

A CREATIVE ECONOMY

Richard K. Lester

America's CEOs, academic leaders, and other luminaries will assemble this week (Tuesday) in Washington for the National Innovation Summit. There they will celebrate the nation's entrepreneurial energies and innovation prowess while bemoaning the decline in federal funding for research and development and warning of the rising innovation challenge from China, India, and other points distant. That's good news and bad news.

The good news is that the Summit participants have half the answer. The bad news is that they are ignoring the other half.

The summit is part of the National Innovation Initiative orchestrated by the Council on Competitiveness, the nation's leading private organization dedicated to promoting a dynamic economy. The event will attract many of the best and brightest from America's corporate and academic worlds, and will stimulate much talk about what is fast becoming a buzzword in business these days -- innovation. (Too bad, since innovation is much too important to be relegated to buzzword status.)

What the summit participants get right is that more resources must be allocated to research and development and to investment in education. What they ignore is the most fertile terrain in a creative economy -- the public spaces for research, thinking and experimenting that rarely themselves come up with profitable products within one, two or even five years, but that provide the crucial new insights and concepts for businesses to exploit in the marketplace.

Most business leaders and politicians believe that the great surge of innovation in the 1990s that led to the commercialization of such now-familiar technologies as the internet, cellular telephones and biopharmaceuticals was the product of intensifying competitive pressures and the flourishing of technological entrepreneurship during that decade. That's half right. What they often don't remember -- or at least ac-

knowledge -- is that all those highly-profitable innovations grew out of advances made much earlier, in government-funded university laboratories or in organizations such as AT&T's Bell



Labs and IBM's Thomas J. Watson Research Center which existed to experiment, tinker, think and come up with entirely new concepts without the pressure of having to cook up marketable products and services that could immediately add to the quarterly profits of their parent corporations.

There are two key points about those great corporate research laboratories. First, they supported open-ended technological conversations out of which truly creative advances emerge. Second, they have all either been shut down or reoriented to support shorter-term business goals. Even the universities are now being urged to become engines of industrial problem-solving and entrepreneurship. An innovative economy needs the crisp, businesslike problem-solving enabled by efficient, well-functioning markets. But it also needs open-ended, interpretive conversations -- crossing disciplinary, industry and, increasingly, national boundaries -- to discover the new problems that markets excel at solving.

Unfortunately, the American economy has been neglecting the public spaces in which these interpretive processes can flourish, and this neglect has been compounded by our celebration of entrepreneurship and market competition. When it comes to innovation, we see only half the picture. Giving market forces free reign, eliminating unnecessary regulations, and getting out of the way of the entrepreneur are all well and good, but in our enthusiasm for these messages we are neglecting the seed corn of innovation. Reversing this certainly means more investment in the basic sciences and the education of more scientists and engineers, as this week's summitteers will stress. But that is only half the equation. It also means carving out time and space for bright minds to think creatively, to engage with disciplines different from their own, and to integrate across organizational, cultural, and intellectual boundaries.

Achieving this will require these new ingredients: recognizing the increasingly important role of our research universities as places for creative conversation about the future direction of markets and technology; rolling back recent changes in the patent and copyright system that were intended to reward innovators but which are actually stifling these conversations; and setting (and seriously pursuing) a few major long-term national goals requiring radical innovation -- weaning ourselves from our increasing dependence on foreign oil would be a good start. Last but not least, we must rethink engineering and management education to emphasize interpretive as well as analytical skills.

Discussions about innovation often seem abstract and theoretical, but our point is actually very simple: we must re-create the questing, experimenting environment, free of quarterly profit pressures, that spawned the remarkably fecund economy that we enjoy today and that we surely wish to bequeath to our children and grandchildren.