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Harnessing the power of partnerships

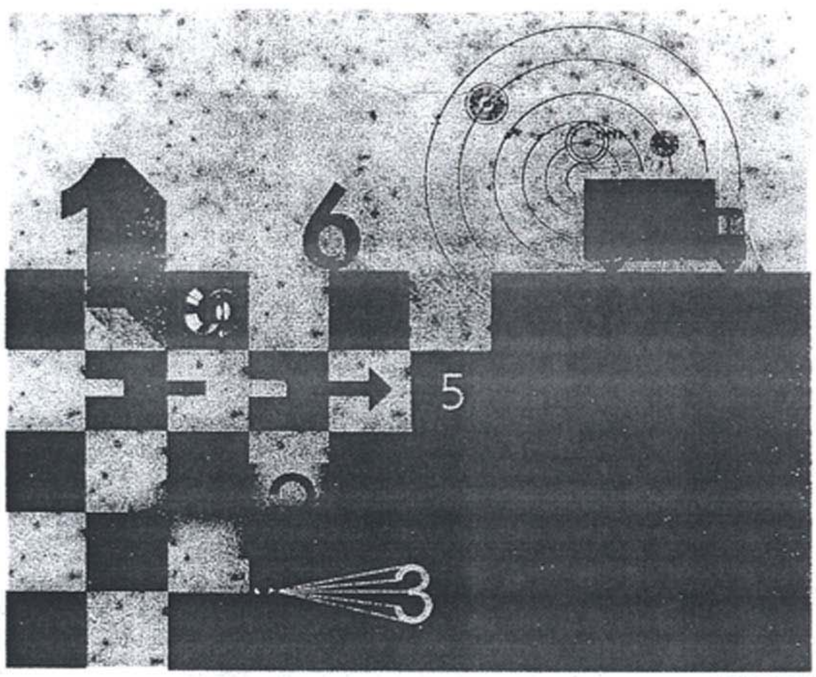
Collaborative relationships are helping companies to avoid the supply chain failures that so often undermine successful innovation

Product innovation is the life-blood of every business. However, developing and delivering new products to global markets is becoming increasingly complex. Once limited to fashion-driven products, constant product innovation, short life cycles and high cannibalisation rates are becoming typical for many industries in today's business environment.

Increasingly, customers are demanding customised offerings while investors relentlessly drive managers to find lower costs and growth. From apparel to high technology, the dual forces of outsourcing and globalisation have led to a rapid supply chain disintegration and increasing co-ordination complexity. Product designers, marketers and manufacturers that were previously located in a single facility are today spread over several continents in organisations with different cultures, languages and business objectives. Moreover, these global supply chains include emerging markets that add many new risks and often slow down the new product introduction process.

For example, not long ago, apparel brands such as Levi's did it all, operating their own US production plants along with their core design and marketing activities. Now, the company has shuttered the plants that once dotted the south-eastern US and outsourced much of that production and even design.

The same is also true for a host of other products, from PCs to lawn mowers. Ten years ago, Hewlett-Packard, the electronics group, designed and manufactured PCs for regional markets in Europe and the US. Now, designers, marketers and assemblers are scattered across different companies.



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There is little doubt that this global migration has enabled consumers to obtain cheaper goods of higher quality. Consider apparel, which began moving to low-cost countries a long time ago. Over the past decade, the sector has consistently landed at the bottom of the consumer price index, although inflation during that period, as measured by the US consumer price index, has hovered between 2-3 per cent annually. Meanwhile, apparel has seen nothing but relentless deflationary pressures. Since 2000 alone, the sector has deflated at 2-3 per cent every year. (see figure 1). From computing power to horse power, consumers are living in the cheap decade.

◆ The supply chain becomes more complex

For managers, the wonders of price deflation have come at the cost of increased supply chain complexity. In other words, with the supply chains of most clothing manufacturers now spanning the globe, increased supply chain complexity has strained every player in the industry – sometimes to breaking point.

When this happens, products fail to meet customer expectations or arrive too late for the intended season, requiring deep markdowns to liquidate inventory before the next set of goods arrives.

In some industries, such product introduction stumbles can be fatal. Palm, the handheld PC manufacturer, learned this lesson during the launch of its m500 and m505 series of personal digital assistants. The new models showed promise but, in the rush to bring innovative new features to market and lower its production costs through a new off-shore outsourcing relationship, Palm stumbled. Collaborating with a new manufacturing partner was difficult and the required product and manufacturing process innovation stalled the new product release, causing Palm's sales to dive as customers waited for the new model. Palm has never really recovered.

