



Innovating business models for sustainability

How innovation in products, processes and business models can help organisations become more sustainable.

By the Business Advice team, Carbon Trust.

Regulation, cost, reputation, revenue and risk management are driving many organisations to cut their carbon emissions, and become more sustainable. More businesses are looking at how they can put environmental sustainability at the heart of their existing business models. A fast-moving consumer goods (FMCG) company, for example, may improve manufacturing processes, minimise (or share) logistics, outsource the provision of physical assets used in manufacturing, reduce packaging, or educate consumers in minimising the in-use phase (e.g. use of water) and encourage consumers to recycle.

To maintain competitive advantage and mitigate reduced demand from a saturated or simply more tentative market, incremental improvements may not be sufficient, and step changes may be necessary. As increasing resource scarcity becomes a significant issue, and more businesses start to understand the cost savings that can be realised through minimising resource use, businesses are turning to disruptive innovation for sustainability.

Innovating products, processes and business models can help to deliver revenue streams that are decoupled from a reliance on natural resources. The need for a new approach becomes increasingly critical when one considers the current landscape in which businesses are operating. For example: raw materials and commodity prices are likely to rise in the future; customers increasingly understand the value of accessing physical products and questioning their need to own them; social media is also enabling the development of virtual communities and amplifies customers' thoughts and opinions to a wider audience than was previously possible.

Against this backdrop, there is the opportunity for forward looking organisations to develop alternative ways to deliver the value of a product or service, rather than focusing solely on their immediate features and functions. This will result in less traditional retailing of physical products to consumers - and a greater focus on developing services and experiences that will lead to longer-term engagement with customers.

There are a number of important concepts that organisations can consider when rethinking the products and services they offer:

Dematerialisation involves removing reliance on the physical product altogether - for example, using video conferencing rather than face-to-face meetings, or downloading content to view on eReaders.

Some products are evolving into services through the concept of access over ownership, which involves providing access to a product, and minimising the 'idling time' that occurs when it is not in use, by sharing with others. This is proving a popular model for durable products like cars, bikes,

DIY/gardening tools, sports and outdoor equipment, homeware, toys and even handbags. Examples include Peugeot's 'Mu' service, that lets members hire a range of mobility solutions, including pedal cycles electric cars, and O2's leasing of Apple iPhones to customers. Alongside products, peer-to-peer 'collaborative consumption' models even include access to shared skills and physical spaces.

Product substitution is another approach to a new way of doing business. It offers an alternative way of delivering the equivalent value of a product. An example of this is selling insulation rather than electric heaters.

Samsung is a notable example of a company utilising upgradeability through their introduction of upgradeable TVs. Some latest models will have a slot able to take an 'evolution kit' - these will be available in 2013, with the aim of upgrading TVs to include the functionality of next year's sets. This extends the life of the TV and ensures access to the latest new features.

Companies such as Le Creuset cast iron cookware and Miele electrical appliances differentiate with lifetime/extended warranties, providing a strong after-sales relationship based around a durable and serviceable product.

New thinking around consumption and resource use is also encouraging debate on a more sustainable attitude to dealing with products when they reach the end of their 'useful' life. For instance the secondary markets model involves securing a 'second home' for a product once its original owner has finished with it; a franchised previously-owned car dealership is a good example of this, and Patagonia help their customers re-sell their outdoor wear.

Organisations can also consider a closed-loop approach, which means taking back products at the end of their life, disassembling/refurbishing components and creating a 'new', upgraded version. Eco-boxes.co.uk offers a service for the take-back of house removal boxes once customers have finished with them.

Alternatively, if a business could utilise 'waste streams' at the end of a product's life it could adopt the downcycling model. Nike currently utilises this model through using old trainers to make sports court surfaces and playgrounds. Conversely, upcycling creates a more aspirational product from waste - Elvis & Kresse turn old fire hoses into luxury bags, and Freitag transform lorry tarpaulins into messenger bags.

The opportunities above may be relevant not only to manufacturers of durable products, but also for other sectors, including retailers, providers of insurance, servicing/repairs, logistics and IT.

Collaboration between and within industry sectors, and in the supply chain, can help stimulate innovation. Some organisations even run 'open innovation' platforms designed to enable customers and third-parties to contribute innovative ideas for new sustainable products and services.

The Carbon Trust assist organisations in developing a view of carbon emissions and resource use along the value chain, and in using this information to build a strategy for sustainable growth. Financial and risk modelling techniques also help these organisations understand the business case for delivering sustainable innovation, and build a compelling case for change.

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