

Cultivating Florida's Technology Workforce

The Florida Technology Council, by Cyndy Loomis

The Challenge - The number one challenge faced by Florida technology firms—and quite frankly all Florida firms that use technology to provide their products and services—is finding and cultivating enough talent to grow their businesses. Florida currently has a negative unemployment rate in technology, meaning there are insufficient workers to meet the workforce demand. This situation constrains market expansion and increases labor costs through escalating salaries. In turn this hinders Florida's economic growth as a technology-centric state. Tightening regulations on H1-B visas by the U.S. Citizenship and Immigration Services is adding to this labor squeeze.

The Impact on State Government - As government agencies increase their technology-based services for citizens, the need for qualified talent will become more critical. The rapid and widening gap between government pay rates and the salaries offered by the private sector is causing a shift of state technology workers to commercial firms. Agencies have reported for years that many of their technology positions remain unfilled and the challenge of finding and retaining talent remains problematic.

Let's examine how this situation impacts the area of data security. The greatest demand, and correspondingly the greatest shortage of workers, exists in cybersecurity where there is a 2 million worldwide labor shortage. State agencies are unable to hire cybersecurity professionals at competitive pay rates. While contracting with expert vendors for needed skills is an option, the cost of doing so is often beyond the means of an agency's allocated budget. Florida's Agency for State Technology has taken action by providing cybersecurity training for state IT workers, but it also recognizes that some of these individuals will depart to work in the private sector once trained.

Current Efforts - Florida's universities, colleges, and schools (both public and private) have taken proactive steps to address our state's technology talent shortage. Despite their best efforts there are currently 40,000+ advertised IT jobs in Florida and 16,000+ new jobs added each year. Florida has pockets of excellent and innovative technology training. Andrew Jackson High School, Tallahassee Community College, and the University of West Florida have created premier centers producing cybersecurity talent. The Florida Institute of Technology in Central Florida is graduating technology students with many of them remaining in the state. Florida's High Tech Corridor supports the stemCONNECT program which provides middle- and high-school teachers access to Science, Technology, Engineering and Math experts to present real-world technology situations to their students. These are just a few of the hundreds of STEM programs.

Next Steps – Florida lacks a holistic and statewide approach to address the widening gap between technology worker supply and demand. However, we also hold within our grasp the potential to outpace other states' economic growth by addressing this technology talent deficient. One strategy is to create a clearinghouse that identifies Florida's technology training programs that are most effective. This would enable the Florida Legislature to target funding to replicate the most successful models. New approaches could also be created and appropriately funded, such as providing economic incentives, creating scholarships for technology students who remain in Florida, establishing a technology accreditation center (similar to NCCER for the construction trade), or learning from other statewide industry groups (such as the Advanced Manufacturing Leadership Council).

Employers may also want to reevaluate the level of education required to work in a technology profession, an option that would surely broaden the pool of prospective candidates. In the construction industry not all workers require a post-secondary education. The architect, engineer, project manager, and general contractor have a professional education; however, framers, roofers, and painters do not. The construction trade has learned to hire the appropriate skilled labor for each task at hand. Similarly in the technology field, the computer engineer, project manager, and security professional require advanced degrees, but can some programmers and graphic designers perform equally well after completing a well-constructed and defined certification program or after attending a technology-focused high school?

Florida has the opportunity to take strong and swift action to resolve the technology skill shortfall in our state in order to spur economic development and growth. A plethora of innovative educational models exist both within and outside of Florida to assess and potentially emulate. Only by initially creating a clearinghouse of successful educational programs and leveraging best practices can the most impactful legislative recommendations and actions occur to enhance our economy through technology skill cultivation and advancement.

About FTC - Technology is the foundation of the new worldwide economy and is a critical element for extending Florida's growth beyond tourism and agriculture. Every Florida business, citizen, and the 27,000+ registered technology companies rely on technology for business innovation, growth, and prosperity. Other state economies are growing faster than Florida by becoming knowledge-based, globalized, entrepreneurial, IT-driven, and innovation-focused.

The Florida Technology Council (FTC), a 501(c) 6 educational non-profit association, is playing a pivotal role in defining Florida's technology future by highlighting four areas where technology advancements are critical: identifying effective economic policy tied to technology, creating Florida's knowledge-based economy, developing a technology skilled workforce, and securing and protecting citizen data.