

MIT Sloan

Management Review

Alden M. Hayashi

The Inside and Outside View of Innovation

The Inside and Outside View of Innovation

Two recent books by innovation scholars focus on different aspects of innovation — within and outside the organization.

BY ALDEN M. HAYASHI

“INNOVATE OR DIE” has become the mantra for many companies. But how, exactly, should businesses innovate? To be sure, much has been written on the subject, yet many executives are still uncertain how to proceed with respect to a number of fundamental issues. How, for instance, can they ensure that a promising initiative receives the necessary resources when the core business dominates the organization? And why do so many brilliant inventions fail while other seemingly mediocre offerings succeed? Such basic questions are the subject of two recent books — *Unrelenting Innovation: How to Build a Culture for Market Dominance*, by Gerard J. Tellis (San Francisco, California: Jossey-Bass, 2013), and *The Wide Lens: A New Strategy for Innovation*, by Ron Adner (New York: Portfolio/Penguin, 2012). The two books make an interesting pairing: The first concentrates on a company’s internal workings, while the latter focuses on its external environment.

An Internal Focus on Organizational Cultures

In *Unrelenting Innovation*, Tellis, who is the Jerry and Nancy Neely Chair in American Enterprise and Professor of Marketing at the USC Marshall School of Business in Los Angeles, asserts that the single most important driver of innovation in any company is its culture, and he cites three essential organizational traits: a willingness to cannibalize existing products, a risk-taking attitude and the ability to focus on the future.

These traits, he contends, are especially difficult to maintain in successful companies because of various human

Executives should look for opportunities to leverage elements that can carry over from one ecosystem to another, as the iPad did with the iPhone and iPod.

? **THE LEADING QUESTION**
How can a company’s internal workings, and its external environment, support innovation?

FINDINGS

- ▶ **Company culture is an important driver.**
- ▶ **Risk taking, focus on the future and willingness to cannibalize existing products are critical.**
- ▶ **Parties who can develop complementary products or services are often necessary for an innovation to succeed.**



tendencies and biases. One well-known example is “loss aversion,” in which our desire to acquire gains is greatly outweighed by our fear of incurring losses. Because of that, Tellis notes, many companies have a hard time commercializing radical innovations that would hurt their existing products. As a result, companies don’t aggressively pursue emerging opportunities in new businesses and instead focus on securing their dominance in existing markets. Think of Kodak’s missed opportunity with digital photography. To counter such tendencies, Tellis offers three important practices.

First, he says, managers need to provide the right incentives. For one thing, many companies have an incentive structure that unwittingly *discourages* innovation with strong punishments for failures but relatively weak rewards for successes. Managers should consider instituting the reverse: weak punishments for failures and strong rewards for successes, because failures are an integral part of the innovation process. Moreover, many companies tie incentives to the success of current products, but that only keeps employees fixated on the present when they should be focusing on the future.

Second, Tellis advises companies to foster internal markets to stimulate healthy competition among diverse innovative ideas. Such markets would be in lieu of the typical corporate budgetary screening process, which tends to be risk averse, favoring projects that have minimal risk (but modest upside) over initiatives that might seem more speculative (but have a large potential payoff). Internal markets come in various forms, including idea fairs, in which employees submit proposals and the best entries receive seed funding; commercialization contests, in which research teams present prototypes to different divisions to attract the necessary resources for bringing those products to market; and parallel business units, in which two or more internal groups develop competing products (for example, having one division pursue plasma displays while another develops LEDs).

And third, Tellis says, companies must empower their “innovation champions” — risk-taking mavericks like the late Steve Jobs who not only possess the vision to foresee where a market is headed but also the determination to persist through the myriad obstacles and inevitable setbacks of bringing

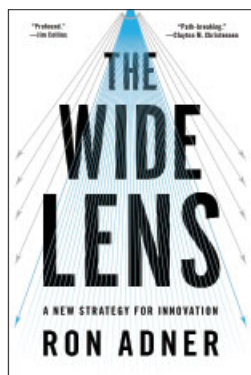
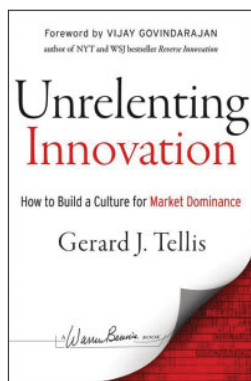
new products or services to market. Google, for example, has established an associate product manager program, which selects high-potential employees, sometimes right out of college, and provides them with mentors and management coaches. The individuals often function as unofficial innovation champions and are allowed to assume substantial responsibilities, including being in charge of new product launches, regardless of their age or tenure at the company.

