Current Trends in Innovation by Expanding Beyond Organization's Boundaries

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By about 2000, it was clear that the "*invent-it-inhouse model*" was not capable of sustaining high levels of topline growth in many companies. The explosion of new technologies was putting ever more pressure on companies' innovation budgets. *R&D productivity* had leveled off, and *innovation success rate* for many companies (that is, the percentage of new products that met financial objectives) had stagnated (for example to at most 35% for Procter & Gamble). In Procter & Gamble (P&G), for example, squeezed by nimble competitors, flattening sales, lackluster new launches, and a quarterly earnings miss, it lost more than half of its market cap when the stock value slid from about $55 to $28 a share (from 1999 to early 2000). *Talk about a wake-up call.*

The world's innovation landscape had changed, yet many companies had not changed their own innovation model since the late 1980s, when companies' R&Ds moved from a centralized approach to a globally networked internal model - what Bartlett and Ghoshal call *the transnational model* in *Managing Across Borders.*

It was recognized that important innovation was increasingly being done at small and midsize entrepreneurial companies. Even individuals were eager to license and sell their intellectual property. University and government labs had become more interested in forming industry partnerships, and they were hungry for ways to monetize their research. The Internet had opened up access to talent markets throughout the world. And a few forward-looking companies, such as IBM and Eli Lilly, were beginning to experiment with the new concept of "*open innovation*", leveraging one another's (even competitors') innovation assets-products, intellectual property, and people.

The Procter & Gamble example makes the point very clear here. As was the case for P&G in 2000**,** R&D productively at mature innovation-based companies today is flat while *innovation costs* are climbing faster than top-line growth. (Not many CEOs are going to their CTOs and saying, "*Here, have some more money for innovation.*") Meanwhile, these companies are facing a growth mandate that *their existing innovation models can't possibly support*. For example, in 2000, realizing that P&G couldn't meet its growth objectives by spending more and more on R&D for less and less payoff, the newly appointed CEO, A.G. Latley, challenged P&G to reinvent the company's *innovation business model*.

It was known that most of P&G's best innovations had come from connecting ideas across *internal businesses.* And after studying the performance of a small number of products P&G acquired beyond its own labs, it knew that external connections could produce highly-profitable innovations, too. Betting that these connections were the key to future growth, Lafley made it P&G's goal to acquire 50% of its innovations outside the company. The strategy wasn't to replace the capabilities of its nearly 7,500 researchers and support staff, but *to better leverage them*. Half of P&G's *new* products would *come from* its own labs, and half would come *through* them.

It was, and still is, a radical idea. As P&G studied outside sources of innovation, it estimated that for every P&G researcher there were 200 scientists or engineers elsewhere in the world who were just as good (a total of perhaps 1.5 million people whose talents P&G could potentially use). But tapping into the creative thinking of inventors and others on the outside would require massive operational changes. P&G needed to move the company's attitude from resistance-to-innovations "*not invented here*" to enthusiasm for those "*proudly found elsewhere*." And P&G needed to change how it defined, and perceived, its R&D organization (from about 7,500 people inside to *7,500 plus* 1.5 million outside, with a permeable boundary between them).

It was against this backdrop that P&G created its "*connect and develop"* innovation model. With a clear sense of consumers' needs, it could identify promising ideas throughout the world and apply its own R&D,

manufacturing, marketing, and purchasing capabilities to them to create better and cheaper products, faster. The model works. In 2006, more than about 35% of P&G's new products in market have elements that originated from outside P&G, up from about 15% in 2000. And 45% of the initiatives in its product development portfolio have key elements that were discovered externally. Through *connect and develop (*along with improvements in other aspects of innovation related to product cost, design, and marketing) P&G's R&D productivity increased by nearly 60%. P&G's *innovation success rate* has more than doubled, while the cost of innovation has fallen. R&D investment as a percentage of sales went down from 4.8% in 2000 to about 3.4% in 2006. And, in two years (i.e., 2005-2006), P&G has launched more than 100 new products for which some aspect of execution came from outside the company.

Five years after the company's stock collapse in 2000, P&G has doubled its share price and has a portfolio of 22 billion-dollar brands.