

## Making Innovation Strategy Succeed

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[editors@strategy-business.com](mailto:editors@strategy-business.com)

Booz & Company

01/08/2008

a strategy+business exclusive

# Making Innovation Strategy Succeed

Booz Allen Hamilton Vice President Barry Jaruzelski discusses the process and findings of the annual Global Innovation 1000 study.

by Amy Bernstein

Innovation is a perennial hot topic in business, widely viewed as the key to corporate success. But how closely connected is R&D spending to performance? That is the question behind the Booz Allen Hamilton Global Innovation 1000, a yearly examination of the relationship between R&D investment and corporate success at the world's 1,000 largest R&D spenders. Since the study's inception in early 2005, Barry Jaruzelski, a vice president with Booz Allen in New York, has taken a lead role in it. He sat down with *strategy+business* in December 2007 to discuss his view of the research, including which findings most surprised him.

**S+B:** Tell us about the objective of the Global Innovation 1000 study and why you continue to monitor top innovation spenders even after finding no statistically significant relationship between R&D spending and financial performance.

**JARUZELSKI:** When we started, in 2005, we really wanted to test a proposition that had become an article of faith in the innovation arena: "Spend more on R&D and growth, and differentiation and other good things will come." Yet our years working in innovation had taught us that just throwing money at the problem was not the answer. Rather, successful R&D requires certain approaches to organization, culture, and deci-

sion making. Many of the biggest innovation successes of recent years were not produced with the biggest budgets. And we've observed that excess resources can actually impede effective innovation efforts.

So, with that hypothesis, we set out to perform a robust test of the relationship between R&D spending and corporate success and found no statistically significant connection. We did note in the first year of the study that there is a sort of minimum threshold — that if a company fell into the bottom 10 percent of R&D spending in its industry peer group, its performance was compromised. But being in the middle of the peer group or in the top 10 percent had no real impact on performance. Those results demonstrated that it's really not about how much a company spends on R&D. It's about how the company goes about doing it — the processes, the tools, the organization, the culture, and the portfolio choices it makes.

Having confirmed in the first year of the study that money isn't the key to innovation success, we wanted to see if there was a set of companies that consistently outperformed their peers while spending less. So in the second year we came up with the idea of the High-Leverage Innovators — companies that outperformed the median of their industry peer group over a five-year period against several metrics covering revenue growth, profit growth, and shareholder returns while spending less

**Amy Bernstein**

(bernstein\_amy@bah.com) is executive editor of *strategy+business*.

than their industry's median on R&D.

What emerged from that was a list of 94 companies that included names that had become synonymous with innovation, firms like Apple, Christian Dior, Adidas, Google, Yahoo, Black and Decker, Hyundai Motors, Honda Motors, and others. These were not companies that were starving the beast. They could not have chalked up five consecutive years of above-median performance against all metrics of profit and growth and shareholder returns while spending less if they were doing something untoward to the institution. These companies had come up with a model for high-leverage innovation.

The other big idea that we tested in the second year involved the role of patents as an indicator of innovation success at the corporate level. We examined an extensive database of patents and found that if companies spent more money on R&D, they did get more patents, but the level of patent activity did not correlate with corporate success as measured in terms of growth, profitability, and shareholder return.

Again, this isn't terribly surprising, but it's an important hypothesis to test because it demonstrates one of our core themes: Innovation and new technology are not the same thing. New technology may be a technical advance, but it's not a real business innovation unless it drives significant new revenue streams. Consider the iPod. The true innovation was iTunes and the one-stop-shopping, ease-of-use business model. There was no significant technical advance. MP3 players had been out there for a few years; so had online purchasing and downloading of music. The real innovation was getting all those music catalogs under one roof and making them easily accessible by imple-

menting established technologies in a simple, coherent way. Those were business model innovations that transformed the digital music industry.

In the third year we wanted to get a deeper understanding of different innovation strategies and the role of customer involvement. So we sat down with representatives of a subset of the Global Innovation 1000, companies that represented over US\$68 billion of the Global Innovation 1000's total \$447 billion R&D spending. We wanted to get a better handle on three notions that arose in our discussions in the previous two years. The first is the relationship between innovation and business strategy. The second is that there are various innovation strategies out there and we want to know more. And the third is the role of the customer throughout the innovation process.

First, we found that the more tightly aligned innovation strategy is with business, the higher the performance in terms of operating income growth, shareholder return, and so forth. The lower the level of alignment, the lower the level of return.

Second, we found that across all industries, there are three fundamental innovation strategies, which we characterized as Need Seekers, Market Readers, and Technology Drivers. Interestingly, any of these strategies can be successful if they are well aligned to the business strategy.

Third, we found that the more companies depend on directly generated customer insight to design their innovation efforts, the higher the level of financial success. This was true across all three innovation strategies.

**S+B: What findings most surprised you?**

**JARUZELSKI:** I'm always surprised by how concentrat-

ed R&D activity is. The 1,000 companies in our study represent nearly 85 percent of all R&D activity in the private sector worldwide and over 50 percent of all R&D efforts public or private. So how well these companies innovate is really an important factor in the health of the global economy.

Another point is that while experience had taught us that how much a company spends is less important than how it spends that money, I was surprised at how stark our findings were.

And the third surprise is that although there's a lot of hand-wringing over India, China, and other emerging economies, the lion's share of innovation is still being performed by U.S. companies, western European companies, and Japanese companies.

**S+B:** Let's focus a little bit more on this year's findings. You talked about the innovation strategies. What did you find?

**JARUZELSKI:** As we looked into innovation strategies, companies fell into three distinct types. One we call Need Seekers, which are focused on understanding their customers' needs deeply and being the first to market with innovation as a consequence of that deep understanding.

The second group is Market Readers, companies focused on monitoring not only their customers' needs but also their competitors' moves. Members of this group tend to be fast followers, taking an incremental approach to innovation. And as a result, although they don't necessarily have better financial returns than the other two groups, they do spend a lot less on R&D than companies following either of the other two strategies.

The third one is what we call Technology Drivers, companies that do not necessarily ignore customers, but have a greater focus on breakthrough technologies. They look to address unarticulated needs of customers, swinging for the fences more than taking an incremental approach to innovation. All three models employ customer insight, and it's important to note that the three produced comparable financial performance. No model was inherently superior financially. The one thing that cut across both industries and models is that the more a company relied on direct customer insight, the better it did.

**S+B:** Did you also find three corresponding business strategies?

**JARUZELSKI:** Clearly there has to be a relationship, and some of it is implicit in the innovation strategy. For example, both Need Seekers and Technology Drivers must figure out how to make an innovation a market success. So they have to focus their resources on channel and market development and education as much as on technology (or whatever the source of the actual innovation). Need Seekers have to be first to market in order to capture maximum value, so the strategy should account for speedily ramping the entire institution, including product development, obviously, but also suppliers and channel partners. They need to remember that Market Readers are out there gauging how successful the innovation is and how soon they can imitate it.

**S+B:** Did you pick up on innovation capabilities that every company ought to have?

**JARUZELSKI:** It's all a matter of degree, but every

company should have a robust portfolio management process and a process for gathering customer insight. They should also have a way to manage and provide visibility into the end-to-end product development process. The level of breadth and depth for each of these capabilities will vary according to the nature of the industry and the innovation strategy. +

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## Resources

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*strategy+business* magazine  
is published by Booz Allen Hamilton.  
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or call 1-877-829-9108.

Originally published as “Making Innovation  
Strategy Succeed,” by Amy Bernstein.