From A(pples) to Z(oom lenses) Extending the boundaries of multichannel retailing at Tesco.com

Having an extremely strong existing brand, the power of the Internet, and our ability to use it - these are the key factors to our success. There is virtually no limit to what we can sell, be it physical goods or services, and where we can sell it.

Lama Wade-Gery jumped out of the white delivery truck and looked at her watch. Delivery was right on time. So was the launch of the spring catalogue for the new online non-food operation 'Tesco Direct' that had been added to the existing dot. corn operation. Integrating different order and fulfillment options was a constant challenge, and Laura had at least one more on her mind: the company had almost reached the limit of its in-store picking model in some areas in the UK and had to think about alternative fulfillment models.

As the driver started to unload bottled water, vegetables, frozen food, wine and a flyer advertising a buy-one-get-one-free offer on Californian Chardonnay, Lama took a moment to look around. It was a typical suburban neighbourhood north of London, neither posh nor poor. In many ways her service had become a perfect mirror of the UK population, just as the main bricks-and-mortar business had been since the turn-around led by Lord MacLaurin in the 1980s.

Tesco – History of a grocery giant

In 1956 the first Tesco self-service supermarket was opened in a converted cinema. During the 1950s and 1960s Tesco grew primarily through acquisitions. These included 70 Williamson's stores in 1957, 200 Harrow stores in 1959,212 Irwin's outlets in 1960, and 97 Charles Phillips stores in 1964. By the 1960s Tesco had become a chain of 600 stores. The Tesco that opened in Leicester in 1961 with 16,500 square feet of selling space entered the *Guinness Book of Records* as the largest store in Europe.

As customers began looking for quality and choice in the 1970s and 1980s, Tesco's 'pile-it-high-andsell-it-cheap' strategy was less successful and results slipped dramatically. The primary reason for the dismal performance was that customers had a negative image of the company and the products it sold. With its exclusive focus on low prices, stores were poorly maintained and the selection of items offered was perceived as inadequate and of mediocre quality.

But by the time MacLaurin retired in early 1997, Tesco had become the largest, most profitable supermarket chain in the UK. His first move had been to pour large amounts of money into the construction of new superstores in order to attract upper market segments. Simultaneously, new systems and technology were introduced in sales and distribution to position Tesco across a range of store formats and market segments.

Another development was about to change the rules of the retailing industry: the advent of the Internet. Although Tesco had been trying to meet new customer demands and develop business models to cater to them, until the Internet provided new ways of communicating with customers, that had not been an easy task, as Laura Wade-Gery recalled:

"We started out with the basic customer demands. Since the early 1990s customers came up to us and said 'It would be great if you could deliver my groceries to my home', so we started experimenting with catalogue and phone ordering. It was an operational mess and very inefficient. So for us, the Internet came to the rescue in terms of providing the technology which enabled cost efficient and operationally effective home delivery."

Tesco's bricks-and-mortar business

The current CEO, Terry Leahy, has worked for the company for more than 20 years: Much of Tesco's recent success is credited to his leadership ability. In order to respond to increased competition and declining prices in the food segment, Tesco significantly expanded its range of products. Its largest

stores now devote 40-50% of their shelf space to non-grocery items such as clothes and products for the home. In 2000 Tesco opened up a new front in retailing, selling consumer electronics, televisions, DVD players and mobile phones.

For the year 2006, overall group sales increased by 10.9% to £46.6 billion, and group profit before tax increased by 20.3% to £2,653 million. UK sales grew by 9% to £35.6 billion, of which 5.6% came from existing stores and 3.4% from new stores. UK profits climbed to £1,914 million, international sales grew by 17.9% to £11 billion and contributed £564 million to profits, which presented an 18% increase over the previous year. Tesco employs more than 450,000 people worldwide across all of its businesses.

