

WHY THE BEST AND BRIGHTEST APPROACHES DON'T SOLVE THE INNOVATION PARADOX

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(PART ONE OF A TWO PART ARTICLE)

In this article, Stephen Denning drew on his latest book, *A Leader's Guide to Storytelling* (Jossey-Bass, 2005). Formerly the Program Director, Knowledge Management, at the World Bank, he advises organizations world-wide on knowledge management and organizational storytelling.

Innovation remains a management paradox. The need to innovate is universally perceived as the key to organizational survival. It's not enough for companies to get better. They have to get different—not just at their periphery through extensions of existing businesses, but in their core. Transformational innovation isn't an option. It's a necessity.[1]

Yet the inability of most large organizations to undertake disruptive innovation and achieve sustained resilience in the marketplace is apparent. The failure rate of mature companies attempting to grow by entering new businesses is estimated to be over 90 percent, perhaps even as high as 99 percent. These failure rates apply, no matter what the criteria for what can be called a new business, what's considered core versus non-core, or what constitutes success. [2]

*The issue is not so much with what Christensen and Raynor call **sustaining innovations**, i.e. innovations that target existing customers with better performance than was previously available, either as incremental year-by-year improvements or as technological breakthroughs. [3] Succeeding in sustaining innovation is a question of how well the firm does relative to its competition. One or more of the established firms almost always win the battles of sustaining innovation, because incumbents have both the powerful incentives and the deep pockets to win those battles. Sustaining innovation essentially involves **doing more of the same, but better or quicker or cheaper**. There are winners and losers in this race, but the players and the dynamics of the game are relatively predictable.*

*The paradoxical aspect of innovation however comes with what Christensen and Raynor call **disruptive innovations**, which concern new business models that transform the business landscape. [3] Disruptive innovations introduce products and services that may not be as good as currently available models, but may be simpler, more convenient and less expensive and appeal to new types of customers. Disruptive innovation is not about doing more of the same, but **doing something fundamentally different**. This is something that most organizations are not currently good at.*

In this article, we examine what the leading management theorists have to offer to solve the paradox of innovation, with particular emphasis on disruptive innovation.

Six leading theories of innovation

#1: Create a safe environment for innovation

Clayton Christensen and Michael Raynor's book, *The Innovator's Solution*, is a brilliant analysis of why companies fail to innovate. It explains in convincing detail why corporate managements don't learn about good ideas, and why managers succumb to inherent pressures to run away from the challenge of disruptive competition rather than stand and fight. The decisions made as a result of these pressures make sense in the short run to the individuals involved, but in due course they send the organization into an inexorable death spiral. [3]

“Innovation remains a management dilemma – long-term survival requires a commitment to transformation via disruptive grow, but it's a strategy few companies survive.”

But while their analysis of the causes of failure to undertake disruptive innovation is immaculate in its force and clarity, their proposal for solving the problem of disruptive innovation is less helpful. The central premise of their thesis – the innovator's solution – is to accept the grim reality that big companies are inherently and constitutionally disinclined to tackle disruptive innovation. A modern organization will crush disruptive new ideas, because they represent a threat to management, to careers, to power structures, to customary ways of things, to client bases, to brands, to corporate culture. The authors' solution is to protect genuine innovators and their disruptive change ideas from these hostile forces.

According to Christensen and Raynor, corporate leaders should put up a wall between the innovation and the existing hierarchy. Leadership should create an independent business unit, which will provide a safe and protected environment for innovation. There the innovation can flourish without having to fight off the interferences and intrusions and anti-innovation attitudes of the hierarchy.

The approach is seductive but has several flaws. First, the approach doesn't address innovations that require organization-wide change. At IBM, the shift in focus under Lou Gerstner from selling computer boxes to providing services to networked organizations and e-business was not something that could have been undertaken in an independent business unit. At GE, Jack Welch's goal of becoming #1 or #2 in every sector could not be implemented in just part of the organization. At best, Christensen and Raynor's approach works where the idea is limited in scope and can be launched as a business independent of the parent organization.

Second, even where it is possible to put the innovators in an independent business unit, it is doubtful that they will receive the resources necessary for success, because, as the authors point out, the parent organization doesn't really want the innovation to succeed.

