

The battlefield for customer loyalty just got greener //

By Chris Allan, Chief Strategy Officer, Quantum Retail

The drivers for green retailing

There is one area where retailers are set to battle harder than ever before: the environment. Amid the buzzwords of food miles and carbon footprints, retailers are already gathering to demonstrate their environmental credentials in order to keep existing customers and win new ones. Along with effectively communicating strong green credentials retailers need to be seen to be thinking and acting with the environment uppermost in their minds. That might be difficult enough for the small retailer to execute, but for a multiple outlet national brand with hundreds or thousands of stores, this is a hugely complex challenge – especially so, when you consider that customers are still looking for a distinctive offer at a competitive price when they walk into the store.

Customers now demand that retailers be more aware of the impact that their decisions have on the environment and are holding them accountable to ensure that business decisions are made ethically. Not only that, but customers are also demanding an understanding of the specific cost to the environment of each and every product they buy.

There is a plethora of green announcements by retailers, all keen to show they are environmentally-conscious. Strategically, most large retailers are now committed to some form of environmentalism such as:

- curbing waste
- reducing packaging
- updating their products
- better use of energy
- fewer distribution trips
- reducing product-miles by sourcing more products locally
- using greener energy for their own vehicles



Additionally, many retailers today use market basket analysis, which assumes that if a customer buys one type of product they are likely to buy another as well. For example, if someone purchases a remote control car, they are likely to buy batteries as well. Or if a customer buys a swimsuit, he or she will likely also want to purchase sunscreen. This type of analysis is useful in understanding product affinities and the ability to flex demand across multiple products, and understanding the cross-sell and up-sell opportunities in the assortment to drive store specific ranging.

They are attempting to give customers better choices and more relevant information, so that customers with environmental concerns can shop in confidence. The competition between retailers has moved to a new battlefield and those with the courage to invest beyond public relations campaigns will win the day with a consumer segment that requires more visibility and responsibility to the environment.

In 2007, UK retailer Marks & Spencer unveiled a £200m “eco-plan” to make it carbon neutral in five years. By 2012 it expects to be carbon neutral and send no waste to landfills. Meanwhile the UK’s largest retailer Tesco’s strategy has involved a £100m fund for investment in sustainable environmental technology such as wind turbines, solar panels, combined heat and power and gasification and has announced it will cut its energy use per square foot by 50% by 2010 against a baseline of 2000.

Its declared strategy is to be the best supermarket for energy use. The company invested £20m in 2006 in a range of energy-saving programs to cut energy consumption by 135 million kWh per year, saving eight million pounds in energy costs, and saving more than 50,000 tons of CO2. In the United States, retailers like American Apparel have led the way in ethical trading by focusing on upmarket ethically and locally sourced product combined with excellent service.

Tesco is also trying to improve logistics efficiency by using suppliers’ vehicles to make store deliveries on their return trips (rather than travel empty), using double-decked trailers that carry 67% more products per load and reducing weekly deliveries to Tesco Express (city-center) stores. They estimate they have saved 8 million fewer delivery miles for suppliers, cut 54,000 deliveries from their operations per year and reduce fleet miles by 2.5 million. As oil and energy prices spiral, it makes both economic and environmental sense to invest in energy efficiency. Most major retailers are acting in this area.

Politicians have woken up to the environmental vote too, and so governments are becoming more demanding and drawing up legislation to require companies to manage their impact on the environment and waste. This will only continue. The Carbon Trust in the UK estimates that retailing accounts for 7% of UK carbon emissions and suggests that it should be easy to cut these by 10%, while many can and should aim at more dramatic reductions.

The green paradox

But how easy is it for retailers to address environmental issues while maintaining focus on their primary business objectives of meeting all their customer needs and adding shareholder value? As retailers are beginning to discuss business issues with respect to their environmental cost, they are quickly noticing that many environmental improvements threaten to undermine other aspects of performance. Carbon offsetting programs increase cost. Supply chain reviews can reduce overhead and reduce the carbon footprint, but at the cost of decreased reactivity and subsequent increases in store inventory. Vendor rationalization and re-prioritization can be engineered in response to environmental criteria, but at the likely expense of increased unit costs.

Retailers can also look to their supplier community and logistics providers to help them better meet environmental objectives, but can only push back so far in this direction without unduly affecting the basis of their supplier relationships and again incurring more costs. All of these options feel a bit like turning the clock back – the actions retailers are currently entertaining to meet environmental objectives frequently increase cost in some way, or at the very least compromise their ability to deliver goods to their stores.

