is undertaking a *"forensic"* examination of its entire supply chain and will remove anyone in the chain who it does not believe is adding value. Tim Smith said its supply chain was too often confused by middlemen. Mr Smith told a seminar organised by analysts, Shore Capital, in London: *"If I cannot explain what value someone adds to the supply chain, they probably should not be there and we will cut them out. Customers want to believe the supply chain is simpler than it actually is. The food supply chain is firmly in the spotlight and I think everyone was shocked by what happened. It made everyone aware the supply chain was too complicated and complex and our dealings with farmers and growers were also too opaque."*

Mr Smith said he had *"no idea"* how many middlemen would be cut out. He added: *"We are going through the supply chain in a careful and meticulous way and we are prepared to be surprised."* The retailer has started the process with its meat business, but will move through all products – a lengthy process with more than 12 countries and 7,000 sites in its supply chain. Mr Smith said he believed the risk came, not so much from processors using unapproved suppliers, but where sites were making products for other companies. When asked whether this would mean a move to a dedicated processing and packing chain such as Morrisons or Waitrose, he said he could not rule out the move in the longer term. He said: *"We are concentrating in the short- to medium-term in sorting out the supply chain we have got."* The retailer was keen to work with its current suppliers, he added. *"We believe in long-term relationships and 90 per cent of our sales come from suppliers we have been working with since 2000."*[18]

Supply Chain Innovation

In the 1980s and 1990s Tesco led the way with technological innovations, providing technology solutions to drive its business transformation:

- In 1982 the first computerised checkouts were introduced to the retail stores and over the remainder of that decade would be rolled out to the entire retail store portfolio.
- From the mid 1980s Tesco introduced new computerised stock control systems to utilise the data being collected by the new checkout systems and to more efficiently predict and order product to match shopping patterns across the company.
- From the late 1980s computerised pricing was introduced to retail stores, removing the need for manual pricing of stock and allowing overnight company-wide price changes to be introduced
- Distribution systems were updated to reflect the new requirements from the retail stores and the new buying processes being introduced at head office.
- HR management systems were introduced to ensure that pay, rewards and development matched staff potential.[19]

Tesco's technological innovation continues to this day. A virtual store was launched in South Korea in 2011 to encourage commuters to buy products through their mobile phone while waiting on train platforms. Tesco's Homeplus initiative creates rich images of food items, laid out in the same way as they would in a physical retail store, and projects them onto huge billboards located on the walls of train stations. Every item has a Quick Response (QR) barcode. (This is a machine-readable optical label that contains information about the item, the QR barcode having fast readability and greater storage capacity compared to standard versions). People can buy the item by scanning its QR code using their mobile phone. This immediately

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[16] Horse Meat Scandal Delivers Supply Chain Lessons, *Retail Week*, 21 February 2013
[17] Trading Responsibly: Improving the Way We Serve Our Customers and Work With Our Suppliers, *Tesco*, February 2014
[18] Tesco's Supply Chain Shake Up to Cut Out Middlemen, *Farmers Guardian*, 26 May 2013
[19] Tesco Business Transformation Case Study, Birmingham City Council, *http://www.champs2.info/elearning/assets/case_study.pdf*, accessed August 2014

adds it to their Homeplus shopping basket. Deliveries of the goods can be arranged to arrive within hours of the order, meaning that in some cases they could arrive just as the commuter gets home. Smartphone technology has helped Tesco become a strong number two in the market, as a fifth of South Korea's 50 million population has such a device.[20]

Tesco Lotus in Thailand has also reported successful usage of QR code technology on its range of food products. Pornpen Nartpiriyarat, head of trading law & technical at Tesco Lotus, explains their popularity: *"They allow customers to see exactly where their food has come from – which farm and which batch – as well as nutritional information and recipe ideas to help customers balance their diet; all with a quick scan from a smartphone."*

The QR codes give consumers an opportunity to trace Tesco Lotus products straight to the farm, and Nartpiriyarat believes this transparency gives shoppers confidence in the products on sale. *"They're popular with customers because they're fun, informative and easy to use,"* said Nartpiriyarat. *"But they also provide a fundamental level of reassurance about the quality, safety and freshness of the food we sell by connecting our customers and the products they purchase to the start of the supply chain"*.