But even if the innovative independent business unit is successful, there is still the issue of what happens next. It doesn't follow that the parent organization will quickly and easily adopt the

modus operandi that has been successfully developed in the subsidiary. Christensen and Raynor cite several examples of success, such as Hewlett-Packard's launching of inkjet printing through an independent business unit. But here the change didn't involve any fundamental shift in the way that HP does business – it was simply another type of printer. More typical are examples where the parent company is still unwilling to adopt the innovations of the subsidiary. Some of these cases are notorious, like the IBM PC division in the 1980s, and the Saturn division of General Motors.

Separate organizations don't work – or at least not for long.... Allowing a different culture to flourish in [a] separate organization eventually leads to repeated power struggles and culture clashes, which members of the mainstream organization invariably win. Interest in the new ventures tends to be cyclical. Brief surges of enthusiasm, triggered by abundant resources and the desire to diversify, are followed by sharp declines. The life spans of both internal venture units and corporate venture capital funds, therefore, tend to be short - on average, only four to five years. [4]

That's the risk with this approach. It's not really "the innovator's solution" as Christensen and Raynor call it. It's actually "deferring the innovator's solution", because at some point, someone has to persuade the parent organization to accept the change.

And this is not merely a one-time challenge of convincing the organization to pursue disruptive innovation. Change advocates have to continue winning the decisions over a multi-year period, as the innovation and its promoters come under attack from skeptics, critics, and all those people with personal, professional, or institutional stakes in the status quo.

“It's not enough for companies to merely get better... they have to get different – not just at their periphery through extensions of existing businesses, but in their core, through a commitment to disruptive growth.”

Christensen and Raynor's "solution" rests on the hope that if you can build enough commercial success in the marketplace, you have a bigger chance of eventually winning that battle of persuasion. Surely, their argument goes, the hard numbers will win the war. Unfortunately the track record shows that hard numbers don't win this kind of war. Even with strong commercial success, numbers and reason are not enough to dislodge the forces of stasis and inertia.

#2: Fund many innovation projects

Gary Hamel proposes breeding healthy innovation via a decentralized funding system that emulates open markets. Thus, just as nature conducts many evolutionary experiments in order to have a successful species, so companies should fund many innovation projects and see which ones win out. By giving large numbers of managers throughout the organization the power to allocate budgets for innovation, Hamel hopes to exploit "the wisdom of the many", over the

blinkered view of a centralized corporate decision-making process. The decentralized process will thus support genuinely different disruptive innovation, rather than tame me-too look-alike changes.

“The arithmetic is clear: It takes thousands of ideas to produce dozens of promising stratlets to yield a few outsize successes. Yet only a handful of companies have committed themselves to broad-based, small-scale strategic experimentation.... The isolation—and distrust—of strategic experimentation is a leftover from the industrial age, when variety was often seen as the enemy. A variance, whether from a quality standard, a production schedule, or a budget, was viewed as a bad thing—which it often was. But in many companies, the aversion to unplanned variability has metastasized into a general antipathy toward the nonconforming and the deviant. This infatuation with conformance severely hinders the quest for resilience.” [1]

There are three central problems with Hamel's approach.

First, Hamel overlooks the reason why centralized decision-making is conservative – it reflects a fear of disruption of entrenched power structures and careers. There's no reason to think that line managers throughout the organization will not experience the same fears. In fact, middle managers usually have more to lose in any basic change than the top management. And so, won't they also vote their resources for innovations that bolster their current fiefdoms and careers? If so, the decision-making will be more cautious, not less.

Second, Hamel's belief that more resources will resolve the problem of innovation isn't borne out by the facts.

- Christoph-Friedrich von Braun, in his 1997 study “The Innovation War,” analyzed 30 Global 500 firms and found almost no correlation between increased R&D spending and improvement in profitability.
- Booz Allen's analysis of global personal-care and consumer health-care companies showed no clear correlation between R&D spending as a percentage of sales and growth in revenues or profitability. [5]

Profitable innovation, in other words, can't be bought. Simply spending more usually leads to a waste of resources on increasingly marginal projects.