Tellis’s framework for innovation is simple in theory: three essential traits of a culture of innovation and three practices to nurture those traits. Companies that get that right will become factories of innovation, and those that don’t will founder. According to *Unrelenting Innovation*, blockbuster products like the iPod, iPhone and iPad are the ultimate successes of organizations with innovative cultures, while failures like General Motors’ electric car EV1 are the results of major shortcomings in that area. But in *The Wide Lens*, author Ron Adner, who is a professor of strategy at the Tuck School of Business at Dartmouth College in New Hampshire, views those same examples from a completely different standpoint — that of “innovation ecosystems.”

An External Focus on Business Environments

The overarching theme of *The Wide Lens* is that many products do not succeed or fail by themselves. Instead, their fates are ultimately determined by the support they receive from external parties. “The light bulb on its own,” writes Adner, “was a miraculous invention but needed the development of the electric power network to turn it into a profitable innovation.” Because external support is crucial, executives need a very broad perspective — “the wide lens” in the book title — to ensure that their innovations become commercial successes.

By now, especially after the runaway successes of products like the iPhone, with its invaluable third-party apps, many executives appreciate the value of such innovation ecosystems. But Adner is able to deconstruct a company’s external environment to look specifically at two types of important parties: those needed to develop complementary products or services (co-innovation) and those needed to



adopt an innovation before the end customer can fully appreciate its value (the adoption chain).

To demonstrate the value of co-innovation, Adner cites the example of high-definition TV. In the 1980s, Philips Electronics was the first to develop HDTV, but the company couldn't capitalize on that innovation. The problem was the lack of co-innovators to develop, among other things, new cameras to provide sufficient HDTV programming to entice consumers to replace their traditional TV sets. Those necessary innovations would come only much later, after Philips had already taken a \$2.5 billion write-down, allowing other manufacturers like LG and Samsung to reap the benefits of HDTV.

Like co-innovation, adoption chains can play a crucial role. To emphasize that point, Adner describes the failure of Michelin's "run-flat" tire. Initially, the product seemed like a surefire hit. The tire remained functional for 125 miles after being punctured, allowing people ample opportunity to get to a service garage to have it repaired at their convenience. But even though run-flat tires would have prevented dangerous highway blowouts and eliminated a major cause of emergency pull-overs, they failed in the market. As it turned out, service garages needed new equipment, tools and training for clamping and calibrating the tires. However, the garages weren't willing to make that investment until the run-flat technology had been widely adopted — and consumers wouldn't buy them unless the product could be widely serviced. That chicken-or-egg obstacle in the adoption chain sealed the fate of what otherwise might have been a blockbuster consumer product.

To identify such potential problem areas, Adner suggests that companies map their innovation ecosystems so that they can then make strategic trade-offs. Before Amazon introduced Kindle, he writes, it made a crucial decision. Having realized that publishers were going to be a

challenging link in the adoption chain, Amazon limited the digital rights of customers, technologically preventing them from printing or sharing the e-books they purchased. Those restrictions might have made Kindle a less attractive offering to consumers, but they helped Amazon avoid a major obstacle. In hindsight, that maneuver to get publishers on board might seem like a no-brainer, but consider this: Sony had earlier developed a technologically superior e-book reader, yet because Sony did not initially remove such obstacles in its adoption chain, Kindle gained more momentum in the marketplace.

A powerful lesson from *The Wide Lens* is that companies aren't necessarily stuck with any given business environment. Instead, they can reconfigure their innovation ecosystems to suit their needs by asking what things can be *separated, combined, relocated, added* or *subtracted*. When Amazon developed the Kindle, for instance, it shrewdly combined the device itself with wireless access to a wide selection of e-books from its online store.

Of course, innovation ecosystems can't be built in a day, and companies need to think about how best to sequence their efforts. First, Adner advises, managers need to identify the smallest footprint of the ecosystem that would deliver the basic value proposition to the customer, and then they must consider which parties and innovations to add later in a staged expansion. "A wide-lens perspective fundamentally changes how we decide where to compete, how to compete, and when to compete," he writes. Executives should also be on the lookout for opportunities to leverage elements that can carry over from one ecosystem to another. Think about how Apple's iPhone was able to leverage elements of the iPod ecosystem (for instance, the iTunes management software and other apps) and about how the iPad would later leverage elements of both the iPhone and iPod ecosystems.



Companies must empower their "innovation champions" — risk-taking mavericks like the late Steve Jobs who not only possess the vision to foresee where a market is headed but also the determination to persist through the myriad obstacles and inevitable setbacks of bringing new products or services to market.