Four key strategy elements

Tesco has a long-term strategy for growth that has been in place since 2000, based on four key elements: to grow the core UK business, to expand by growing internationally, to be as strong in non-food as in food, and to- follow customers into new retailing services. The strategy is being pursued via a number of initiatives and decisions:

- **Core UK**: The UK business consists of a dense network of more than 1,800 stores with a combined sales area of 5.1 million square metres, and accounts for 75% of group sales. Around 250,000 people work in the group's UK business. Tesco plans to grow through new shopping space with a multi-format approach and from extensions of existing shops. It has a strong customer base of more than 26 million people in the UK, with more than 11 million households having a Tesco Club card.
- International: The group operates in 12 European and Asian markets outside the UK and owns more than 800 stores. Over 100,000 employees work in international operations, serving over 15 million customers. More than half of the group's space is now outside the UK. A market entry into the US took place in 2007.
- Non-food: Sales of non-food products account for more than £6.8 billion in the UK alone. Tesco has a market share of 7% in non-food in the UK, compared to 20% in the grocery sector. Still, only one quarter of the UK population is within reach of a Tesco Extra store offering a large non-food selection.
- Retailing Services: The group has moved into additional services such as Tesco Personal Finance (TPF), Tesco.net and Tesco Telecom. The latter currently serves more than 1.5 million customers, including 1 million in an Mobile Virtual Network Operator (MVNO) in cooperation with O2. These services offer a great revenue potential, with TPF accounting for £65 million in profits.

Five different store formats

Tesco aims to serve a broad range of customers and therefore takes a multi-format approach. After establishing the original superstore format in the 1970s, it has differentiated its presence into four more store formats since the early 1990s:

- Homeplus: This new store format, initially introduced in seven stores in the UK, offers a wide range of non-food items, including clothing. Further products are available through the Tesco Direct order and collection point in every store. With a sales area of more than 30,000 square feet, stores are stand-alone or in retail parks and complement the local Tesco food offer.
- Extra: Introduced in 1997, Extra stores represent the largest store format, ranging from 60,000 to 125,000, square feet. These hypermarkets offer a wide selection of non-food items as a complement to the regular supermarket product range.
- **Express:** These stores have a sales area of up to 3,000 square feet. The format was introduced in 1994 and now consists of over 700 stores selling a range of up to 7,000 lines including fresh produce, wines and spirits and bread and confectionery from their in-store bakery. Many of these stores have a petrol station (Tesco is one of Britain's largest independent petrol retailers
- **Metro:** The first Metro store was opened in 1992, bringing the convenience of Tesco to town and city centre locations, meeting the needs of High Street shoppers and the local community. Metros

offer a tailored range of food lines, including ready-meals and sandwiches.

• **Superstore:** These stores have a minimum selling surface of 26,500 square feet and display 25,000 - 30,000 SKUs (stock keeping units). The oldest and most established store format of the group, there are now 433 superstores with a total sales area of 13.2 million square feet (53.7% of total UK shelf space) located in the UK.

Competition in grocery retailing

The UK has a highly consolidated and competitive food retail industry. Other leading players include Asda (owned by the US company, Wal-Mart), Morrisons (which acquired Safeway in 2004), Sainsbury's and Somerfield. Discount players, such as Lidl and Aldi, have entered the bottom segment of the market, adding to the existing price pressure.

Traditional High Street businesses are also under competitive pressure from Tesco and other large retailing chains. Tesco's main business has come under criticism from various directions, prompted by the fear of large supermarkets eliminating High Street shopping with its small, specialized shops. Critics claim that retailing in the future risks being dominated by large, anonymous chains, as this comparison by Andrew Simms, Policy Director of the new economics foundation (nef), indicated:

The chains became the economic equivalent of invasive species: hungry, indiscriminate often antisocial and destructive. [...] Britain is being sucked into a vortex of US-style, chain-store-led, clone retailing [...]

Local authorities have accused Tesco of using 'back-door-tactics' by taking over existing High Street retail sites in order to dodge the need to obtain planning permission. In response, Tesco insists that, ultimately, no retailer can move against the preferences of its customers, as the response of Lucy Neville-Rolfe, Executive Director, corporate and Legal Affairs of Tesco plc affirmed:

Andrew Simms' attack [...] demonstrates that he knows far more about flora and fauna than he does about modern retail. Tesco will only prosper if we meet customers' desires and demands. Simms' problem is that he doesn't like the choices people freely make!

Shopping for groceries at Tesco.com

Actually, we weren't particularly bothered about the website, as long as it enabled customers to do the basics of a shopping trip: find the products they nee~, look at them, make their choice and pay. So we decided to keep it as straightforward as possible.

Laura Wade-Gery, CEO Tesco.com

Registering for the website

Users who want to order groceries online via Tesco.com need to register by providing their personal data, including delivery directions. They are strongly encouraged to provide their Tesco Club card details when registering because this enables them instantly to review their previous purchases in physical Tesco supermarkets. In this way first-time online customers can start with their usual shopping without having to key in each item separately. If a customer does not have a Club card number or does not want to reveal it, the system creates a new, virtual Club card number to track the shopping history and award points.