Finally, Hamel's hope is that by funding a variety of different ideas, the organization will emulate evolution's natural selection and the best ideas will survive and prosper. But it may not pan out this way. Once a disruptive idea starts to flourish, and becomes even more interesting than the normal bread-and-butter work of the organization, it risks becoming a threat to the hierarchy and the entrenched interests of managers and customers as well as the culture of the organization. The organization may well welcome the new idea into its bosom, but only to crush it to death. The organization applies its own procedures and processes and attitudes to the new idea and overwhelms it. Donald Sull gives many examples:

Consider A&P with its upscale supermarket, Laura Ashley with clothes for professional women, Firestone with radial tires. All these companies had obvious ideas staring them in the face, which were tested inside the firm and then crushed, precisely because they were successful. They were the future of the firm. The firm could see them very clearly. It wasn't that they were unaware of them. They could see them and they were obvious and they had to be crushed.[6]

Ultimately Hamel's diagnosis is wrong. The biggest challenge in innovation is not in generating more ideas. It's about how you take the really good ideas and make them actually happen. To do that, eventually you have to win the battle of persuasion. And not just once, but repeatedly. The problem for management is that the conventional tools of communication – reason, numbers, bullet points – aren't adequate to the task.

#3: Systems thinking and the learning organization

Whatever happened to the learning organization? On re-reading Peter Senge's *The Fifth Discipline* recently, I was struck at how brilliantly he describes the goal of the learning organization, "where new and expansive patterns of thinking are nurtured, where collective aspiration is set free and where people are continually learning how to learn together." [7]

Less persuasive however is his proposal on how to get to this goal. The critical element according to *The Fifth Discipline* is "systems thinking", a way of looking at systems as a whole that will enable us to see things complex chains of causation and so solve complex problems.

The difficulty? First, getting large numbers of people in an organization to adopt systems thinking would itself be a massive challenge of innovation. How could one make this happen?

Secondly, even if systems thinking was widely adopted, it wouldn't necessarily lead to action. Innovation is less about *understanding* the problem than getting people to *act* differently, often contrary to well-established assumptions and practices. Many of the disruptive challenges that killed businesses were intellectually obvious. The problem was that they weren't adopted with enough energy and enthusiasm.

Thirdly, implicit in systems thinking is an engineering mindset that is ill-adapted to solve problems involving human beings, their objectives and their feelings. Habits and emotional attachments aren't based on rational foundations that will lapse simply because intellectual understanding is entrained by systems thinking. For these things to change, we have to change people's hearts as well as their minds. For this purpose, systems thinking is just thinking – it's operating in the wrong part of the body.

#4: Use data-driven strategic innovation

Michael Schrage believes that "the key to innovation is, now more than ever, data-driven strategic innovation." [8] According to him, it's no longer enough for innovators to be sensitive to potentially provocative correlations. Today's innovators must explicitly generate them en masse. Capital-

intensive innovators increasingly structure their research initiatives to ensure that unexpected correlations trigger recognition and review. Correlation becomes the crucible for innovation and insight. According to Schrage, “the future of innovation will increasingly be determined by the future of data-driven statistical techniques.”

There is no doubt that this will produce some new ideas and some of the ideas may generate significant revenue. For instance,

- *Organizations like GE’s aircraft engines division already rely upon data-driven techniques to predict the need for maintenance and repairs before significant problems actually happen, and significant savings accrue. [9]*
- *In pharmaceutical research, it appears possible that statistical analysis of trials will reveal hidden opportunities in drugs, which initially fail as drugs for the entire population. For instance, in 1999, Eli Lilly & Co. halted trials of a promising experimental chemotherapy drug called Alimta after three patients taking it died suddenly. Analysis showed that patients with the most severe side effects were those with high homocysteine -- and low folic acid -- in their blood. The researchers decided on a disarmingly simple solution: Give all patients folic acid pills in addition to their dose of Alimta. Today, Alimta is an approved treatment for mesothelioma, a rare type of cancer caused by exposure to asbestos. It's under Food and Drug Administration consideration as a treatment for lung cancer, a much more common ailment. [10]*

Data-driven innovation thus will be a useful component of an overall innovation strategy. But it’s difficult to agree with Schrage that “the future of innovation will increasingly be determined by the future of data-driven statistical techniques.” It will be a component of sustaining innovation, but not a very large component of disruptive innovation. It will generate ideas, but not the business-busting ideas that transform a sector in a single stroke.

