Leveraging know-how: licensing knowledge and making it work for you

Firms license technology and other types of knowledge in order to innovate and stay competitive. But not all licensing leads to innovation. IESE's Thomas Klueter looks at how different licensing styles and forms of organizational attention impact innovation outcomes.



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In the early 1990s, many big pharma firms found themselves with a problem. To really progress, managers knew they needed to use the most up-to-date information derived from genes. But training staff to develop these competencies in-house was inefficient, time-consuming and costly.

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One answer to this dilemma was licensing. Established firms could license knowledge from universities and small startups with the latest developments. In many cases, this strategy worked: biotech giants used the knowledge they had licensed to produce new innovations and solidify their market-leading position. But in other cases, licensing failed to bring the benefits firms had hoped for.

In a study, IESE's Thomas Klueter, L. Felipe Monteiro and Denise R. Dunlap find that to license effectively, we must understand how different types of licensing *and* different types of organizational attention impact future innovation.

Analysis of licensing agreements from the world's top 50 global biopharmaceutical firms over 20 years led them to conclude that licensing which requires an ongoing exchange of knowledge and resources between licensor and licensee — known as "partnership-embedded licensing" — typically leads to more innovation than "standard licensing," where the licensee has no mutual interaction with the licensor once they have bought the knowledge. Communication, it seems, is crucial.

And it doesn't stop with the type of licensing. The authors add that organizational attention is key, disproportionally so for standard licensing. In fact, standard licensing can, in some cases, lead to similar innovation benefits as partnership-embedded licensing when applying two types of attention — top down and bottom up. By encouraging staff and company culture to prioritize new knowledge, firms can greatly increase their chances of innovating post-licensing.

The nitty-gritty of licensing and innovation

Licensing contracts grant a company the right to use patented knowledge, scientific insights or proprietary databases. This can drive innovation, which can, in turn, lead to greater business competitiveness.

There are two main ways to structure a licensing agreement: either as a partnership-embedded license or a standard license. These work in different ways:

- **Partnership-embedded licensing.** Some licenses are embedded in a wider alliance between the licensor and licensee companies. The organizations pool resources and R&D, and share knowledge back and forth throughout the innovation process. With partnership-embedded licensing, both firms agree to allocate resources and personnel to support innovation.

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- **Standard licensing.** Standard licensing is a simpler agreement which gives the licensee the right to use the licensed knowledge but does not involve resource sharing or mutual interactions. There is usually no obligation to commit staff or personnel to the new knowledge.

Standard licensing has much lower setup costs, and requires less time and energy spent on coordination. Partnership-embedded licensing is more complex on both financial and organizational levels, as both partners must work together to create new products.

Still, the examples in this study validated that extra effort, as partnership-embedded licensing was more likely to lead to the creation of a product innovation compared with standard licensing. In many cases, standard licenses limited possibilities for applying knowledge and sustaining the innovation process.

Directing attention: top-down or bottom-up?

Standard licensing presents limits, but these can be overcome — through the kind of attention the organization designates to the knowledge they license. It's about priorities, focus and resources. The authors look at "bottom-up" and "top-down" organizational attention to emphasize the importance not just of licensing knowledge, but working with it.

"Bottom-up" organizational attention refers to the focus of scientists within R&D units, who process and apply licensed knowledge. While in partnership-embedded licensing, innovation happens through the interaction of both companies, in standard licensing, the receiving R&D unit is responsible for learning about the technology and its possibilities. Focusing on a narrow range of problems greatly increases the chance of innovation.

Initiative can also come from above. High-level managers make decisions and allocate resources that can boost innovation. In standard licensing agreements, "top-down" attention from management is extremely important to ensure that an appropriate investment is made in using licensed technology.

So it's not just the knowledge you license that's important, it's what you do with it. If innovation is the goal, a strong focus on the new knowledge is essential.

Understanding the differences and risks that accompany each type of licensing agreement — and how to mitigate these risks — can help managers to make effective licensing decisions, and use new knowledge and technologies to drive their company's success.

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Methodology

The authors tested a sample of over 500 licensing agreements from the world's top 50 global bio-pharmaceutical firms over a 20-year period. They analyzed the licensing agreement type and the amount of organizational attention given to the licensed knowledge, and compared this data with the outcome of licensed knowledge, i.e., whether the agreement resulted in a product innovation.

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