Accessing the website

Customers have a number of different options to access Tesco's online services. Since 2001 shoppers at Tesco.com have been able to use mobile commerce applications to make their purchases. In partnership with Microsoft, Tesco.com launched Tesco Access, which allows users of hand-held computers and WAP-based wireless phones to shop online, as John Browett, at the time

CEO of Tesco.com, explained:

Since the launch of Tesco Access, our customers can shop any time, any place, on any device, whether through the Internet, digital TV or pocket PCs.

Tesco Access has since been included in the regular web site Tesco.com. As of July 2007 users can choose directly from within their Tesco.com account settings how they want the site to be displayed.

Navigating the website

The website offers several types of functions to facilitate the online shopping process. They include:

- Express Shopper: Customers can write shopping lists on the Tesco.com web site, just as they would do for a regular shopping trip. The website then searches for items from the product line that matches the customer's wishes. Customers simply choose the product they want and move on to the next item on the list.
- Lunchbox Tool: Aimed at busy parents and customers wanting to order complete lunch meals, this tool enables them to customize their sandwiches.
- **My Favourites**: This function displays a list of all the items that a customer has purchased recently. Customers click on any items that they want to buy again.
- **Online Recipe Book**: Customers can browse all the ingredients needed for a particular recipe and click to buy. Products are split into those that the customer probably has at home and those that are special to the recipe.
- Organic Box: Tesco offers pre-selected baskets of organic products in different sizes.
- Season's Choices: This displays items for special events such as Christmas, a barbecue or a party. Customers choose a specific list and then tick the products that they want to add to their shopping basket.

Although not every feature is used by all customers equally, there are certain occasions where Kate Cook, a regular Tesco.com shopper, makes use of some of them:

I really like the 'favourites feature'. That way, I complete my £100 order that I do every other week in 10-15 minutes during my lunch break. When I have people come over for dinner, I check the recipe selection for some cool snacks or Season's Choice section for offers on BBQ. A colleague of mine, a mother of two, loves the Lunchbox tool for her children - if you have to make a sandwich for the little ones five times a week, all year long, you just run out of ideas.

If customers have a preference regarding a product (e.g. they like their bananas particularly ripe), they can mention this to their shopper using a special note function that appears on the web site next to each product. If an item is out of stock, they have the option of either choosing a suitable substitute or skipping that item. If a customer does not like the substitute, they can return it to the driver upon delivery and the amount is re-credited.

The website stores the virtual shopping cart each time the customer leaves the online store, thereby making it easy for different family members to retrieve the stored shopping list next time they connect to Tesco.com. Tesco is also trying to integrate the online and offline shopping experience: Club card members can enter their card number through the website and view recent purchases from offline stores.

Scheduling delivery and paying for the goods

Tesco.com's prices are the same as those in Tesco stores. In-store discounts, promotions and special offers are made available to online customers, for example, a 'buy-one-get-one-free' offer. If the offer is already valid when the order is placed, it will also be displayed on the website. Payment can be made by credit card or debit card such as Visa, MasterCard, Switch, American Express and the Tesco Clubcard Plus. The account is debited when the packing is completed.

For the first couple of years Tesco charged a flat fee of £5 for home delivery, regardless of order volume and delivery time. Currently, delivery fees differ according to the day of the week, with early weekday deliveries being cheapest, and evening and/or weekend deliveries more expensive. Customers choose a two-hour delivery slot any time between 9.00 am and 11.00 pm. They seem to be satisfied with the model, as online shopper Kate Cook confirmed:

They are always on time. I have been shopping at Tesco.com once a week for the last four years and delivery was late by 10 minutes once - the driver really apologized and I got £10 off my order. In fact, a lot of times they are even a little bit early. Sometimes I come home from work and the van is already parked in front of my house and the driver is waiting for me!

Items are delivered in plastic bags, with substituted items marked so that customers can inspect them upon delivery and accept or reject the substitute. In an attempt to reduce pollution and waste, Tesco is reducing plastic bags used for home delivery. A recent study revealed that for an order of 32 items Tesco.com used 11 bags (other online retailers even more). The company recently announced a 'no-bag-option', whereby groceries arrive in stackable, reusable, plastic trays, which will be taken away by the driver. Consumers who shun bags are rewarded with additional Clubcard loyalty points. Around 40% of customers have already opted for no bag delivery.

