



Pioneering Spirit

Arizona has a chance to create the Endless Frontier of Innovation and Discovery

By William C. Harris

We are all familiar with Tom Friedman's remarkable translation of competition in the 21st century through his book "The World Is Flat" or our own personal experience. And readers of *TechConnect* understand that the economic position of the United States is being challenged on a number of fronts and that all companies are, essentially, now mobile.

This reality has changed the economic playing field and we all need to appreciate that companies must make decisions to create and retain a competitive advantage to be successful. In our "flat world," countries and states focus on attracting and retaining companies that offer high-skilled and high-paying jobs to enhance economic growth. While cost is always an issue, brains (human talent!) and speed in decision-making have become key attributes to locations for a knowledge-driven company.

Arizona will increasingly be challenged to keep our high-quality and high-tech companies if we do not commit and measure our performance and improvement in all areas of our education system so that we are recognized for having a world-class workforce. We must aspire for "best in class" and measure our progress. In my view, the mobility of companies such as Boeing, Honeywell, Intel, Raytheon and others require a sense of urgency and focus on this issue of "talent."

We need an Arizona economy that is more like a good investment portfolio: a broad and strong mix of good companies and funds. Thus, it is useful to ask if the state is too dependent on the construction, real estate or "people-growth" sectors that may not create the wealth we need for our future or the sustainable economy we desire. A strong focus on excellence and innovation is needed so that we are adding value and do not end up with the low-wage side of the service economy as we grow the state.

I believe strongly that innovation will be driven by the quality of a nation or state's educational system and how effectively its workforce is integrated into and able to exploit the ICT sector (information and communications technology). Information technology will be the infrastructure (i.e., brainware) that underpins the aerospace, microchip, sustainability, manufacturing and bio-medical industries going forward. States that have exceptional talent in the ICT areas will have a competitive advantage.

Growing Our Own

Arizona has an opportunity to obtain a highly competitive position by investing in ICT areas that add value and support technology convergence if we commit to build best-in-class university aerospace, mechanical, electrical and computer science capabilities. We want to be known as the state

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that produces exceptional technical talent (at all levels) and people who are inspired to grow with Arizona and to grow new industries so Arizona becomes the Endless Frontier of Discovery And Innovation and is recognized as such during the coming decade.

Rather than talking about cutting education funding, we must commit to and insist on the true excellence needed. We cannot be content until our engineering schools are on par with the best in California. That must be one of our shared goals.

We also need a consensus for true excellence and effective R&D partnerships between the private and public sectors to create a competitive advantage for Arizona. Why?

Because we share a commitment to our children and grandchildren so they can remain here and excel.

Science Foundation Arizona is starting its second year and is beginning to help connect the unique industry assets in the state to public-sector researchers in new ways that require partnership and performance. And we are committed to working with the private sector and Arizona universities to help support engineering programs that are best in class—but this has to be a shared value and determination.

If the pioneering spirit will commit to and invest in excellence, a more robust economy will be the outcome. Arizona can become the Endless Frontier of Discovery and Innovation—so that future Googles will emerge from this land of beauty and opportunity. ■



William C. Harris, Ph.D., is president and CEO of Science Foundation Arizona and former director general of Science Foundation Ireland.

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