Tesco evidently sees the benefits of using QR codes for interacting with its increasingly mobile shopper base. Last Christmas saw the grocer introduce the codes on a number of retail store windows across the UK to allow customers to find out more information about the festive product range. Once the code was scanned, the product came to life using augmented reality on the customer's smartphone, providing options to arrange to 'click & collect' from the same retail store within 24 hours.[21]

Shelf management is another area that can be improved through use of technological innovation. The shelves in any modern grocery store are meticulously planned according to category management decisions, taking into consideration customer demand, as well as seasonal influences or promotions. To optimise shelf layout, retailers deploy sophisticated analytics and planning tools and create detailed planograms, using advanced technologies such as 3D graphics or virtual reality to obtain the best results. Despite the best efforts on the planning side, shelves can often look quite different in reality. Products can be misplaced or even missing from the shelf completely. Daily changes to the layout, in response to shopper demand, seasonal or weather influences, as well as promotions, are often not being executed, at least not in a timely manner.

To cope with the challenge, Tesco is now working with IBM's research lab in Haifa, Israel, and testing a new mobile app for use by its retail store personnel. The solution is based on IBM's 'Augmented Reality Shopping Advisor', an app (a self-contained program or piece of software designed to fulfil a particular purpose; an application, especially as downloaded by a user to a mobile device) – initially designed to be used by shoppers – which identifies specific products among a row of goods. It will then display relevant information above the image and rank items according to a number of criteria such as price or nutritional value. Tesco staff at a pilot retail store near London can now use their tablets or smartphones to photograph the current status of the aisles, including the quantity and siting of goods. The system then employs image recognition technology to identify the products and augmented reality to superimpose information from the retailer's database and online resources and detect deviations from the plan. If detected, it can then alert staff to take corrective action.

Such technology could be extremely useful in supporting Tesco's efforts to make its retail stores more attractive and to create a compelling shopping experience for its customers. The solution should ensure products are always adequately stocked and easy to find for shoppers, which can only help to secure sales. It can also make retail store processes more efficient. Managing shelves is a tedious routine currently executed manually by scanning barcodes. This app could remove much of the drudgery inherent in the task and boost efficiencies while doing so. If proven successful, Tesco is expected to roll out the solution quickly across its retail store network, as is its habit with beneficial innovative technologies.[22]

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[20] The Evolving Tesco.com Model: What it Means for Suppliers, *IGD Retail Analysis*, March 2012
[21] Tesco Lotus Reports Benefits of QR Code Technology, *Essential Retail*, 10 Feb 2014
[22] Tesco Testing Augmented Reality Shelf Management, *Essential Retail*, 09 March 2014

Multi Channel Retailing

In 2013 Tesco announced that becoming a leading multi-channel retailer was “a strategic priority” for the business. With UK like-for-like sales down 1.5% year-on-year and sales across its global markets also weak in comparison to previous years, the supermarket group is working to strengthen its multi-channel proposition and fulfilment options (receiving, processing and delivering orders) in order to drive growth and boost its customer offering.[23] In 2014, Tesco hired former Amazon and Apple executive, Allan Lyall, as customer fulfilment director to bolster the multi-channel team.[24]

A strong focus for Tesco is on providing flexible fulfilment options for its customers, and the supermarket has now rolled out one-hour grocery home delivery slots to over 98% of the UK population. In addition, Tesco now has more than 200 grocery click & collect drive-through locations at its retail stores and has started a number of trials in non-store locations, such as schools and libraries. Blogging on the Tesco Talking Shop blog, Simon Belsham, managing director for Tesco’s grocery home shopping, said: *“Retailing has been transformed over the past decade with so much choice now available to customers in how they can shop. Today, Tesco customers can visit our retail stores for the weekly shop, use our click & collect service to pick up their shopping on their way home from work or visit us online and have their groceries delivered to their home at a time that suits them. This approach – of putting the customer in control – underpins everything we do as a multi-channel retailer and is an important part of our online offering to customers.”*[25]

The initial strategy for Tesco’s online retailing was to pick orders from existing retail stores, not the distribution network. However, this strategy has evolved, and now, in the UK, Tesco operates dedicated ‘dotcom stores’ in areas of high demand. These are laid out and replenished as retail stores with products on shelves, but only service online orders.