#5: Use open source innovation

Another widely discussed approach in innovation theory is open source innovation. According to Henry Chesbrough, “successful innovators are finding they must complement their in-house R&D with external technologies and offer up their own technologies to outsiders. R&D at large companies is shifting from its traditional inward focus to more outward-looking management — open innovation — that draws on technologies from networks of universities, startups, suppliers, and competitors.” [11]

Until recently, private R&D labs wouldn’t have dared trying open source innovation. R&D was viewed as a vital strategic asset and, in many industries, a barrier to competitive entry. Research leaders like DuPont, Merck, IBM, GE, and AT&T did the most research in their respective industries — and earned the most profits as well.

According to Chesbrough, “The change is striking... most of the premier industrial research laboratories of the 20th century have retreated from their historic mission of independent scientific discovery because of the low yields they’re experiencing.”

Yet here lies the heart of the problem: the research laboratories of large companies are experiencing low yields. But why? Is it because of the lack of ideas? Or is because of the business-as-usual assumptions that hamper innovation in the big companies? Chesbrough answers that very question – it’s the constraints that firms place on their own research that stifles innovation:

The big toy makers constrain their search by insisting that any new toy bring in \$100 million or more in its first year. Even such leading toys as Barbie and Hot Wheels would have failed to bring in a comparable amount when they were introduced in 1959 and 1969, respectively. An insistence on large initial sales condemns the toy manufacturers to merely extending existing brand franchises, or acquiring at a high price new toys successfully launched by smaller innovators. [11]

Similarly in pharmaceuticals, where big companies are struggling despite immense investments in R&D, the perspective of internal R&D must also change: from a focus on finding small molecules to produce a single blockbuster pill that will knock out a major disease for the entire population to more diverse approaches.

This is not to say that open source innovation won’t help. Whereas old-school research labs took new technologies from basic science to finished product, open innovation labs can develop technologies that embrace and extend existing intellectual property — even those that are “not invented here.”

So it isn’t that open source innovation is a bad idea. It’s a supplement to the steps that are needed to resolve the basic problem of innovation, not a solution in itself. The fundamental problem in innovation isn’t one of finding more new ideas: it’s a matter of establishing a way of running the organization that is open to exploring new ideas and willing to back the most promising of them with resources and talent. To present open source innovation as “the solution” will generally result in a distraction from attacking the core problem, which isn’t outside the organization at all. It’s right there in the very heart of the organization itself.

#6: Create a chief innovation officer

Another approach to solving the problem of innovation is to create the senior position of Chief Innovation Officer (CIO). Debra Amidon was one of the early proponents of a CIO in *The Ken Awakening*. [12] Given that the existing hierarchy is inimical to innovation, the alternative is to create a special new hierarchical position to support innovation.

The idea is interesting, and yet one has to ask: what sort of person would be appointed to such a position? And what sort of incentives would govern their actions? What is the likelihood that the

chief innovation officer would actually tackle the rest of the hierarchy? What sort of powers would be needed to force innovation on the top management?

One obvious risk is that a chief innovation officer would be selected in the image of the existing management mindset and would encourage innovations that fit the mold that the hierarchy expects – namely, tame, me-too, extensions of the existing way of doing business, not than bold disruptive revolutionary changes.

“Disruptive innovation requires offering or doing something fundamentally different, a strategy most organizations don’t excel at.”

Another concern is whether a CIO would be good at sparking heterodox ideas? Powerful people who climb the hierarchy and arrive at the senior positions in large organizations get there because they have been good at maintaining order and focus and discipline. This is good for organizational efficiency and organizational optimization, but not always friendly to genuine innovation.

Three alternatives to disruptive innovation

Given the difficulty of implementing disruptive innovation, three alternatives are sometimes considered:

a. Consolidate an idea from outside the firm.

Costas Markides and Paul Geroski argue that a firm can pioneer a market or scale it — but not both. [13] Thus, Amazon didn’t invent on-line bookselling. Charles Schwab or E-Trade didn’t invent on-line brokerage. In each case it was a pioneer who invented the idea, but for it to be successful someone else had to scale it up. According to Markides and Geroski, the individuals or companies that create radically new markets are not the ones that build them into mass markets. Xerox Corporation is notorious for having invented scores of new products and technologies of the information revolution, while failing to commercialize them. But Xerox is the norm, not the exception. Most bold disruptive ideas in an organization end up being implemented by some other organization.