The Tesco.com business model

When Tesco first started its delivery service, it was possible for customers to place orders through multiple devices: telephone, fax and also via the Internet. However, the ordering system turned out to be too slow and inaccurate, as each order was captured manually, leading to frequent errors and frustration for customers. Delivery costs were high since the picking system was manual and paperbased - pickers would walk around the store with order lists and take the requested items off the shelves. Laura Wade-Gery recounted the early days of grocery delivery:

It was disastrous. You took the phone order, then typed it in manually, then sent it down to the store by fax, where it was then picked. We often had a kind of Chinese whisper effect, so when a person ordered a grapefruit, by the time he got the order, it might have become a cabbage.

To overcome these initial difficulties Tesco decided to automate its delivery service to a large degree and use the Internet as the sole ordering channel to streamline and improve the order processing. When contemplating the delivery format for its online shopping it had to choose between two different approaches: either to pursue a warehouse model or to use its British stores as distribution centres. Both strategies carried risks: building huge warehouses would have cost millions of pounds, which Tesco was hesitant to spend on an unproven service, while packing and picking groceries from stores might clog the aisles, thereby frustrating store customers. Hence, the business model evolved slowly over time, starting with the simplest fulfillment model of in-store picking.

In-store picking

Tesco.com CEO Laura Wade-Gery explained the rationale behind ultimately choosing the in-store picking model:

In the beginning, a lot of people looked at our idea of instore picking and said: 'You are mad, this can't possibly be right.' They automatically assumed that the warehouse model was the answer. But think about the costs of fulfilment: the costs are actually in delivery. That made it necessary to start near the customer - our dense network of supermarkets all over the country that were there anyway. So actually it was much less of that strategic debate than I guess it has been made to appear on the outside. It was just the obvious thing to do.

Giving customers a natural extension of the bricks-and-mortar experience also yielded advantages for the company, as Daniel Roberts, Operations Development Director at Tesco Direct, added:

If you place an order on Tesco.com, we will go and pick that order in a Tesco store. So our experience of availability, product quality, and other aspects shopping the store, is the same as that for somebody walking in from the street. In essence, Tesco.com pickers are our eyes of the regular customer on the shop floor, to the extent that the Tesco.com metric for availability has become the Tesco metric for availability.

Tesco.com picks around 250,000 orders a week from 300 British stores. By delivering from local stores no route takes longer than 25 minutes, since 94% of the population in England live within a 25-minute radius of a Tesco store. In order to ensure an undisturbed shopping experience for its customers, Tesco has refined its in-store model over the years. Picking starts at 6.00 am and continues until 2.00 pm. Over the course of the day the number of picking staff is gradually reduced as more customers do their grocery shopping. In this way the daily peaks of in-store picking and regular shopping are de-synchronized to avoid clogging the aisles. Using improved picking algorithms is another means of reducing the disturbance by spreading the trolleys more evenly across the store.

One of the biggest challenges of the daily operation is to accurately forecast the incoming orders. While on a nationwide level demand is fairly easy to forecast, exact predictions on the individual store level are almost impossible, resulting in overtime picking after 2.00 pm.

Despite all attempts at optimizing the in-store picking, eventually stores reach a limit that is hard to exceed. Other bottlenecks include the size of the backroom where orders are stored and loaded onto the delivery vans, and the parking space available for the delivery fleet, as Daniel Roberts explained:

One problem we do have is congestion, especially at Christmas. In some stores, we have literally dozens of trolleys on the shop floor and they start to cause distractions with customers and other pickers, so we can see some bottlenecks in that area. And although you might be able to work around that, you will then hit the next bottleneck - maybe because replenishment can't keep up with the rapid picking speed, causing too many items to be out of stock. So eventually, you get to a point where you run out of ideas and solutions.

Building delivery hubs

Tesco's fulfilment activities are run from about 300 shops in the UK, which vary in size from a 30,000 square foot store to a 125,000 square foot hypermarket. Constraints vary accordingly, as some stores operate only 2-3 delivery vans, while large stores with more floor space can have a fleet of up to 20 vans. The entire delivery fleet numbers 1,800 vans. Tesco is starting to address environmental issues with its new fleet of zero-emission battery-powered 'green vans'. Fifteen of these vehicles operate in London and in an environmental model store in Shrewsbury. The vans, which have the same carrying capacity as the regular delivery vans, have a maximum speed of 80 km/h and a range of 160 km before they have to be recharged.

