The Journal Report: The New Face of Innovation

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Finding an Innovation Strategy That Works

BY FRANK T. ROTHAERMEL AND ANDREW M. HESS

When it comes to pursuing innovation, choosing the right path can be tricky, even for the most seasoned of managers. That's because there are many options from which to choose, and no one-size-fits-all recipe for success.

To make it a little easier to find the right path, we spent five years analyzing some commonly used innovation strategies. In particular, we took an in-depth look at four approaches—recruiting and cultivating human capital, spending on internal research and development, engaging in strategic alliances, and acquiring technology ventures—and what happens when companies try to pursue some or all of them at the same time.

We found that while it is possible to achieve a higher level of innovation by pursuing some of these strategies simultaneously, more isn't always better. Some strategies don't mix well, and companies risk wasting valuable resources if they pursue them together. So while some managers may be tempted to try all of these approaches at once, thinking it will improve their odds of success, our research indicates they should resist the urge.

One caveat: Our research focused on how global pharmaceutical companies pursued innovation in the field of biotechnology. Still, while our findings may be based on the drug industry, we believe they provide invaluable insights for all managers.

It's the People

Specifically, we found that the most effective way to achieve continuous innovation over the long term is to hire and cultivate talented people. Companies that innovate through hiring will have stronger control over their intellectual property and often a steadier pipeline of future inventions because they aren't relying on outside partners for any part of the innovation process.

The odds of this strategy working improve when a company builds a team of both star and nonstar employees. Having people who can prospect for new ideas (star scientists, for example) and people who can turn those ideas into actual products and services (rank-and-file knowledge workers) makes successful innovation more likely.

We observed, however, that some of the companies trying to innovate through human capital wasted resources by also pouring money into alliances. That's because the kind of knowledge gained through alliances can be the same kind of knowledge gained by building a team of star scientists and a good supporting cast—resulting in diminished returns for each additional dollar spent. The question to ask is: What are the unique assets gained through an alliance that I haven't already obtained from my human capital?

Working Well Together

The innovation strategies we found to be most complementary when pursued together were alliances and acquisitions. That's because forming a joint venture with a company before trying to buy it gives a company inside information about the target's worth and the value of the research it is seeking to acquire.

Eli Lilly & Co., for example, was involved in a joint venture with Icos Corp., maker of the $1 billion-plus erectile-dysfunction drug Cialis, before purchasing the company outright in January 2007. More recently, Lilly, which has an entire department devoted exclusively to managing alliances, was able to outmaneuver Bristol-Myers Squibb Co. to acquire ImClone Systems Inc., maker of the cancer-fighting drug Erbitux, which also has more than $1 billon in annual sales.

Alliances and internal R&D spending often complement each other, as well, at least among the companies we studied. That's because internal knowledge allows companies to more readily identify the most promising research areas, which in turn allows them to select the most promising research partners. Internal knowledge also helps companies better understand the information that is exchanged between partners, increasing the efficiency of such arrangements.

Many other combinations of innovation strategies are possible, significantly increasing the complexity. But the bottom line is that innovation strategies should be pursued simultaneously *only* if they complement each other—that is, if the marginal benefit of each activity increases in the presence of the other activity. If the marginal benefit of each activity decreases in the presence of the other activity, then chances are they aren't worth pursuing together. ▪

Dr. Rothaermel is a Sloan industry studies fellow and the Deedy associate professor of strategy at Georgia Institute of Technology's College of Management in Atlanta. He is also president and chief executive officer of ftrStrategy. Dr. Hess is an assistant professor of strategy at the University of Virginia's McIntire School of Commerce in Charlottesville, Va. They can be reached at reports@wsj.com.

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