Their solution? Since big companies are constitutionally ill-suited to undertake disruptive innovation, the authors suggest that big organizations accept the reality of their own incapacity and get someone else to do it for them. When someone else has successfully selected and developed a good new idea, then bring it into the organization and scale up the market.

This has worked well for some organizations, such as Microsoft, IBM and GE that have taken over many innovations developed by others. It is particularly effective for innovations that supplement the existing business model.

However, there are many examples of firms that have tried to bring an idea from outside, but they can't manage it, precisely because it is disruptive. Often the organization is locked into commitments reflected in invested capital, personnel decisions, promises, customer investor and analyst expectations, employee know-how, skills and practices, public promises and goals, existing relationships with resource providers and suppliers. These commitments are constitute a powerful tool for exploiting the existing game plan, but they also become cognitive, cultural, and structural shackles that prevent a company from changing – even when the need to change is clear to all. The very things that made the idea successful in the pioneering organization can't always be recreated in the recipient organization, and so the idea is not nearly as successful as it was in the pioneering organization.

When Quaker Oats bought Snapple Soft drinks, it looked like a slam dunk. But the particular marketing arrangements that had made Snapple a success were not present in Quaker Oats, which also failed to recreate them. As a result, the acquisition was a miserable failure.

When General Motors learned that Japanese car manufacturers had improved productivity through robotics, it spent \$45 billion in the 1980s trying to import robotics into GM, with little success. Why? The idea had worked elsewhere, but GM couldn't recreate the management culture needed to make it work. [14]

b. License the innovation to someone else.

James Andrew and Harold Sirkin suggest that companies should license their own good ideas to another firm and let it do the hard work of developing and bringing it to the marketplace. [15] The authors give a number of examples where this was done, showing that that it's possible to generate sizable revenues in the process:

- in 2002 **Amgen** earned \$330 million and **IBM**, \$351 million, from royalties of products and technologies they let other companies take to market.
- In early 2003, **GlaxoSmithKline** transferred the patents, technology, and marketing rights for a new antibiotic to Affinium Pharmaceuticals in exchange for an equity stake and a seat on the board.

But there are risks here too.

For instance, Motorola licensed its own patents on digital telephone technology to Nokia, apparently without realizing that this was going to be their core business, and thus giving a head start to a company that turned out to be their principal competitor for the next decade. They licensed away the technology, essentially without realizing that it was the very future of their organization. [14]

Thus licensing valuable innovations can be a dangerous strategy, unless you have a clear and accurate vision of your future.

c. Stop kissing frogs

Executives who find disruptive innovation too difficult will find comfort in a study by Andrew Campbell and Robert Park in *Harvard Business Review* of July 2004, entitled “Stop Kissing Frogs”.

According to this study, innovations that “hold out real promise for mature companies are rare.” The study looked at managers responsible for developing innovations in large companies, gauging the success rates and looking for patterns in a database of success stories. The study covered companies such as Shell, McDonald’s, and Whitbread. Success rates were low – around 5 percent. According to the authors,

“In every case, the real problem we found was a shortage of opportunities rather than a shortage of courage or venturing skills. Given the companies’ strengths and weaknesses, few, if any, of their projects had a reasonable chance of success.”

The authors applied a screen based on the principles of good strategy to the ideas being pursued. In one organization pursuing 24 ideas, only one showed an honest chance of succeeding; two others were marginal. So they see the problem not as failure on the part of the management to innovate, but as a lack of suitable opportunities to pursue. Most of the ideas were “frogs”, not “princes”. According to the authors, “frog kissing is not the way forward”. Instead, managers should wait patiently for a real “prince” to come along.

Thus according to the authors, companies must be “patient” and “face up to a future of lower growth”. They should realize that “an average return for investors” is good enough. Managers must learn “how to communicate with shareholders and motivate managers in a low-growth organization.” They must also “get used to living in the ‘mature and die’ part of the grow-mature-die cycle of business and let go of the seductive grow-grow-grow view of business.”

But before we accept this depressing conclusion, let’s look closely at the screen that Campbell and Park applied to determining that “good ideas are rare”.

“If the leading theories that try to solve the paradox of innovation don’t work, does this mean that the paradox of innovation can’t be solved?”