Occasionally Tesco has built a supermarket larger than actually needed. A couple of these Tesco Extra stores have been expanded into 'hubs' by increasing picking staff, delivery fleet and building a customized order handling area in the back of these stores. These serve a larger area, thus taking away some of the pressure from congested supermarkets.

The "dot.com-only store"

In some parts of the UK, we have pushed the limit of the store-based model probably as far as we can. But given customer demand for the service, we tried to find a way to further our online business. So this is why, about one year ago, we built what we call our 'dot.com-only store'. From the outside it looks just like one of the huge automated warehouses built by some of our competitors.

Laura Wade-Gery, CEO Tesco.com

From the inside it looks just like a Tesco store. And essentially that's what it is: a large Tesco

supermarket - except without customers, cash registers and checkout staff.

The 'dot.com-only store', located in Croydon, south London, opened in February 2006. Its size is comparable to that of the Tesco superstores ranging from 20,000-50,000 square feet. It was pragmatically designed in a way that would enable Tesco.com to use all of its experience in the instore picking model, including specially equipped picking trolleys and the logistical process know-how that had been refined over time in the stores, while dispensing with the constraints of time and space that some of the crowded Tesco stores around London were facing. The 'dot.com-only store' serves as a hybrid approach combining the benefits of in-store picking with the spaciousness of a large warehouse.

Integrating the model into the stores

Tesco had to focus on both customers and the bricks-and-mortar stores from where it would actually do the fulfillment. From the perspective of a store manager, integrating the Tesco.com operation into their daily business might at first seem like a drastic intrusion and an extra challenge for store managers. However, it does have a significant impact on the development of sales per square foot. This being one of the key metrics for determining a store's success, store managers are quite eager to integrate the service. The online business has a similar operating margin to Tesco's physical business of approximately 5.7%; however, it has much higher sales growth rates of up to 30% online, compared to 9% sales growth at UK stores. Fulfilling online orders is seen as an opportunity rather than an additional burden, as Lama Wade-Gery confirmed:

The online business is quite a lot of extra work for the store manager, so why would he want this rather complicated time-critical operation in his store's back area? Well, the answer is, he wants it because it is providing significant sales growth. And as a retailer, the first thing that counts for him is sales - no matter where they come from. So even if the dot.com operation may only account for 4% of a store's total sales, it is a portion that is growing constantly at 25-30% per year.

Making online grocery retailing profitable - Tesco.com costs

In addition to the workload and complexity, the integration and operation of online activities incurs additional costs that must be split between the main business and Tesco.com in a way that fairly reflects the input involved from each side. In the past, some analysts had claimed that Tesco.com merely 'piggybacked' on the success of the main business. Tesco.com differentiates between three different types of cost that are incurred:

- **Direct** costs: Dealing with the direct costs involved in the fulfillment of the orders is quite straightforward: Tesco.com takes into account the costs of picking personnel, delivery fleet, drivers, equipment, IT system, etc.
- Indirect costs: Incremental costs incurred by the dot.com operation, e.g., additional cleaning costs on the shop floor, additional replenishment during picking hours, etc.
- **Pure bricks-and-mortar** costs: For instance, the operating costs of a store's restaurant will not be shared in any way by Tesco.com.

According to Laura Wade-Gery, Tesco.com follows a very pragmatic approach when it comes to splitting costs between the dot.com business and the bricks-and-mortar business:

We clearly separate between genuine or incremental costs that are caused by us, and costs that would be there anyway. A good example is, when we started we were operating in a narrow corridor in the store's storage area, closed off by a metal bar that we put in for maybe £600. So did we charge ourselves huge amounts of the store's lighting, heating, and capital development costs? No, we didn't! By now, we have our own design standard for what we need a dot.com area to look like, which has its own freezer, its own chiller and decent amounts of space. That can cost up to a quarter of a million pounds, so we pay for that because that was genuinely caused by us, as well as for the additional heating, electricity, replenishment, and cleaning.

Growing non-food: the launch of Tesco Direct

As long as you're doing food, it is quite clear who your competitors are. Now, with Tesco Direct, you are not only competing against multinational retailers, you are also competing against a whole range of Internet pure-plays such as e-bay, Amazon and the like. And on top of that, you are competing with Joe Bloggs from Putney who owns an electronics shop and decides to put his stuff online.

