Cheaper, Foreign Engineers

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If foreign engineers are well-educated and less-expensive, does that give these countries a competitive advantage? Not necessarily.

I just returned from a trip to Europe where I talked about entrepreneurship and open innovation (OI) with various groups in the Eurozone, and have come back with a mixed bag of predictions about the probabilities of success.

On a positive note, there are about a half a billion people in the European Union (EU), and most are well-educated and living a middle class life with some disposable income. Engineers seem to be well-trained, and since most education is free or costs very little, students seem to exit their universities without the heavy burden of debt many young Americans carry.

Salaries are often lower — highly qualified engineers in Italy make about half what their colleagues make in the U.S. — however, the burdened rate, what an employer has to contribute for taxes, health-care, etc., makes up roughly half that figure. An Italian engineer costs his company approximately two thirds the average price of an American engineer (and many speak flawless English). German engineers cost a bit more, but they are still below the price tag of their average U.S. equivalent.

If engineers are well-educated and less-expensive, does that give these countries a competitive advantage? Not necessarily. Many European countries have a bureaucracy problem, or an interference that state regulations impose on start-ups and established organizations. Hiring is easy, firing is not; putting money in a bank is easy, getting a loan is hard. Sound familiar?

European governments do, however, seem to be realizing that pulling money out of the middle class is not the answer, and the balance-the-budget model does not work. As British economist John Maynard Keynes preached, the pump has to be primed for a robust economy. Even the Germans are warming to a shared pool, because without spending from the rest of the EU, they cannot prosper. It seems as though Europe is beginning to do things we have yet to fully embrace in the U.S.

My recent travels began in Munich, for a speaking engagement at the IFAT ENTSORGA show [1]. While I'm not really sure what that stands for, it's billed as the world's leading trade fair for water, sewage, waste, and raw materials management. With 125,000 visitors from 80 countries, I felt compelled to believe them. It was obvious, from the depth and breadth of the show that while we are becoming aware of an impending water crisis in America (it seems silly to call something a crisis if you know well ahead that a problem is brewing but choose to ignore it), the rest of the world is actively engaged in the issue.

What was conspicuously missing was representation from U.S. companies. GE was

there (as they are everywhere) since they have manifested themselves as a true multinational company, but I felt like the lone American at the party. I suspect that will quickly change as global warming marches to its zenith in the too near future.

One of the more interesting stops on my UK tour was a tiny machine shop in Macclesfield, England, where I visited Progress Aero Works — a small company that turns out wonderful model airplane diesel engines as a hobby, but makes a significant part of its income re-machining pieces and parts that have been "precision" made in China. In other words, they're the company you turn to when those parts you ordered for a reduced rate in China have to be remade in the UK. It suggests that the on-shoring trend that we are beginning to see in the U.S. may be happening in Europe as well.

Upon arrival to my primary speaking engagement at the first European Open Innovation Summit (EOIS) [2] in Belgium, Brussels, it seemed as though companies were looking for a new path to profit by outsourcing innovation. The truth, as I have come to realize and preach, is that the OI movement is a mixed bag. As I have written in the past, the OI movement must succeed in this country, if we are to maintain our competitiveness in the world. Without overt government spending of strategic industries, we will never maintain our lead, if we are in fact leading. The only way we are going to keep up is through innovation, and OI is, perhaps, the only way for us to harness the innovative energies we have left.

In Brussels, I found that there is fairly unanimous frustration at the difficulty of getting OI adopted by corporations. One individual, charged with cranking up the OI effort for a big pharmaceutical company, described his organization as a supertanker, exceedingly difficult to turn and requiring enormous energy to gain momentum. Sadly, this particular company has had a strong reputation for innovation, which does not bode well for the rest of us who are trying to push innovation into other less outsider-friendly companies.

Then I witnessed a presentation from a mobile phone maker that is now preoccupied with apps and human connects through an admittedly elegant crowdsourcing model. At the back of the room, all I could think was that this company had once led the IT world, and was now lost and preoccupied with apps.

On a most positive note, my co-presenter at the conference was an incredibly charismatic Dane named Henrik Stamm Kristensen, entrepreneur for Blendhub S.L, an innovative Agri-life services company based in Murcia, Spain. After handing off control of a successful ingredient company, Henrik devoted himself to creating a device that takes the blending of food ingredients to the source of the ingredients. Feed ingredients into one end of the box, out comes a package of blended ingredients.

What was most exciting about Henrik was his enthusiasm for OI. He created this device by crowdsourcing "techies," his term for the retired, sent-to-pasture experts who have learned from years on the job. The techies helped him realize his vision of a perfect, deployable, blending system.

Now, the big agribusiness competitors are trying to buy this device from Henrik, to increase their bottom line against the smaller competition. The beauty of Henrik's position is that he is already well off and can afford to give smaller competitors a leg up on the big players, and that is exactly what he has done.

Thanks to Henrik and the many other people I met throughout my European travels, I look across the landscape of OI and realize that I have become a believer. While I've always understood the value of larger corporations opening their doors to innovative partnerships, I have now come to believe in the crowdsourcing model as well. Clearly, there are aspects of crowdsourcing that must be closely monitored, especially when it comes to intellectual property, but I am increasingly optimistic for the future.

I find myself hopeful that we as Americans can learn to tap this brain trust in a way that allows us to maintain, or perhaps regain, our position of world leadership in technological innovation.

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