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Europe Needs Innovation Model



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The new global currency of the 21st century is innovation. In order for this currency to properly appreciate, developed countries will have to cast away some common misconceptions about what it means to do good research and technology (R&T).

Many countries that trade with the U.S. and Europe are no longer satisfied with the offset model of building factories in their countries. Instead, they demand that we bring them the foundations of North American and European excellence: research, scientific know-how and our innovative management practices. Our trading partners are keenly aware that the currency of the 21st century will be the exchange and acquisition of game-changing innovation.

Parts of the current discussion concerning innovation often tend to disassociate technology from industrialization. However, they are symbiotic. Countries with overly developed service sectors such as France have lost significant ground to nations like Germany, which possess comparative technology and manufacturing advantages in mechanical engineering, automotive technology and alternative energy research.

“Europe and the U.S. should aggressively set up joint flagship programs to develop the next generation of fuels.”

Large industrial companies in such countries are important to keep the R&T landscape fertile. Often, they are better positioned to support small and medium enterprise innovation than bureaucratic public bodies.

In the U.S., there is a strong relationship between the private and public sectors. Public bodies like the Defense Department and NASA do their best to develop combinations of winning teams when large companies need to be associated with small and medium enterprises and academic institutions. The recognition that innovation occurs throughout the entire enterprise is manifested in small-business set-aside requirements for nearly all major U.S. government procurements. Further, the U.S. also has a congressionally mandated program that funds only small enterprises called Small Business Innovation Research. It provides \$2 billion annually in R&T funding for businesses having 500 or fewer employees.

Europe continues to be far too politically correct

in this endeavor. Its way of organizing research programs is like spreading a little piece of butter on a very large slice of bread. European R&T authorities are trying to allocate projects very thinly across too many countries and often to those that do not have any competency related to a given project.

Obviously, this does not lead to optimal results. Europe needs to define itself on the basis of the strengths and weaknesses of each country and to foster areas of excellence in each state or region. Despite all the rhetoric, the 27 EU countries will never play in the same league but they all have a chance to excel in what they individually do best.

Sometimes you can find examples of a promising long-term R&T strategy in places where you would not expect them, such as Malaysia. Its leaders realize the country is too big to be only a brain trust, which is how its neighbor Singapore has positioned itself. On the other hand, such countries are too small to be low-cost producers. This is why Malaysia has decided to build up capabilities in selected innovative technologies such as composite materials. It deliberately avoided opting to build an aerospace manufacturing chain from scratch.

The Aerospace Malaysian Innovation Center is a public/private partnership. The government contributes 50% of the funds, the private partners provide the other half, and research is pursued around topics that are of great interest for the nation and have the potential to create a complete set of new businesses. The center is setting its sights on technology to develop jet fuel from algae, new standards in aerostructure manufacturing and sustainable green aeronautic materials, and improve technologies for systems integration.

We need these kinds of flagship programs everywhere. They can help both the private and the public sectors to rally together and push for a new renaissance of innovation. Today's European situation fosters wastes of both time and money, and we will end up once more with a complicated, bureaucratic and costly scenario that will discourage small and large private actors from actively entering these types of initiatives.

Europe and the U.S. should aggressively set up joint flagship programs to develop, for example, the next generation of fuels. The geo political consequences and moral hazards associated with reducing dependence on fuel from the Middle East are obvious.

The results of this Europe-U.S. collaboration to find acceptable alternative fuels would be positive competition. Both sides of the Atlantic would benefit from the available research, technology and production know-how, which would help them to compete in the new global market. ☉