The addition of non-food products to the product range of Tesco supermarkets began on a large scale with the introduction of the first Tesco Extra stores in 1997. These hypermarkets now carry a line of 4,000 non-food products, including a small range of clothing. Some existing supermarkets were turned into Tesco Extra stores by building additional shopping areas, or, where lack of space prohibited it, with the help of mezzanine floors that basically cut shopping room height in half, which was only possible in some areas of the store. Tesco soon realized that the expansion of the bricks-and-mortar business into non-food had its limitations and that, anyway, customers wanted more ordering and delivery channels.

Tesco's entry into a non-bricks-and-mortar, non-food business was via joint venture with mail order company Grattan, II announced in 1998. Tesco brought its high-performance IT system into the partnership, as well as its large customer base; order fulfillment was managed by Grattan. The joint venture lasted until 2006. In essence, Tesco passed on non-food orders from its own customers to Grattan and let the fulfillment expert deal with it, and the two shared the profits. But the Grattan Joint Venture had its limitations in terms of range and flexibility in developing the customer proportion and revenue, and Tesco ultimately decided it was better positioned to grow the online non-food businesses on its own.

Using the expertise gained from a decade in the online grocery business, Tesco brought a couple of senior non-food retailing veterans into the team, including Steve Robinson, and started developing its own non-food competence under the new brand 'Tesco Direct'. Robinson had previously worked as a Financial Director at Argos one of the largest UK retailers. In September 2006 the service went live in time for the Christmas shopping season, handling the spike in festive sales and significant increase of Grattan Joint Venture volumes with relative ease.

Setting up the organization

Unlike the launch of Tesco.com, Tesco Direct was integrated, into the existing organizational structure. Steve . Robinson explained:

When I joined Tesco in July 2005, I did not step on the scene and say: 'OK, I need 400 people and a completely independent business unit to set up the business.' Instead, I saw that Tesco had already accumulated quite a lot of non-food expertise in the bricks-and-mortar business and a very successful online presence. So we basically piggybacked on this know-how and added people in the non-food and dot.com business to cope with the additional workload and get the multi-channel knowledge that we would need for the project.

The Tesco Direct team worked closely with the commercial teams in the main business. The buyers working for the bricks-and-mortar side of the business dealt with suppliers across the globe and aligned the different channels, since some of the range available at Tesco Extra stores was also included in the catalogue.

Developing a suitable value chain

Tesco believed that every part of the value chain that had significant impact on the customer experience needed to be performed by Tesco itself. One of the key insights that Robinson provided from his experience in multi-channel retailing was the fact that pure Internet-based ordering was not enough. He aimed for a customer experience that was far from cutting edge and had been used for quite a while by retailers: a catalogue.

Having experimented with a small catalogue that was printed for the launch in September 2006, the next issue of the Tesco Direct catalogue, published in March 2007, had a print run of several million copies. Scheduled to be printed twice a year in Spring and Autumn, with smaller leaflets featuring seasonal and special offers over the year, copies were distributed across the store network, where they were put on large pallets of a couple of thousand units each, as well as distributed with every Tesco.com order. Demand was high: within two weeks almost all copies of the catalogue had gone.

Producing a catalogue of more than 1,000 pages posed some serious sourcing challenges. At the time, Tesco's core competences did not include high-end photographic publishing; most people involved in developing the online non-food business were convinced that the whole design process for the catalogue had to be outsourced to a publisher. But the team was in for a surprise when Robinson arrived:

When we discussed the topic, I immediately said 'No way.' If you're going to sell something over the Internet and through a catalogue, you absolutely have to own the photography and the design. It's not like in a store where people can simply touch and look at the goods. Owning the publishing facility was an absolutely crucial strategic capability we needed to develop - and that's what I did.

Robinson built up a media publishing centre with a team of 40 publishing experts including designers, photographers and publishers who had previously developed catalogues for Argos and other retailers. Putting them all into one building close to the rest of the Tesco business also yielded another crucial benefit, as Robinson explained:

It is priceless to have all these people working so closely with us. If a colleague from the web design looks at the raw shots for the catalogue, he can immediately step in and tell us that it might work in print but not on the web, or vice versa. That way, we can immediately modify the material and still benefit from only having to shoot once. That saves us a lot of time and money.

