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My View: Mobile apps, biosciences helping Florida's economy to blossom

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What do mobile applications firms such as NovoPayment and biosciences companies such as U.S. Stem Cell have in common? Both are examples of arenas in which the state of Florida has truly blossomed during the past decade. Tourism, trade, real estate, retail and agriculture may be the mainstays of our economy but knowledge-based companies and individual entrepreneurs are altering the landscape of the state's 21st century economy.

The globalization of technology and markets has fueled a competitive environment in which regions within states strive to bring together business, academe, government and the nonprofit sector to create knowledge-based "clusters." For Florida, the assets of climate, low cost of living, and tax incentives contribute heavily to a business environment where science and technology, innovation and creativity proliferate at a rapid pace.

Mobile applications and biosciences are proliferating and offer great promise for our economy, achieving notable results to date. At the same time they are straddled with certain constraints. On the plus side, affordable software and platforms for mobile apps are widely available and Millennials, especially, are keen on embracing technology-based entrepreneurship.

Scores of startups in South Florida, Tampa Bay, Orlando and Gainesville are dotting the map and doing their part to retain homegrown talent and attract young people from elsewhere, with local economic development agencies, foundations, incubators and accelerators catalyzing this new ecosystem.

On the minus side, there is a level of irrational exuberance regarding tech startups in terms of the size of employment multiplier effects (most employ fewer than five people) and staying power (the vast majority of startups die within three years).

The gap between mobile apps that are “nice to have ... cool and fun” and those that are “essential ... game-changing” is huge. Nevertheless, like salmon spawning, the survivors and newborn will make their mark; and startups too numerous to mention have put South Florida on the global map of technology entrepreneurship.

In the area of biosciences, Florida has built a robust life sciences industry during the last decade. The economic impacts have been great, especially with respect to employment and wages. Florida’s life science industry supports 79,000 direct jobs with 5,476 establishments located throughout the state. Average salaries exceed \$75,000, almost double the state average. According to BioFlorida, the biotechnology sector grew 75 percent in the 2007-2013 period.

To illustrate, the University of Florida’s Office of Technology Licensing has helped create more than 150 new companies, mostly bioscience, in the last 13 years. In terms of financing bioscience, private equity firms invested \$33.9 billion in 178 Florida companies in 2014, ranking Florida fourth nationwide for private equity investment. The majority of these were in the healthcare and life-science area.

However, on the negative side, venture capital and related angel investment have been relatively scarce, despite last year’s nationwide growth in these forms of financing. Total venture capital in 2015 was less than eight-tenths of 1 percent for the country’s third most populous state.

Besides financing, bioscience needs the very best human capital. Here, too, Florida comes up short. Although the state has an infrastructure of many good institutions of higher learning, only two universities (the University of Florida and the University of Miami) are in the top 50 in the nation, while the state (third in the nation in population) ranks 46th in per capita expenditures in higher education.

Recognizably, Florida — particularly South Florida — abounds in opportunities beyond technology and science. Miami is [now the second most entrepreneurial city in the U.S.](#), with the highest startup density in the country at [247.6 startups per 100,000 people](#), according to the Kauffman Index. Firms such as World Product Marketing, which aids inventors with patenting, marketing, prototyping and manufacturing, are vitally important to technology startups and life science companies, as well.

In essence, Mobile apps and biosciences will grow in importance as two key drivers of Florida’s 21st century knowledge-based economy — one that will fuel growth and

development with good, high-skilled and well-paying jobs, investment opportunities, and a better life for the state's residents.

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