Advancing the Discussion of Innovation

Some of the ground explored by *Unrelenting Innovation* and *The Wide Lens* has been covered before. Tellis's discussion of the internal forces that work against innovation in large corporations will sound familiar to many readers, and his term "incumbent's curse," which describes the difficulties faced by entrenched leading companies like Microsoft, Sony and General Motors, is reminiscent of the "innovator's dilemma," coined years ago by Clayton M. Christensen of the Harvard Business School. Meanwhile, Adner's discussion of innovation ecosystems brings to mind the work of, among others, Michael A. Cusumano and Annabelle Gawer (of the MIT Sloan School of Management and Imperial College Business School, respectively) on the symbiotic roles of platform leaders and complementors in platform markets.

But both books are able to build on and extend such past work, often providing additional insights into what others have observed. Adner's framework, for instance, provides a better understanding of the phenomenon of "early-mover advantage." Why, specifically, have some companies been able to capitalize on being first to market (Xerox and its photocopiers) while others have not (South Korea's SaeHan Information Systems, which developed the first MP3 player, a forerunner to the iPod). From a wide-lens perspective, the answer is simple: For a company to fully realize any early-mover advantage, all the pieces need to be in place within its innovation ecosystem, and some products (like photocopiers) don't require many new pieces, while others (like MP3 players) do.

As with many books on the topic, *Unrelenting Innovation* and *The Wide Lens* succeed far better at description than prescription. That is, the books extensively describe the various problems that companies face in trying to become better innovators, but they are less effective in offering pragmatic solutions. For one thing, some of the best practices cited — such as Google's policy of allowing employees to spend 20% of their time on projects of their own design — are not feasible for many companies that don't have the luxury of excess capacity.

Moreover, the books don't always supply the necessary tools and details for implementing their advice.

Tellis, for instance, doesn't provide adequate counterbalances for his proposals. Consider his recommendation that companies embrace risk and minimize penalties for failure. Wasn't it that type of unchecked environment that triggered an economic meltdown, with financial institutions recklessly approving injudicious subprime mortgages and devising ill-advised financial instruments? Tellis's advice might be useful for some companies that need to jumpstart their innovation activities, but without the proper safeguards it could lead to organizational dysfunction. Adner, for his part, provides a valuable high-level view of innovation, but he doesn't supply all the nitty-gritty details for those working down in the trenches. Managers need more in-depth instructions for mapping their innovation ecosystem, identifying the problem areas and making strategic trade-offs. How exactly, for instance, did Amazon know that consumers would still purchase an e-reader like Kindle if it wouldn't allow them to share their e-books? Here, the devil is definitely in those details.

NEITHER *UNRELENTING INNOVATION* nor *The Wide Lens* (or any books on the topic, for that matter) can teach companies how to eliminate all the risks that are part and parcel of the innovation process. Yet even though the two books can't help executives determine with any certainty which innovations will succeed, they can certainly help predict which ones are very likely to fail, and at the very least, they instill a deeper appreciation for why innovation is so inherently difficult. That, of course, explains why there are so few companies that can continually innovate through various technological shifts and market cycles. And that's why, in the future, there will likely be no shortage of books like *Unrelenting Innovation* and *The Wide Lens*. As much as has already been explored on the topic of innovation, there is still so much more that needs to be learned and understood.

Alden M. Hayashi is a freelance business writer and editor; he is a former senior editor of MIT Sloan Management Review and Harvard Business Review. Comment on this article at <http://sloanreview.mit.edu/x/54320> or contact the author at smrfeedback@mit.edu.

Reprint 54320.

Copyright © Massachusetts Institute of Technology, 2013.

All rights reserved.

MIT Sloan

Management Review

PDFs ■ Reprints ■ Permission to Copy ■ Back Issues

Articles published in MIT Sloan Management Review are copyrighted by the Massachusetts Institute of Technology unless otherwise specified at the end of an article.

MIT Sloan Management Review articles, permissions, and back issues can be purchased on our Web site: sloanreview.mit.edu or you may order through our Business Service Center (9 a.m.-5 p.m. ET) at the phone numbers listed below. Paper reprints are available in quantities of 250 or more.

To reproduce or transmit one or more MIT Sloan Management Review articles by electronic or mechanical means (including photocopying or archiving in any information storage or retrieval system) **requires written permission.**

To request permission, use our Web site:

sloanreview.mit.edu),

or

E-mail: smr-help@mit.edu

Call (US and International): 617-253-7170

Fax: 617-258-9739

Posting of full-text SMR articles on publicly accessible Internet sites is prohibited. To obtain permission to post articles on secure and/or password-protected intranet sites, e-mail your request to smr-help@mit.edu.

Customer Service

MIT Sloan Management Review
238 Main Street E48-570
Cambridge, MA 02142