Choosing the right products and order fulfillment

Robinson's experience at Argos gave Tesco Direct a head start in selecting a product range that would appeal to consumers. Product categories of more than 12,000 SKUs include everything from garden equipment to toddler toys. Not satisfied with merely copying the catalogue of his former employer, Robinson came up with some ideas that would soon prove to be hits:

Horse riding is an incredibly popular sport in the UK. However, none of the multi-channel retailers had got into equestrian equipment yet. We did! We even started to include swimming pools and garden sheds.

Going online also meant that Tesco could do what it had been doing in the grocery business. It extended its 'good-better-best' philosophy, offering not only the value or the standard item of each product, but also a low-cost and a luxury version of a lot of products.

While offering products via a print catalogue or online did not pose any particular challenges, fulfillment of orders certainly did. While the Tesco Direct operation was viewed as a natural extension of non-food retailing, fulfilment could be accomplished with the proven instore picking approach, as Robinson explained:

In grocery, the challenge is to keep the food fresh throughout the supply chain, so everything should be available everywhere to minimize delivery time. With non-food, it's almost the opposite. I can't fulfil an order of a £5,000 television set through my store network because I will only sell one of them every 6 weeks - and I don't know where. So at the end of the year I would have a huge number of out-dated TVs that no one wants to buy. It just makes more sense to hold stuff centrally.

'One-man products' consist of smaller items, such as consumer electronics and multimedia products, that are fulfilled from a central distribution centre in Daventry. 'Two-men' products, such as furniture

and white goods, are distributed through logistics specialists using dedicated warehouses. Although stocking large items incurs additional costs, Robinson is convinced that it is money well spent:

Eighty percent of all sofas bought in the UK are black, brown or beige. We offer a selection of these models with a delivery time of 5-10 days. That's much faster than the 50-day delivery of large furniture stores. It was a gamble we took, but it has changed the landscape of retailing in the UK.

For all but the largest items, customers can choose two-hour delivery time slots, just like in the grocery business. Or they can pick up items in the stores. Besides being able to pay cash (still the preferred payment method, especially in lower-income customer segments), this gives busy customers greater freedom of choice by not having to pre-select a time window for delivery and having to stick with it. Being able to order all items over the phone and at the Tesco Direct desks installed in many larger Tesco supermarkets is yet another example of the freedom of choice Tesco strives to offer, as Robinson explained:

Being able to offer people interaction with real human beings is something that clearly distinguishes us from Internet pure-plays such as Amazon or e-bay. It is only logical for us to use our physical store network and let the customer choose how he wants to do business with us.

Pricing at Tesco Direct

Pricing has its challenges as different order and delivery channels can incur different costs. However, customers are not willing to pay different prices according to the delivery channel. At the moment, apart from the £5 delivery fee, prices are the same for each channel, except for localized seasonal clearings in single stores or overstock items of the Internet business. These prices are merely the result of a cost-benefit trade-off, as Robinson explained:

In general, we have the policy to provide the same price on the web as in the store. However, some stores might have an overstock of, let's say, garden furniture after the summer season. It would simply not be cost-efficient to ship these items all the way back through the supply chain. Instead, stores can clear them by offering lower prices that are not matched on the web.

Other competitors had tried differentiated pricing models. Argos, for example, originally provided free delivery for orders over £100. The order value was later increased to £135 and then £150 before finally being abandoned altogether. Clearly there are limits to this model when it comes to Tesco Direct and the option for customers to pick up their goods directly from the store: while it adds extra flexibility from customers' point of view, it can create additional complexity and costs that might result in a negative yield for smaller items.

The Clubcard – An ace up Tesco's sleeve?

There's no rocket science involved with Clubcard. It's about educating, empowering and rewarding consumers.

In 1995 Tesco introduced the first customer loyalty card, which offered benefits to regular shoppers while at the same time helping Tesco to analyze its customers' needs. Today, Tesco has 13 million Club card members.

Shoppers' names and addresses and the category of products purchased are recorded and used for direct mail campaigns and other promotions. For instance, when Tesco launched its pet insurance product it was able to pitch to customers who had recently bought dog food and cat litter at its online store. On a regular basis it distributes printed flyers along with the shopping order according to the products chosen. For example, customers ordering only vegetarian food will not receive a 'BBQ season opening' flyer. Clubcard evenings - complimentary in-store gatherings for selected Club card holders - are held to promote products. Customers of the wine or cheese departments at Tesco might be invited to a wine-tasting evening; shoppers who have purchased shampoo or cosmetics might be

invited to a hair-care event, as Karen Marshall, Tesco spokesperson, explained:

It's a small 'thank-you' to customers for shopping with us. The main idea is to help serve our customers better. Besides, we get into personal contact with our shoppers and gather information about how to serve them better – something difficult to achieve in the mass-marketing age.