Products in the dedicated dotcom store are stocked in the same way as a regular supermarket, except that customers are replaced by order picking staff. These staff pick product from shelving into order crates; up to six customers orders can be picked simultaneously, spread across van routes. Completed orders are brought to a manually loaded in-feed line, which takes the crates to a consolidation buffer mounted on a platform. This buffer consists of a three-aisle ‘Quickstore’ Highly Dynamic System (HDS) Automated Storage and Retrieval System (AS/RS), a shuttle system for totes and trays, which provides optimum access to stored goods. Each aisle is split into two vertical modules, equipped with 6 shuttles per aisle; there are 18 shuttles in total. Each shuttle can access three levels of shelving.

The order crates are spread throughout the HDS consolidation buffer and held until a pre-defined release time of complete delivery van loads. When empty vans are assigned and directed to a loading bay, the driver will indicate the van’s presence to the HDS to initiate release of all ambient orders destined for that van. The HDS will release crates to be sorted and loaded in reverse drop sequence. On exit from the site, the van is scanned and that load is deleted from the system.[26] Tesco outsources maintenance and support of the warehouse automation technology in its dotcom stores to a Dutch company called Vanderlande Industries.

In 2013 Tesco opened its fifth UK depot dedicated to fulfilling online orders. *“This state of the art facility will increase our capacity in the area, enabling us to offer an excellent and convenient service to our customers,”* said Barney Burgess, Tesco’s chief operating officer for Grocery Home Shopping. *“Dotcom stores are an increasingly important part of our service for customers,”* said Burgess. *“More and more customers are using their computers and smartphones to shop.”* [27]

[23] Tesco Focuses on Fulfilment as Like For Like Sales Dip, *Essential Retail*, 04 Dec 2013
[24] Tesco Hires Former Amazon and Apple Executive Allan Lyall as Customer Fulfilment Director, *Retail Week*, 15 August, 2014
[25] Tesco Focuses on Fulfilment as Like For Like Sales Dip, *Essential Retail*, 04 Dec 2013
[26] The Evolving Tesco.com Model: What it Means for Suppliers, *IGD Retail Analysis*, March 2012
[27] Tesco Opens New Online Only Retail Depot, *Information Age*, 22 January 2013

Supply Chain Sustainability

In 2011 Tesco was named the top retailer globally in the Carbon Disclosure Project for its carbon reporting and reduction measures and top FTSE 350 company. Also in 2011, Tesco won the Guardian Sustainable Business award. Tesco is a member of the FTSE4Good and Dow Jones Sustainability Indices and has held platinum status in the Business In The Community Corporate Responsibility Index since 2007. Tesco endows the Sustainable Consumption Institute at the University of Manchester.

Tesco is currently pursuing an ambitious climate change strategy across its worldwide operations to become a zero-carbon business by 2050. In order to achieve this, the company implemented its '4F Plan' to halve distribution emissions, which comprised:

- 'Fuller cages' to transport fully maximised pallets, relying on warehouse workers' performance and optimal warehouse planning.
- 'Fuller trucks' through optimal logistics planning in order to minimise the number of miles incurred by empty trucks returning to a distribution centre. Arrangements were made for Tesco trucks to pick up a supplier's goods on their way back to a distribution centre.
- 'Fewer miles' by optimising the distribution network in order to achieve more efficient routes. Tesco reorganised its distribution centres from having 36 units to 26 units, but in better locations closer to retail stores.
- 'Fuel economy' is achieved through eco-driving practices and technical vehicle enhancement such as double-decker trailers or aerodynamic improvements. All drivers are personally monitored on their fuel consumption and driving manner.

There is considerable employee involvement in the 4Fs strategy, which relies on logistic planners, drivers and warehouse staff to achieve success. Tesco has also invested in alternative modes of transport and has transferred more freight from road to rail than any other retailer in the UK.[28]

The transfer of deep-sea containers between its main continental gateway port of Bremerhaven and its chief European distribution centre in Slovakia has, since 2012, been entirely handled by rail, and it claims to have saved four million road miles per year. Tesco has also stopped using road freight to move general merchandise from Poland to its port-centric distribution centre in Teesport, and now uses a short-sea route from Gdynia in Poland operated by Containerships, which has a direct call at the port. This, it said, had reduced road travel by over 80%. For its apparel products sourced in Turkey, Tesco has also switched modes, using a Samskip multimodal service that sees 45ft containers shipped from Istanbul to the Italian port of Trieste and then transferred by rail to Cologne in Germany, before being carried by road for the final leg to the UK hub of Daventry. It aims to extend the rail leg through to Daventry by using the Channel Tunnel.[29]