Although we can expect increased customer pressure and government legislation for more responsible retailing, customers still want product availability and customer service. While the growth of organic foods, for example, has shown that a proportion of consumers are prepared to pay a higher price for ethical goods, the fact remains that the majority are not – at least not yet. Retailers now need to look for ways to achieve their operational and financial goals in tandem with environmental objectives. This is a difficult balance, but one that customers and the environment demand.

Achieving the impossible – balancing the needs of shareholders, consumers and the environment

One solution, Q from Quantum Retail, has been uniquely engineered to enable retailers to do precisely that. What makes Q stand out from other solutions is in how differently it is constructed and operates. First Q enables retailers to achieve merchandising goals for every product in every location with significantly less inventory than they would otherwise require. It is able to do this as Q was designed to overcome the volume and complexity of information from the supply chain and assortment planning processes.

Q additionally deals with the allocation of inventory in cases of scarcity and abundance to ensure that the available inventory is being distributed to best achieve the retailer's environmental, merchandise and financial goals. These environmental objectives can include reducing the need for transportation, cutting distribution miles and reducing carbon footprints.

These goals are not considered in isolation; rather they are all factored into the automated, exception driven, decision making processes established by the system. In order to create the balance between competing objectives, Q offers a Multi Objective Optimization layer to rationalize all needs against top line strategies and customer demands. Furthermore, Q can work standalone or alongside a larger social responsibility program.

Q allows retailers to only move what is necessary, where it is necessary, taking into account the weighted inputs of transportation impacts such as fuel consumption, fuel cost and carbon emissions. Every factor is considered simultaneously and no individual factor in a decision is subordinated to another. Q is able to calculate the carbon impact of each and every inventory decision that is made and balance that against the merchandising and financial goals that the retailer is trying to achieve. It is this ability to balance these goals which marks Q as unique from conventional solutions, so that the whole impact of retailers supply chain decision making is considered at one time. This means that Q can reduce markdowns by targeting purchasing and focused distribution.

At the same time it can also be more responsive to rebuy opportunities as they arise, due to its more reactive decision making process and ability to take into account the closer proximity of a particular supplier. In this way Q is uniquely able to provide holistic optimization and inventory management rather than sub-optimized forecast optimization, replenishment optimization, price optimization and markdown optimization. Q also works in tandem with carbon footprint tracking tools to continuously audit carbon impacts so these can be reported as a total footprint, or a detailed analysis; thus enabling management to review their success in meeting their environmental goals alongside their merchandise and financial goals.

At one level it is almost blindingly obvious, but in an age when sustainable use of limited resources is essential, Q helps the retailer to achieve more with less. Reductions in supply chain options and frequency of delivery, for example, can be absorbed without financial or merchandise performance.

In Q, Quantum Retail offers retailers a technological means to meeting and balancing environmental, merchandising, financial and operational goals. The design of Q's technology itself offers environmental benefits. The way it has been designed to run in the retailers technical environment means it is cheaper to run and offers lower maintenance and operational costs. By delivering rapid implementations, Q also delivers value to the retailer more quickly and begins to make a difference to the retailer's ability to meet its business objectives more quickly too. At a purely IT operational level, Q has a much smaller hardware requirement, with lower processing power and smaller storage – saving energy and resources at the IT level too. Operationally it also frees up people from the mechanics of the merchandising and distribution processes allowing them up to work more exclusively on the areas where the retailer adds value to its offer.

Green matters

To talk of shareholders and consumers goals as being totally distinct is to miss the plot on this new era of Green Computing. There is a way the two can be successfully linked that benefits the world as well. While they might not have been at one time, environmental goals are just as crucial to the retailer's success and as deeply interwoven with merchandising and financial performance. What is more, they will become all the more important in years to come. As green retailing becomes mainstream, no retailer will be able to omit environmental performance from its own, its shareholders' and its customers' estimation of success. Fortunately an adaptive optimization technology is here today that enables retailers to make both tactical and strategic decisions that take account of green factors while maintaining both shareholder and customer satisfaction.

Quantum Retail Technology, Inc.

The market is asking new questions... you need new answers.

Q answers the new questions facing grocers and retailers today with solutions that enable them to profitably buy, move and sell merchandise, solving the most complex and costly problems they face - **quickly and permanently.**

Q is the answer for: Assortment and Range Planning - Forecasting and Order Planning - Replenishment and Allocation

Every Quantum Retail customer has achieved 100% return on investment in less than 6 months. For more information visit <http://www.quantumretail.com>. Follow Quantum Retail on Twitter at <http://twitter.com/quantumretail>.