The benefits of science collaborations

Some of the most important commercial products of the 20th century owe their success to the university researchers who gave them birth.



July 1, 2009

By Bruno Cassiman

There is considerable evidence that firms with links to external science and research are more likely to be at the forefront of innovation and more often named on patent applications than those lacking such links.

These ties, dubbed “science linkages” by researchers, vary in quantity, style and complexity, but companies may create them by:

©IESE Business School

- accessing publicly available scientific information;
- partnering with universities and public research centers;
- citing scientific literature in patent applications;
- publishing their own scientific literature, often in cooperation with university researchers.

In the U.S., many companies contract additional capabilities through partnerships with universities. This is especially true for technology, which has always posed complex and expensive challenges to develop. Hewlett-Packard, Sun Microsystems, Yahoo and Google are a few examples, not to mention Stanford University's famous partnerships with industry players that eventually gave rise to Silicon Valley.

Although Europe has not yet matched the United States in terms of volume, the continent is by no means unaware of the advantages of leveraging university ties to create high-impact businesses.

The value of science linkages is what occupies me as a researcher and consultant to the European Commission and Belgian government on matters of innovation policy, as well as my work with executives on matters of innovation strategy.

I have analyzed Flemish manufacturing firms about their engagements with universities or government research centers, and I have studied R&D partnerships by ST Microelectrics, a leading semiconductor manufacturer. What are the prevalent types of science linkages, and how do they relate to the quantity and quality of a firm's innovations?

Having explored the costs, complexities and components of successful university/industry collaborations, in this article I suggest how to stimulate more of these linkages — and how to make them work for your firm.

This article is published in IESE Insight magazine (Issue 2, Q3 2009).

This content is exclusively for personal use. If you wish to use any of this material for academic or teaching purposes, please go to IESE Publishing where you can purchase a special PDF version of "The benefits of science collaborations" (ART-1536-E), as well as the full magazine in which it appears, in English or in Spanish.

©IESE Business School

Thanks for reading IESE insight
To continue reading this premium content,
please click below



Bruno Cassiman

Professor of Strategy at KU Leuven and in the Department of Strategic Management at IESE. He is an expert on innovation and strategy.

www.iese.edu/insight

©IESE Business School