

Looking into the Eyes of a Dinosaur

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By MIKE RAINONE, Co-Founder, PCDworks



Journalist Fareed Zakaria's CNN weekend program *GPS* provided yet another glimpse into the importance of innovation in American economic survival. He and his guests did a thorough job of detailing the role of innovation in the development of our country, discussing how innovation created the economic and military powerhouse we became, analyzing how we are losing our innovative mojo and offering a prescription for how we can get it back. Of course, the show prompted me to re-examine this whole business from my own perspective and look for a common thread.

Anyone with any knowledge of what has transpired in the past 30 to 60 years can probably predict some of the reasons we got to the top:

1. A valued, robust educational infrastructure largely untouched by war;
2. A well-developed manufacturing strength left over from the momentum of WWII and Korea;
3. The global threat of communism, which prompted continued technological development of our military strength;
4. A robust consumer economy, which reflected the pent-up demand of a people who had come out of the Great Depression and won a world war; and
5. The indomitable "can-do" spirit of a melting pot of people who had come here from all over the world looking for opportunity and freedom.

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I am sure there were other important factors, like a well-developed economic infrastructure, the stabilizing influence of the rule of law and a political system that was, for the most part, uncorrupted, but these were not the drivers that pushed us to the top. No, the one integrating factor for all of this was pretty obvious, at least to me.

My revelation was provoked by perhaps the most unlikely debate on the Zakaria show, which featured a California venture capitalist (VC) named Glenn Baker and Eric Schmidt, Google boss. Baker parroted the economic mantra du jour of Friedman and Greenspan, which we have lived with since 1980, insisting that federal government has no place investing in the marketplace and should not be seeding economic growth, innovation or, for that matter, anything at all.

If the marketplace needs it, Baker argued, the VC private equity folks would provide it. Schmidt, on the other hand, pointed out that VCs are not interested in heavy industry or anything that doesn't provide instant returns, and without the government, we would never, ever get real manufacturing moving again.

That's when it hit me. The common thread over the past 70 years has been the federal government, for everything from the incentivizing and funding of technical education to the winning of WWII, to the space race, to the domination of the Soviet Union through our technical prowess, to the residual economic strength in our manufacturing after WWII, to the explosive growth of the defense industry in terms of capability and innovation, to the seeding of innovation through DARPA, NASA and NIH.

Like it or not, the infrastructure that provided the fertile ground for the seeds of innovation to be planted has been our own federal government's investment in us.

Globally, when you examine the rise of Germany, Korea, Japan, China and other dominant economies, you find central governments pouring money into research, subsidizing industry, and otherwise providing the impetus for industry to innovate and create jobs.

Take for example the German domination of precision engineering and manufacturing, their domination of the machine tools industry, including lasers, and until recently, their domination of solar cell development and manufacturing. (China has now seized top spot in solar cell innovation and production due to their government intervention.) These things did not come about because their federal government sat idly by and waited for a VC to create the industry.

In Korea, the Daewoo Group did not come to dominate the world of shipbuilding and other heavy manufacturing, nor did LG become a major player, without the active participation of the Korean government.

How much of Japan's technological strength comes from MITI, their Ministry of Industry and Technology? They came to dominate television production, consumer electronics and a host of other industries, including automobiles, through the direct intervention of the Japanese government.

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The economic policies of the Chinese government, by suppressing internal demand and emphasizing exports, have built the largest creditor nation in history. Meanwhile, government investment in innovation, education and manufacturing are making China the greatest economic threat we have ever faced.

We cannot stick to the ridiculous notion that VCs and the free market alone can power our economic growth and survival. Right-wing ideologues stick to the preposterous notion that government has no role in the economic life of this country, as if we have learned nothing from Enron, AIG, Bear Stearns and the current mess that laissez faire capitalism has brought upon us.

Today, the mantra of trickledown economics, which George H.W. Bush appropriately called "Voodoo Economics," and its corollary that all government involvement is bad and hampers growth, has become de facto truth — as if repeating a lie over and over again makes it true. Please note that I believe whole-heartedly in capitalism; heck, I run two companies. I am a capitalist, but I do not believe that unchecked greed is the best way to run an economy.

I merely suggest that we learn a lesson from the Far East, specifically Japan, Singapore, China and Korea. Government funding is absolutely required if innovation and manufacturing growth are to flourish.

I do not think of myself as old. I don't think any of us do, no matter what our chronological age. Even at 62, I have the same mental attitudes, goofiness and personality I did when I was 18. Obviously, I creak a bit more, but spiritually, I think of myself as young.

However, when I look into a mirror, I see the face of a dinosaur. I see the face of a species, a Homo Sapien, an American innovator, which is going extinct. We are threatened with extinction because the conditions under which we once flourished are going away or gone forever, and like the Brea tar pits, we are caught in a mire of our nation's own making and from which we may never emerge. Not without government involvement, not without a complete turnaround in education and not without an ability to manufacture what we need to survive.

We still have the spark, but that spark is dying, and I can see that in my own eyes.

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