HP learned a similarly painful lesson when it tried to innovate and reduce costs in its notebook computer division. With increasing product options and a complex outsourced supply chain, model after model reached customers late and had to be sold at deep discounts. Struggling to speed up launches, products shipped from Asian suppliers sometimes had to be reworked in regional distribution centres to meet US and European requirements. The resulting costs and delays were devastating. HP learned that it had to develop collaborative teams across functions and organisations to ensure products were

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designed to accommodate supply chain capabilities.

Lessons on how to collaborate better

Companies must learn to collaborate better, both within their own far-flung organisations and across the extended enterprise. And under intense time pressure, effective collaboration becomes all the more important and difficult.

In a series of four executive roundtables (part of the Thought Leadership Summit on Digital Strategies, itself a collaborative effort between the Tuck School of Business at Dartmouth, Cisco Systems, and a group of global companies including General Motors, Cargill, Eaton Corporation and Whirlpool), senior managers from diverse industries shared their successes and frustrations in fostering innovation through supply chain collaboration. While there was widespread agreement on the need for improved collaboration, the executives concluded that a simple formula for success was elusive. Technology can help overcome a few specific hindrances to collaboration but the larger hurdles of incentives, trust, intellectual property ownership, shared knowledge and lack of common terminology remain barriers to mutually beneficial collaboration.

Examining the histories of many different collaborative efforts, three important management lessons emerged from the summits.

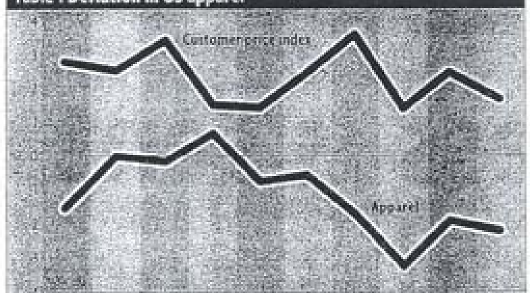
Collaboration can not be an afterthought. Too often, collaboration is something managers hope will develop after a financial agreement is reached. But that hope rarely materialises. This is particularly true in industries with a long tradition of bruising price negotiations. Brad Boston, CIO of Cisco, speculated that such purchasing practices "have poisoned their ability to collaborate". While managing a supplier relationship through the procurement department may be effective for commodity materials, treating a potential collaborator like a commodity supplier is a certain path to failure.

Effective collaboration requires a strategic relationship, focused on creatively leveraging the knowledge and capabilities of each partner with opportunities for all to benefit. Gil Urban, a collaboration expert from Whirlpool, summarised this well: "I hear a lot of people talking about simply trying to find a way to generate a product more competitively: outsourcing for lower costs. When I think of collaborative product generation, that phrase means mutually beneficial."

Competitive relationships designed solely to drive down costs or meet time pressures are tactical. Collaborative partnerships, chosen to expand reach or capabilities, are strategic.

Building collaborative relationships takes time. It requires reaching agreement on how to share benefits and protect mutually created intellectual property. Moreover, working with companies in emerging markets such as China, generates unique questions that managers must address. How can agreements to protect intellectual property be enforced? How do companies work with different partners, avoid duplication and still protect intellectual property? Determining which partners will and will not share helps to maintain agreed-upon roles and avoid turning partners into competitors.

Table 1 Deflation in US apparel



Part of the solution to maximising collaborative relationships is creating many points of contact between the two partners. Traditional supplier relationships managed by the procurement and sales departments rarely lead to anything more than a price-focused relationship. Collaboration requires contact at different levels to ensure clear communication and to build trust. This means that groups from development and operations to marketing and information technology must all build relationships. This relationship investment is significant and is certainly not appropriate for every business partner. So, deciding the partners in which to invest is the next step.

A company's suppliers might not be its best collaborators. As Mr Boston at Cisco noted, these relationships may already be too adversarial. Moreover, the nature and market of the material being supplied may not warrant greater collaboration.

Research into procurement has identified four key factors that managers should weigh when considering supplier relationships: strategic importance of the material; number of suppliers; complexity; and uncertainty. Suppliers of commodity materials that are readily available from many others are not likely candidates for collaboration. On the other hand, suppliers of complex, important components who have little competition are particularly attractive for relationship investments. For example, Boeing maintains strategic alliances with three engine manufactures: GE, Rolls-Royce and Pratt & Whittney. The strategic importance of engines, the complexity of integrating them with the airframes, the limited supplier market and the risk of production delays all indicated that collaborative relationships were critical.