Tesco also sends Club card members a monthly magazine with recipe ideas, details of new product launches and other information tailored to particular demographic groups. Each edition reflects the interests and lifestyle of a target market group such as young families, students or senior citizens. In addition, quarterly mailings are sent to all participating households, which in total make up more than 6% of the UK's annual post bag.

During the first couple of years after launching Tesco.com, the Club card idea was of great value, as Laura Wade-Gery recalled:

Especially in the first year of Tesco.com, we received numerous comments from new customers who couldn't find a lot of the items they regularly bought offline, the choice was simply overwhelming. So now, if a first-time online shopper already has a Clubcard, our system will recognize that and automatically populate his/her shopping list with the items they usually buy in their supermarket, making it a lot easier for new customers to find the things they want. Besides, we can track how many online shoppers are also frequent Tesco shoppers, and how many we are drawing from other chains.

Soon after Tesco.com was launched it turned out that the vast majority of Tesco.com customers shopped online *and* offline. Rather than perceiving this as evidence of cannibalization - one of the big fears when Tesco first added the online channel - Laura Wade-Gery saw it as a proof of the business model:

Everybody who does grocery shopping for a household knows how difficult it is to buy fresh groceries for a whole week. So people buy stock items along with some fresh items and then return to a Tesco store once or twice a week to pick up fresh vegetables, fruit or meat. And that is absolutely fine for two reasons: first, because it shows how compatible the offline and online shopping experience at Tesco has become. Second, because these customers are our most valuable ones in terms of overall order volume.

The vast amount of data collected by Tesco about their customers' habits has also raised concern about privacy and data security issues (if the data stored got into the wrong hands). Tesco insists that it only uses the data for serving customers better by making tailored offers to each of its customer segments.

There are four crucial things I want our customers to say about Tesco.com, regardless of what we sell:

- '/ know Tesco will have it.' So I want Tesco to be known to have pretty much anything a customer could want.
- '/ trust Tesco to offer me great value.' So we have to make sure that we offer customers the best value.
- 'They make it easy for me to shop.' We want to be able to create a different shop window for different types of customers .
- 'I don't have to think about it, it simply works.' All of our processes have to run absolutely smoothly and need to be optimized and redesigned continuously.

Laura Wade-Gery got back into the passenger seat of the white delivery truck. The journey was almost completed, with only one more stop. She took a look at the electronic delivery device: she was about to deliver a couple of low-fat products, skimmed milk, a lot of fresh vegetables and fruit and dietary information, as well as a personalised meal plan. No doubt this was a customer of Tesco's increasingly popular dieting service.

In 2004 Tesco teamed up with online dieting business 'e-diets' and signed an agreement licensing the technology and using it for TescoDiets, a service that is essentially the online equivalent of 'Weightwatchers'. Users get a personalized record with their previous dieting history, meal plans and the goals that they want to achieve. Then they are able to click on the appropriate shopping list for delivery to their home via Tesco.com. The subscription-fee is £2.99 per week, with a minimum subscription of ten weeks.

Laura Wade-Gery describes the benefits of the model for Tesco:

This is a <u>very</u> good example of using the Internet to create a new business that is actually very close to Tesco's core business. It works brilliantly in a low-cost environment, very scalable, fantastic low-cost business to deliver. You get support online; you can help one another in forums, etc. Now, people who joined the service have even started to meet - in one of the coffee shops in our store. Overall, the online dieting business is very scalable, requires almost no capital and is very low cost to deliver.

Back at her office, she reflected on the progress made in online retailing at Tesco and where the journey would go next. The issue of coming up against boundaries geographically and product-wise was getting urgent. Her objective was to come up with a plan to extend them. Adapting the order fulfillment model had been achieved slowly - hesitantly almost - after the early failures in warehouse fulfillment. But with the introduction of Tesco Direct, a pure in-store picking approach had become impossible.

Adapted from Strategies for e-Business, Twafic Jelassie and Albrecht Enders, 2nd ed., 2008.