According to the authors, “The screen consisted of questions as to whether the proposed venture offered attractive market potential, was in a realm where the company held sufficient advantages to cover the learning costs, would be supported with an effective leadership team, and would complement, not undercut, the core businesses.” [2]

The screen used by the authors thus viewed as sound those ideas that complemented the core businesses, rather than truly disruptive ideas. As Christensen and Raynor explain, this is precisely why big companies routinely don’t succeed with disruptive innovation. They screen out

all ideas except those that complement the existing way of doing business, and thus miss the disruptive ideas that could really lead to above-average growth. [3]

In other words, Andrew and Park categorize disruptive innovation as “kissing frogs”, thus dismissing the whole class of ideas that might in fact generate above average growth. Their “princes” are tame creatures that look good to the management but are essentially more of the same – merely me-too changes.

Moreover, Campbell and Park’s screen requires that winning ideas needed to have “an assured market” – the very thing is rarely if ever present with a genuinely innovative idea. The very fact that the idea is new means that there is by definition no assured market. Also troubling is their conclusion that the ideas would fail because they lacked the “support of an effective leadership team.” True, if the organization isn’t willing and able to put in place an effective leadership team, a bold innovative idea is unlikely to fly. But this has nothing to do with the quality of the underlying idea. It simply indicates rather a lack of management commitment to the change idea.

In effect, the authors suggest that management should wait until they come across a “zero risk scenario” that would succeed even with “limited commitment to the change. This is exactly the mindset that results in few ideas ever reaching the top management or getting implemented, and in corporations waiting until it’s too late to innovate.

Conclusion

In this article, we’ve looked at the six leading theories that try to solve the paradox of innovation and we’ve seen that basically they don’t work. We’ve also looked at three ways of trying to sidestep the problem, rather than solving it. Does this mean that the paradox of innovation can’t be solved? Are corporations doomed to fail, as disruptive innovations from outside inevitably undermine, and ultimately kill, their business models? Is there no way that organizations can learn to change their ways and figure out how to do succeed with disruptive innovation, doing something completely different – quickly, energetically and enthusiastically?

The very fact that none of the leading theories offers us any clue to the solution itself suggests that we may be looking at innovation in the wrong way. If innovation is a paradox, we may need to recognize that the solution to any paradox lies in rethinking the fundamental assumptions of the mindset being applied.

In a second part of this article, we will explore what kind of revisions to our fundamental assumptions is involved in actually resolving the paradox of innovation.

Bibliography

1. Hamel, G. and L. Välikangas, *The Quest for Resilience*. Harvard Business Review, September 2003.
2. Campbell, A. and R. Park, *Stop Kissing Frogs*. Harvard Business Review, July/August 2004.

3. Christensen, C.M. and M.E. Raynor, *The Innovator's Solution: Creating and Sustaining Successful Growth*. 2003, Boston: Harvard Business School Press.
4. Garvin, D.A., *What Every CEO Should Know About Creating New Businesses*. Harvard Business Review, July/August 2004.
5. Kandybin, A. and M. Kihn, *Raising Your Return on Innovation Investment*, in *strategy+business*. Spring 2004.
6. Sull, D., *Revival of the Fittest: Why Good Companies Go Bad and How Great Managers Remake Them*. 2003, Boston: Harvard Business School Press.
7. Senge, P., *The Fifth Discipline: The Art and Practice of The Learning Organization*. 1990, New York: Doubleday.
8. Schrage, M., *Prepared Minds Favor Chance*. MIT Technology Review, July 1, 2004.
9. Pool, R., *If It Ain't Broke, Fix It*. MIT Technology Review, September 2001.
10. Burton, T., *By Learning From Failures Lilly Keeps Drug Pipeline Full*, in *Wall Street Journal*. April 21, 2004.
11. Chesbrough, H., *R&D Through Open Source Innovation*. *strategy+business*, Summer 2003.
12. Amidon, D., *Innovation Strategy for the Knowledge Economy, The Ken Awakening*. 1997, Boston: Butterworth Heinemann.
13. Markides, C. and P. Geroski, *Colonizers and Consolidators: The Two Cultures of Corporate Strategy*. *strategy+business*, Fall 2003.
14. Finkelstein, S., *Why Smart Executives Fail: What You Can Learn from Their Mistakes*. 2003, NY: Portfolio.
15. Andrew, J. and H. Sirkin, *Innovating for Cash*. Harvard Business Review, September 2003.

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