Furthermore, Tesco is the UK's market leader in the use of bio fuels and works hard to reduce its CO_2 emissions per case delivered, through initiatives including rail, barge and alternative fuels. The company also buys considerable numbers of double-deck trailers to move more cases per trip.[30]

The Rana Plaza building collapse in Bangladesh was the worst industrial accident in the history of the garment industry. Although Tesco did not source from Rana Plaza, the company acknowledges that it has a responsibility to help bring about change to improve the livelihoods of all those who work in the industry. Tesco sources its clothing from 22 countries, with the vast majority from China, Bangladesh, India, Sri Lanka and Turkey. The Tesco Clothing Manufacturing Standard ensures consistent product quality in all of its sourcing countries. The company has a team of experts based in its sourcing hubs working across general merchandise and clothing to ensure decent working conditions.

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[28] Tesco Case Study Report, *European Monitoring Centre on Change*, 23 January 2013
[29] Tesco Needs to Address the Wastage in its Supply Chain to Make Up for Falling Sales, *www.theloadstar.co.uk*, 06 April 2014
[30] Tesco logistics case study, first published in Harrison, A & van Hoek, R; Logistics *Management and Strategy: Competing Through the Supply Chain 3rd Edition*, Pearson, 2008, and updated by Joe Thomas (Tesco) in 2010

In Bangladesh, Tesco has made a number of commitments to improve working conditions. These include structural surveys for all factories and suspending any factory where there are concerns. Tesco has also committed £1m to fund safety improvements. It supports the Bangladesh Accord on Fire and Building Safety, a legally binding agreement between two global trade unions and 150 international brands and retailers, and independently chaired by the International Labour Organisation.[31]

Tesco clearly understands the importance of environmental sustainability. However, Muller et al (2012), in a three-year study of the British/South African fresh fruit supply chain, found that Tesco adopts a push approach to achieving socially sustainable practices. This is a unilateral, prescriptive approach (pushing), mirroring a paternalistic value system, in which a company prescribes norms of socially responsible behaviour at the ground level. This is in contrast to a bilateral, collaborative approach (sharing) in which organisations work together to improve working conditions, as adopted by rival supermarket Waitrose. The report concludes that a shared value approach is a more successful initiative than paternalistic pushing initiatives.

One result of Tesco following the more generally practised route of enforcing business standards is poor communication between stakeholders and less control over the supply chain. The lack of formal structure in achieving shared goals provides an opportunity for misunderstanding and manipulation and has negative consequences for both Tesco and producers in South Africa in terms of image and costs. In comparison, Waitrose has a ‘management by objectives’ approach; a cooperation strategy that encourages communication and partnerships, not only in one sector but also extending to inter-sectoral partnerships that can bring positive long-term change.[32]

Perhaps with this criticism in mind, Tesco launched an Independent Supply Chain Advisory Panel and a Producer Network Hub in 2012 as well as producing a Trading Responsibly Report in 2014.

The Independent Supply Chain Advisory Panel provides expert advice on Tesco’s sustainability programmes. It also assesses the effectiveness of programmes and monitors, challenges and supports progress. The external members of the panel are:

- Justine Roberts, CEO and Founder of Mumsnet;
- Bill Mustoe, immediate past Chairman of First Milk and Frank Roberts & Sons Ltd;
- Paul Wilkinson, Chairman of Thorntons plc, Fengrain Ltd and the National Skills Academy for Food and Drink, who also farms 900 acres in the UK;
- Paul Christensen, President of the National Federation of Young Farmers Clubs and Director of a family dairy farming business.

The Producer Network Hub consists of suppliers and Tesco teams regularly participating in online discussions, webinars and surveys, sharing best practice and collaborating. It is proving to be a powerful tool in building stronger relationships and in finding solutions to shared issues. It has 2000 members with representation across 47 countries.[33]

Crop farmers used the Tesco Producer Network Hub to trial the ‘Cool Farm Tool’, an online carbon calculator designed to reduce the environmental impact of farming. Farmers have also been able to share their views on how to tackle food sustainability and food waste, which have been fed into an EU consultation on the issue. Key insights were pulled together from the network on the causes of food waste among suppliers, Tesco operations and customers themselves. These contributed to the development of Tesco’s strategy to tackle food waste.

