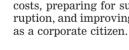
Rethinking links in the supply chain

New methods of partnering for product development can help companies profit from demand shifts. By Manmohan S. Sodhi and Christopher S. Tang

> hen you have a real lemon on your hands, like the present economic downturn, you should think lemonade. This bitter and difficult financial crisis provides an opportunity to rethink an entire business and, more specifically, its supply chain.

> This is a good time not only to look at initiatives to improve the company cash flow in the near term but also to think about long-term issues such as being in markets with zero growth. In the short term, there is a need to lower operating costs, for instance by outsourcing supply chain functions with demonstrable savings or by shedding projects whose incremental benefits cannot justify incremental costs in the near term.

> The following ideas will help in meeting goals with regards to cutting costs, preparing for supply chain disruption, and improving your standing



waste means using fewer resources. Any company can make small improvements in its supply chain that collectively can lower costs and improve supply chain sustainability

Marks and Spencer, the UK retailer, has taken a leadership role in sustainability among its peers with its "Plan A", which is intended to reduce energy consumption by 25 per cent for all its operations by 2012. The implementation comprises many small efforts including replacing 90-watt light bulbs with 75-watt bulbs in its food stores in the UK. This not only reduces energy consumption by 17 per cent for lighting but also reduces refrigeration and air conditioning needs.

Packaging is another area to explore. Tetley Tea developed new packaging materials to increase the density per pallet of its products by



Combine lean and green

Lean means less waste and less significantly.

50 per cent, thereby reducing the

number of vehicle loads between factory and warehouse by 28 per cent.

Planned obsolescence can make sense in rapidly innovating industries such as consumer electronics but in the wake of the downturn, the industry may have to make products with significantly longer lives. Doing so will result in reduced use of resources and less need for recycling, a burden that is likely to fall on manufacturers themselves in the coming years

Tie pricing to supply chains

This is important to improve margins, not only in the present economic downturn but even more so in the long term, when developed markets face the prospect of zero growth for an uncertain period of time. Airlines and hotels, for example, use dynamic pricing to their advantage for individual customers. Similarly, manufacturing companies can use dynamic pricing by customising and delivering bundles of products and services for individual customers with different

Dell, the computer manufacturer, adjusts prices dynamically to influence customers' product selection. When it faced a supply shortage of certain components from its Taiwanese suppliers after an earthquake in 1999, the company offered special price incentives to induce online customers to buy computers that utilised

When developing the iPod, Apple provided up-front payment to entice integrated circuit manufacturers

components from other countries.

Amazon, the online retailer, offers discounts to customers willing to reserve new products in advance. By using early sales data, Amazon can develop more accurate demand forecasts.

Companies can also rethink what they are selling. Bundling products and services enables organisations to differentiate themselves: for example, IBM's acquisition of PwC's consulting division in 2002 helped the IT group to further transform its business model from selling computing products to offering business solutions.

Companies can also develop inhouse capabilities for services. Best Buy, the US electronics and home appliance retailer, moved to selling bundles of products and after-sales services provided by its "Geek Squad Agents". This strategy increases revenues and profits, and boosts customer satisfaction long after point-of-sale. General Electric customises its services bundle for each customer when selling turbines or medical equipment. Using such bundling, companies can implement "value-based pricing" at the individual customer level, but doing so requires adapting the supply chain to streamline the delivery of these bundles, including services and improving their understanding of how customers use (or re-sell) their products.

Shorten supply chains

Shortening supply chains means not only moving manufacturing or sourcing closer to existing markets but also developing markets in the low-cost countries where manufacturing or sourcing take place. Shorter supply chains mean more agility, more robustness against disruption, lower exchange rate risk and, in the long run, lower costs. While many apparel makers source from low-cost countries such as China and India, Zara, the Spanish clothing retailer, has banked on its European plants to create and respond quickly to new market trends in Europe with a design-to-shelf time of only two weeks. Having European plants means it has lower transportation costs to its markets in Europe.

In Japan, some electronics manufacturers have moved core manufacturing back to high-cost Japan, giving them greater agility in responding to demand as well as better intellectual property protection. Sourcing closer to home can also help companies to gain recognition as good corporate citizens.

Today's low-cost sources are tomorrow's markets and western companies with a well-established global brand image can demand a price premium. For example, Shanghai GM, a joint venture between General Motors and the Shanghai Automotive Indus-

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business administration chris.tang@anderson.ucla.edu try Corporation, produces and sells Buicks in China at a premium despite having lower costs of production than in other markets.

Selling in China and India means having different types of supply chains for different market segments. The best example is Hindustan Unilever Limited (HUL), the largest fast-moving-consumer-goods company in India. The company's brands span the affordability spectrum, from topend cosmetics to low-priced shampoo sachets. The HUL supply chain has adapted itself to meet customised requirements at the top end while driving cost-focused efficiencies to deliver and sell several billion sachets a year.

Reassess outsourcing and external partnerships

Companies are becoming more open to ideas and solutions from external parties. Procter and Gamble's so-called "Connect + Develop" business innovation model, which was launched in 2002, reduces the time and cost of product development by reaching out to other companies and academia for ideas for new products. For example, when P&G wanted to print text and images on Pringles potato crisps, it partnered with an Italian professor who had developed the relevant technology. This approach to innovation has enabled P&G to achieve phenomenal double-digit growth in sales and profit over the period since 2003.

In China, Hong Kong-based trading company Li and Fung provides supply chain management services to customers such as Kohl's, the US department store chain. Li and Fung uses its network of more than 6,000 suppliers across Asia to provide services ranging from design, sourcing, supply management, and quality inspection to logistics for its global customers.

However, outsourcing and partnerships require simple and transparent ways to share the pain and the gain. For example, when developing the iPod, Apple provided up-front payment to share the development costs of specialised chips in order to entice integrated circuit manufacturers such as Samsung and Micron. Toyota also provided similar incentives for Matsushita to develop the battery for the Prius hybrid car.

Conclusion

Cost-cutting can only go so far. Companies also need to seek additional revenues and higher profit margins. Being lean and green can generate additional profits in the long term. Just as Tetley's trucks now carry loads for their customers rather than coming back empty, there may be revenue opportunities in cost-reduction initiatives as consumers become more willing to pay a premium for eco-friendly products. Shorter supply chains and new methods of partnering for product development will make companies better positioned to take advantage of changing demand. Dynamic pricing means higher average prices - this is especially important when revenues are not growing - but companies must better understand what generates value for their customers. The present downturn poses a long

list of uncertainties in the year ahead. Nevertheless, if you squeeze the downturn lemon right, you should be able to enjoy lemonade for a long time to come.