While suppliers are a natural starting point when thinking about collaboration, sometimes complementary companies in adjacent industries or businesses with closer links to the customer can be an exciting source of new collaborative relationships. For example, many collaboration initiatives involve creating complete customer solutions. Collaboration, with a shared focus on the customer, sharpens the objectives and better aligns the objectives of both collaborators. Partners close to the consumer or in parallel industries often bring direct consumer knowledge and a fresh perspective. Better yet, they are less likely to become direct competitors. Hank Marcy, vice-president of corporate technology and electronics development at Whirlpool noted: "When choosing partners for strategic alliances, we focus on parallel industries. Products that rely on our products – those that really get us to touch the consumer – help us to innovate. Fabric, chemical and food manufacturers are the companies that make products that touch our customers." Using this approach, Whirlpool recently teamed up with Procter & Gamble to develop a device that postpones the need for dry cleaning by smoothing wrinkles and removing odours from clothing. The device integrated Whirlpool's knowledge of appliances with P&G's odour removal technology.

In another example, HP's dominance in the laser printer market was the result of just such a collaborative partnership. HP was good at developing critical software and hardware to control the printing process, but not so good at fusing letters on the page. Canon, with its deep expertise in copiers, was far better positioned to build the printing engine. By focusing on their strengths, together the companies created a blockbuster product that has dominated the category since the day it was introduced.

There is no single collaboration tool. With the right partner and appropriate investments in supporting the relationship, technology can facilitate collaboration within and across organisations. There is no single tool that solves everyone's collaboration problems. So, the lesson is to invest in those that solve specific problems quickly rather than look for a single multi-purpose collaboration tool.

Some of the simplest web-based systems that host discussions among users and allow them to share documents and data can be very powerful. By providing one place for teams to meet and share information about a joint project, the progress of the team is evident and easily accessible for all team members.

These tools can be helpful for any project but, as the product develops, other more sophisticated tools become useful. Many are tailored for specific industries.

An example is product content information, the data required to manufacture and distribute a product to customer-defined specifications. Product content information helps apparel designers collaborate with factories in Asia or expedite the design change process for a consumer electronics product. This includes details such as the bill of materials, drawings, lists of approved manufacturers for each component and process information needed to build, test and customise the product. Sharing information on product content enables product synchronisation throughout the supply chain, speeding products to market and reducing costs.

For example, in the apparel industry, ensuring that everyone in the supply chain has an accurate and up-to-date description of the product is one of the biggest challenges. Like all products, once initially designed, garments undergo many design changes – often 50 or more – during the development and preproduction phases. In many companies, the development process is conducted through faxes, phone and e-mails – all poor means of collaborating in a distributed, complex supply chain. An executive at Burlington, a fabrics manufacturer based in the US, lamented that the process looks like a child's whispering game. Starting at one end of the chain, a designer may call a manufacturing co-ordinator requesting a change to the left rear pocket of the trousers. But by the time the request makes its way to the manufacturing floor in Mexico, the request becomes a change to the right front pocket.

Equally important is visibility to the entire product and sourcing team with a documented history of product changes. All too often, a change made by one member of the design team is not seen by others, creating confusion and finger pointing. Off-specification products arriving at a brand distribution centre are turned back by inspectors only to find out later that a single manager in the chain verbally approved the changes.

"From computing power to horse power, consumers are living in the cheap decade"

To solve these problems, Liz Claiborne, the apparel company, cut weeks out of the time to design new products by migrating hundreds of designers to standard digital design tools and a product content management system that provided centralised product information. With important product content stored in a single place, everyone was assured to be working from the most recent version. More importantly, changes could not occur without being visible to all parties. Besides saving weeks in communication time, the system helped eliminate costly mistakes.

Many software vendors are taking collaboration a step further, feverishly developing tools that link various product collaboration activities including initial concept development, design, content management, procurement, manufacturing and support. The goal is to enhance collaboration and increase the profitability of the entire life cycle of a product.

Certainly, there is no shortage of useful software tools. The biggest challenges are agreeing on which tools to use, embedding the tools in a structured development process, and then managing the use of the tools across the extended enterprise.