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[31] Trading Responsibly: Improving the Way We Serve Our Customers and Work With Our Suppliers, *Tesco*, February 2014
[32] Muller, C; Vermeulen, W & Glasbergen, P; Pushing or Sharing as Value-driven Strategies for Societal Change in Global Supply Chains, *Business Strategy and the Environment*, 21, 127–140, 2012
[33] Trading Responsibly: Improving the Way We Serve Our Customers and Work With Our Suppliers, *Tesco*, February 2014

"We're absolutely committed to doing everything we can to help our hard-working suppliers become more efficient and sustainable," said Matt Simister, Tesco's commercial director for group food. *"Tesco is UK agriculture's biggest customer, and our suppliers are unparalleled in their knowledge and expertise. The supplier network is all about harnessing that knowledge and expertise and spreading best practice to everyone's benefit. The network also offers unique access to Tesco buyers and industry experts. The feedback we have had from suppliers using the network has been fantastic, and we hope many more of our suppliers will sign up."*

Emma Kent, head of technical and quality at Tesco supplier, Nature's Way Food Limited, added: *"It's a really good source of information that we can use across our sites to extend knowledge. We also used it to double-check that our quality management system covered the controls required for Hepatitis A, which it does."* [34]

The Trading Responsibly Report states that Tesco is committed to trading responsibly and working to:

- Improve quality
- Mitigate risks
- Improve end-to-end productivity
- Reduce waste
- Improve the way that it serves customers

In order to achieve these objectives, Tesco claims to be acting in the following ways:

- Building formal, long-term supplier relationships. In doing so, it will help producers to deal with volatility and uncertainty and give suppliers the confidence to invest in innovation.
- Building expertise and skills to support the development of its supply chains, primarily through in-country expertise and Sustainable Farming Groups.
- Listening to and acting on feedback. Its improved Partner Viewpoint Survey will be used to identify areas for improvements.
- Engaging externally with the many stakeholders who are trying to improve global trade. It will also aim to get expert advice to help drive ambitious plans, for example, by working with the new Independent Supply Chain Advisory Panel.
- Using its scale to support its producers and share good practice, for example by enhancing and expanding its Producer Network Hub as a leading online community to suppliers worldwide.[35]

Supply Chain Relationships

Tesco's Trading Responsibly Report gives a number of specific examples showing how the organisation works collaboratively with its suppliers:

UK Agriculture: To help build better relationships with its farmers, Tesco is in the process of offering them two-year contracts, being the first major retailer to offer two-year direct contracts for beef and sheep farmers right back to the farm. Following the success of the Tesco Sustainable Dairy Group (TSDG), which Tesco launched in 2007, it has established Sustainable Farming Groups for its beef and lamb farmers. These groups will help Tesco to build relationships and trust between the company and its farmers. They also provide a forum to discuss customer needs, standards and how all parties can work more closely together.

Bananas: In recent years Tesco has made significant changes to its banana supply chain. It now works directly with a select number of farms, with almost half of Tesco's bananas exclusively supplied by just 12 farms in Costa Rica and Colombia. This direct approach helps Tesco to ensure that its growers are operating to the highest ethical standards, protecting workers and the environment. Tesco has also invested in local expertise in its supplier countries. Most of the company's banana technicians and ethical trade managers come from the countries in which they work and have expert, local knowledge of the industry. Through regular farm visits, they have developed strong relationships with the growers.

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[34] Tesco's Online Supplier Network Hits 2,000 Member Milestone, *www.2degreesnetwork.com*, 10 April 2014

[35] Trading Responsibly: Improving the Way We Serve Our Customers and Work With Our Suppliers, *Tesco*, February 2014

Basmati Rice: Tesco has entered into a long-term strategic partnership with the Marbour Group to supply own-label Basmati rice across Europe from two of its sites in the region. The collaborative relationship has allowed Tesco to take a proactive approach in risk-managing the fluctuation in commodity prices, currency volatility, packaging and freight costs. The partnership has allowed Tesco to build relationships with producers, which gives security of supply and traceability from source to its customers.

