

→ In the Velcro organization, relationships need to be rearranged quickly, easily, and effectively.

what the corporate strategy is and what the strategy means in terms of purposes and priorities.

- Individual operations have a high degree of functional excellence. (Only units that are strong in their own right have managers who are comfortable and effective wearing multiple hats.)

- Managers in individual units believe that their peers in other units are very good at what they do and that they are willing to focus on corporate, rather than unit, success when asked to do so.

- Information systems can track performance across units so that managers get the same answer whether they slice by country, business, or project.

- Compensation systems reward cross-unit effort without diluting the incentive for local effort.

- Finally, the company culture develops senior executives who are comfortable with the ambiguity required of a Velcro organization.

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4 Demand-Side Innovation*

Look over the extensive literature on innovation, and you'll find that most of it deals with how companies should meet challenges on what might be called the supply side. The questions are familiar: How do we innovate better

and faster in products and services? How do we ride the waves of disruptive technologies? How do we manage the diffusion of innovations once we have created them? How do we "cross the chasm" from early adopters to early majority? All those challenges are real, but, sad to say, overcoming them will not give you a lasting competitive advantage. In a world of ultracompressed life cycles for products, a company's ability to develop viable new products or services rapidly is more important than ever. The problem is that each brilliant innovation has half the impact and half the shelf life of a product in the previous generation. For most companies, the focus of innovation will have to shift to the demand side.

Demand-side innovation is a different animal, and companies need to manage it differently. It's not about product features or functions but about how a company orchestrates its customer interactions and relationships. It's innovation with respect to *how* companies go to market, as opposed to *what* they bring to market. Of course, every manager considers these questions today, but few companies have thought through the implications deeply. As demand-side innovation becomes the central innovation process within most companies, managers can no longer relegate it to a secondary role. Scattershot implementation won't work. How companies go to market will determine who wins and loses the game.

Innovation on the demand side can uncover new sources of growth by illu-

minating opportunities in unexpected places. Consider what's happened recently in the competition to sell cellular phones and services. Hewlett-Packard identified villages in rural India as a burgeoning market for mobile telephones, even though customers there cannot afford to buy handsets and won't run up enough usage minutes to justify subsidies for the hardware. HP opened up the phone market by creating a new economic model for handset sales: It leases phones to users and collects rent and usage fees. Closer to home, Sprint created the fastest-growing cellular services brand in the United States by licensing the Virgin Mobile brand; the company did an end run around a mature market by tapping into a new demographic segment—teenagers.

Demand-side innovation can take many forms. In HP's case, it meant revising the underlying economic model of the business. That's what automakers did when they started pushing financing over purchases. More recently, eBay and Priceline have done the same by creating global platforms for consumer-run retail auctions and reverse-marketing travel services, respectively.

Companies can also take a lesson from Sprint and "reskin" their offerings. That is, they can borrow an identity from someone else to appeal more powerfully to target customer segments, or they can create a radically different interface for a familiar offering, as Google did with its simple search site. The most innovative experiment along these lines has been the Will brand, a concept that embraces a variety of lifestyle products (cars, consumer electronics, beverages) and that was created by a consortium of Japanese companies including Toyota, Matsushita, and Asahi Breweries. To appeal to a certain hip demographic segment, the product lines shed their old brand skins and pooled their efforts to design and promote Will offerings.

Or demand-side innovation can involve customers at an emotional level—creating halo effects for products and services through social, cultural, or linguistic movements. Before the World

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Cup in 2002, SK Telecom lost out to a rival in its bid to become the official sponsor. Rather than sit out the season, SK created what was, in effect, a social movement that ultimately signed up more than 5 million South Koreans. In SK's "Be the Reds" campaign, customers identified themselves by wearing bright-red SK-branded shirts at the soccer games. The shirts reinforced South Korean nationalism, promoted the country's team, and became a visual symbol of SK's central place in customers' lives.

to good effect. Nike's success suggests that sometimes the customer's participation is purely psychological. Since the brand aims to connect its products with the idea of achieving one's "personal best," the experience doesn't materialize unless the customer steps up to the challenge.

Demand-side innovation demands in-depth consideration. Companies should manage it for what it is—a core element of corporate strategy. Within most companies, demand-side innovation is, at

Similarly, American automaker Saturn snapped "family portraits" of new Saturn owners with its dealership staffs and followed that up by hosting "reunions" at the company's headquarters in rural Tennessee.

Companies have become more adept at using customer information to customize or personalize their offerings. Every Amazon customer has encountered this in the form of personalized Web page content that is dynamically generated based on his or her search and purchase history. Offline, too, we see hotel chains, airlines, casinos, and retailers using data from loyalty programs to personalize services for repeat customers.

One last way that companies can pursue demand-side innovation is by involving customers in the creation of products and services. Levi's failed to market customer-designed jeans, but Land's End made it work online with basics such as khaki trousers and men's shirts. Indeed, many offerings—from My Yahoo personal pages to Reflect.com's beauty solutions, which are created according to individual taste—engage customers in the design process.

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You Heard It
Here First



For decades, technology and business have delighted customers' eyes with ever brighter, sharper, and sleeker products. Utility is chiefly realized through sight; hearing, by contrast, has remained vision's poor cousin. "If you compare [sound design] to the visual world, we're still 20 years behind," audio guru Dane Davis told *Wired* magazine a few years after winning an Academy Award for his sound-editing work on *The Matrix*. In the interview, Davis described dropping cars from cranes and smacking stuff with wrecking balls to achieve his effects. He'd rather construct noises sitting at his computer. Unfortunately, audio software is not yet up to snuff.

But the ears are coming into their own. Progress in sound technology seems likely to follow the trajectory that computer graphics traced in the last two decades, which means we may be on the threshold of a world in which synthetic sound is ubiquitous and indistinguishable from natural sound. Movies, obviously, will benefit. Video games—whose sound tracks are laughably primitive—will benefit even more. And that's just the beginning: The creation of sounds that are not just realistic but also rich in information suggests applications in many industries.

An intriguing multidisciplinary science called auditory display (AD) is studying how the brain responds to sound, how sound affects things like mood and performance, and how technology can put sound to practical use. Applications emerging from AD are already present in aircraft control panels, surgical equipment, and ICU monitors. The most common use is in alarm systems for people who work in environments that are saturated with visual data, but those applications remain fairly simplistic.

A more exciting technique is data sonification, the transformation of complex data into sound. Qualities such as pitch, volume, and vibrato speed can be mapped to various pieces and kinds