Embracing Uncertainty

BY **JONATHAN LITTMAN**

There are two overriding issues for global companies today—the unpredictability of their markets and the press of new competitors that learn and innovate faster than they do.

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JOHN SEELY BROWN, the former chief scientist at Xerox, has spent his career challenging people's deeply held assumptions. His latest book, *The Only Sustainable Edge*, looks at the changes wrought by technology and globalization. In his view, what they call for is a paradigm shift in how companies operate and compete.

How has the competitive environment of global business changed?

John Seely Brown: Established companies face new competitors, often emerging from the ranks of their suppliers. They also face the growing unpredictability of demand in their markets as fickle customers press for cool new products and services. This is playing havoc with their basic operating assumptions.

Until recently, most global companies were mesmerized by the idea of making themselves more and more efficient through business process reengineering. Wall Street was telling them, "We want quarterly returns predictable to the penny," so a company's ability to operate efficiently and forecast demand precisely were what defined success and dictated its structure, policies, and rewards. Those mechanisms worked fine in the 1990s, but they don't work in this new climate, because if you become overly concerned with efficiency, you start squeezing out innovation. A lot of innovation needs a little slop to it.

What do you do when your traditional markets become unpredictable?

JSB: You have to start to focus on your company's unique specialty. What makes it truly distinctive? How can you mobilize all the resources around it? Are you best at serving up customer relationships or at the logistics of delivering stuff? Or are you a company that focuses on product innovation? If you can decide to put all your weight on what you are best at, and reduce the mass everywhere else, then you can move with agility and win. It's not necessarily taking an axe to the things that don't fit, by the way—you can spin them out as separate companies, with their own trajectories. But first you need to ask how you can access, leverage, and learn from the required complementary assets.

Doesn't loss of ownership compromise your ability to tap those assets?

JSB: If you can attract and pull them together at a moment's notice, you don't actually have to own or control them. You can work productively with them and in some cases even nurture them. Take Procter & Gamble—they now outsource a huge amount of their R&D. They have 7,000 chemists inside the company, but there are 1.5 million more outside who can help innovate their products. Their first step was to create the website they use to outsource innovation on a problem basis. They will post a challenge on it, and anyone around the world who has been qualified by them can try to meet it. Now they go much further—they see a need for something and then identify some small company somewhere that's already delivering it. They've got the customer relationships, so they can offer that company a worldwide channel. That way, they can go out and find leading-edge products from tiny labs that nobody else knows about.

But these are really one-off transactions. Companies like Toyota take this further, institutionalizing these relationships and figuring out how to lower their transaction costs. In the auto industry, a lot of companies still deal with their suppliers by dictating to them. They say, okay, we're going to have competitive bidding to see who can build this component the cheapest, and here's exactly what it needs to be. The suppliers have no incentive to be innovative. It's all about price—there is no real collaboration. Toyota takes the exact opposite approach. They ask their suppliers, "Can we learn from you? Can you find a better way to do this? In fact, can you work with other suppliers so your part fits with theirs and the resulting product or component is better and cheaper?"

Toyota views their first tier suppliers as an innovation network. It's a beautiful example of distributed innovation. When innovative suppliers are brought together, a kind of productive friction starts to happen. Toyota doesn't own any of these companies, but their supplier network is like an extended firm. The relationships are relatively long-lived, not transaction-based, so there's much less concern about negotiating the perfect deal upfront.

Do you have to be a Toyota to do this, or can it work at a smaller scale?

JSB: China is full of smaller-scale examples. Take the city of Chongqing. In the early nineties, the big Japanese motorcycle brands moved in. They started joint ventures with state-owned enterprises, exploiting the difference in wages to produce cheaper motorcycles. They got the price down, but the local suppliers developed more and more skills. In 1997, one of them said, "Why can't we be an assembler, too?"

The big brand joint ventures designed their motorcycles with very tight specifications that each supplier had to meet. The new assembler said, "I've got a different idea. Let's get together with our suppliers in the teahouses and get them to come up with their own designs." The teahouses are where innovation occurs in Chongqing.

Instead of following the big brands' strategy, the new assembler told his suppliers, "I want something like this"—it was all very loose, leaving it to them to figure it out using all their newly-acquired manufacturing skills. What followed was a huge amount of on-the-job improvisation and local optimization—and lots more conversation in the teahouses. The outcome was a $200 motorcycle. The big brands' equivalent models cost $700. The result for them has been devastating—in Vietnam, their market share plummeted from 90 to 30 percent. This is an example of swarm innovation—thousands of suppliers swarming around and building their own network and designs. It's mostly bottom up as opposed to top down. Of course, the new assembler still had to approve the final designs, but that's a lot different than imposing rigid, top-down specifications on the suppliers.

How do established companies cope with competitors like these?

JSB: They have to get out on the edge, because that's where the newest ideas are. It can be the edge of youth, avant-garde suppliers, or developing economies. There are a lot of edges to think about. One company that's a model for how to do this well is Li & Fung, the Hong Kong–based apparel maker and distributor.

Like Toyota, Li & Fung has built a supplier network. The difference is that they have some 7,500 suppliers. How well they do this is unbelievable—their return on investment equity runs about 50 percent a year. They do it by orchestrating: they're the conductor. They qualify every supplier and figure out what it's good at. As a result, when they get a new order, they can string together a logistics chain that wires these specialist suppliers together—creating a supply path for just one product from their vast web of longer-term relationships. Yet they avoid having "captive" suppliers—they guarantee that they will take 30 percent of a supplier's operating capacity, but never more than 70 percent. They want their suppliers to work for their competitors. And yet they share information with their entire network, orchestrating its flow from supplier to supplier.

Won't these companies lose control of their intellectual property?
JSB: They don't want control—they want to accelerate learning. For example, they pay attention to who else contracts with a supplier for the rest of its output. If it's their best competitors who are doing so, that's an independent signal that the supplier is doing good stuff. Li & Fung will use those people year after year, so the transaction costs go down. They have to be fair with their suppliers, because otherwise they won't give them 70 percent of their capacity when they ask for it. But Li & Fung's real accomplishment was to figure out how to get better faster than anybody else. They built an agile and adaptive system that accelerates learning and talent. And they did it by working with their network of suppliers and getting them to learn from each other.

Because of the dynamic nature of things, we're moving into a world where the action is no longer in building up stocks of goods and intellectual property. It's in participating in flows. Business in general is becoming like the fashion industry—fashions don't last very long, so except for the rip-off of labels and trademarks, you don't protect a fashion. Once a design hits the shelf, it's gone. In the world of fast turns, it's the ability to turn fast that matters. Protecting the past is less important than being on the edge—the leading edge.

Can't companies get the same learning going across their own units?
JSB: Not easily. With a partner, it's a different culture—one with much less "politics." To innovate faster and better, you need partners that do their stuff so well that you both learn—their brilliance and yours come together. You may clash, but you can both make that clash productive. Plus partnering like this is almost a machine for generating talent. But the real reason to do it is to accelerate learning. The COO of Wipro Technologies in Bangalore told me that, thanks to this kind of partnering, he spends a quarter of his time each week reflecting on what he's learned. U.S. COOs might spend one percent of their time on this, because they don't yet see accelerated learning as a competitive advantage.

Old style companies can find all of this threatening. "You mean we have to generate idea after idea?" But that misses the point. Innovation is becoming more like compound interest—you create an idea and then you build on it the way Apple did with the iPod. The first one is a platform, and then—bang, bang, bang—you have successive modifications. They keep on turning out something new, but it's actually incremental. It shows that they've learned how to accelerate up that curve.

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