Citrus Fruit: As well as a strategic approach to developing specially cultivated new varieties through the Citrus Genesis programme, Tesco's partnership with MMUK,a large citrus and grape specialist, has also allowed the retailer to develop ways of getting fruit to customers more quickly. By providing volume forecasts further in advance, Tesco allows its suppliers to send fruit straight from their sites in Spain directly to the UK depots. As a result, customers can buy fruit which is up to two days fresher and this extra shelf life helps reduce waste throughout the supply chain.

Pork, Beef and Lamb: Tesco's long-standing partnership with Hilton, a meat supplier, has now been strengthened by a five-year contract with truly global reach. In addition to the significant investment the supplier is making at one of its UK sites, the relationship with Hilton gives it the confidence to invest in new countries. As a strategic partner, Hilton is re-focusing its site in Poland on supplying Tesco, providing fresher products to its customers in Central Europe. Plans are also being finalised for Hilton to build a new dedicated facility in Thailand to supply one of Tesco's biggest international businesses.[36]

Tesco has also rallied suppliers to get behind an innovation drive to introduce a wide range of new products over the next three years. Tesco group commercial director, John Scouler, invited suppliers with product innovations to write to him directly if they had issues getting a product listed. In a presentation entitled Growing Together, Scouler urged suppliers to work with Tesco to focus on creating loyalty and personalisation; deliver a *"great shopping trip"* and "*build a reputation that we are proud of. Use our scale for good"*. One attendee commented: *"This felt like a newer, more open Tesco looking to collaborate."*[37]

However, a recent Daily Mail article suggests that Tesco is charging food companies thousands of pounds a year to ensure their products appear at eye level on its shelves. This ploy is believed to be used by most supermarkets to boost their profits at the expense of their suppliers. In effect, Tesco and other retailers are charging food and household products companies for the right to sell their brands through the supermarkets' retail stores. Only those prepared to pay a premium figure will get their products placed on the shelves at eye level, where research shows that they are more likely to be seen and purchased.

A memo compiled by Tesco's cooking ingredients buying manager, James Marshall, and sent to suppliers was leaked to The Grocer magazine by an angry supplier. The memo explained that suppliers would be expected to pay £30 a product per retail store for lines to be stocked on two key eye-level shelves. Consequently, a company wanting its products on these shelves at 600 Tesco retail stores for a full year could be charged £18,000. There was a charge of £15 for products to be stacked on the top shelf or those at waist level, while there was no payment for the bottom shelf. The Tesco email also included a diagram to highlight the benefits of being on the 'hottest' shelf. The shelves at eye level were coloured in red and featured images of the sun wearing sunglasses, while the bottom shelf was blue and included pictures of igloos.

While the system is a clear money-spinner for Tesco, it also helps large brands, which can afford such payments, at the expense of small independent food producers. There has been controversy in the past about how supermarkets require manufacturers and farmers to fund special discount promotions by accepting lower prices for their products. This has allowed the supermarkets to present themselves as the shopper's friend without having to suffer any cut in their profit margin.

[36] Trading Responsibly: Improving the Way We Serve Our Customers and Work With Our Suppliers, *Tesco*, February 2014
[37] Tesco Urges Suppliers to Aid New Product Drive, *www.retail-week.com*, 30 September 2013

Tesco insists that charging suppliers more to put their products on eye-level shelves was not new and that it is common practice among major retailers. However, one supplier who received the email described it as a new tactic. He said: *"Tesco are making it increasingly unattractive to do business with them. We won't support this. And as a leading brand, if we are then positioned on the bottom shelf, how is that serving the needs of the Tesco customer?"*

The row is the latest evidence of an increasingly difficult relationship between Britain's biggest supermarket, which has huge power to make or break brands, and manufacturers. Tesco recently took 70 big brands made by the Princes company off its shelves, including Princes meat pies, Cross & Blackwell soups and Napolina oils. Neither company would explain why the two had fallen out. However, rival suppliers suggested the dispute may have been over payments demanded by Tesco. A Tesco spokesman said: *"We work closely with our suppliers to build exciting ranges for our customers, and make our ranging decisions based primarily on what we think will work best for customers. Suppliers often request changes to where their products are placed on shelves, for example to give more prominence to a new product. This practice is common across the industry."*[38]

[38] Pay Up for an Eye Level Spot on the Shelf, Tesco Tells its Suppliers, *www.dailymail.co.uk*, 29 October 2013

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