

A New Relationship Between Business and Academia

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America's leadership in new product and service development is in jeopardy. Competitive cost cutting has forced the elimination of all but the shortest-term research and development programs in the private sector, and our corporate laboratories have all but vanished. RCA Labs, for example, no longer exists, and Bell Labs is a shadow of its former self. Our corporate competitors overseas have increased their research and development efforts to the point where many are now superior in quality and productivity to our own.

Do we have any national assets that we could bring to bear on this problem? Our institutions of higher education in the U.S. are still without question the finest in the world, and they possess a reservoir of intellectual talent and creativity unmatched anywhere else. American graduate students are still the most cost-effective R&D labor force anywhere. In addition, many colleges and universities have laboratory assets that would be prohibitively expensive for most companies to reproduce.

So why haven't U.S. corporations adopted colleges and universities as corporate R&D centers? Why aren't more technology-based companies incubating their new product concepts at universities? How could the U.S. be so inept that we can't find a way to exploit this obvious "unfair advantage" over foreign competitors?

Both academia and the corporate sector are to blame. On the academic side, I see several areas in which a new approach is needed:

1. The "Gatorade factor" – A tiny number of universities have reaped financial windfalls via intellectual property developed by their faculty. This dream of significant financial return has led universities to demand intellectual property rights and subsequent royalty payments from the corporate sector with such vigor that lawyers terminate many projects before they even begin. It is time for U.S. colleges and universities to remember that they are tax-exempt, non-profit organizations whose primary role is to serve society, not to make money.
2. The "give us the money and we'll work on something related to your interest" factor – university faculty are usually looking for support for their own ideas, not those of others, and that causes many corporate executives to wonder what it is they are funding.
3. The "fund me for three years and I'll give you a progress report" factor – Academic timescales are typically much longer than corporations can tolerate, especially when they are under competitive pressure from abroad.

On the corporate side, there are also a few negative factors at work:

1. The “next quarter’s bottom line” factor – it’s amazing to me to still hear people question Toyota’s multi-year, billion dollar commitment to hybrid vehicle development, a commitment U.S. auto companies were unwilling to make because of the long lead-time that was necessary before any profits could be realized.
2. The “we’ll buy any new technology we need” factor – corporate acquisitions and mergers are consuming untold billions in legal costs without adding any really new intellectual assets to the U.S. inventory. These funds could be used to fund technology R&D.
3. The “we won’t pay overhead” factor – many companies who have internal overhead rates of over 100 percent on internal corporate R&D projects refuse to acknowledge the very real costs that universities must bear to support research and development projects and balk at paying overhead rates at academic institutions that are typically 50 percent or less.

So we’re both to blame. How do we exploit our unfair advantage and make the U.S. once again the pre-eminent center of research and innovation that results in the best ideas for new products and services?

Imagine a group of colleges and universities that decide to make faculty and staff, graduate and undergraduate students, and facilities available to companies to carry out corporate research and development projects at low cost and without the usual intellectual property fights that usually derail such efforts. Imagine a new relationship between business and academia in which hundreds of companies discover that they can once again afford to do new product research and development, while identifying future employees at the same time. Suppose that the participating colleges and universities agree to accept a modest up-front payment, to be shared by the students, faculty, and the institution, in return for relinquishing all IP rights associated with the work to the sponsoring company.

Can this kind of arrangement work to re-energize our corporate R&D programs? I believe that the answer is yes. Let’s get on with it. Our future economic prosperity may well depend on our success in exploiting one of our last competitive advantages – America’s institutions of higher education and the extraordinary research and development assets that they represent.