

Copying overseas developer successes not for South Africa

By Cara Turner 27 Oct 2017

Alarming national headlines mean it's easy to take a sceptical view of our collective future prospects. Yet much of what we have achieved in the recent past is enormously positive. Let's take the ICT sector as an example of local excellence in action.



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For many years, South Africa had two cellular operators, and for a hundred years before that, just a single fixed line operator. Today, consumers can choose amongst half a dozen mobile and virtual cellular network operators, and a couple hundred internet service providers (ISPs) from just one twenty years ago.

This growth in choice matters because it's GDP-boosting stuff.

We can still be optimistic and 'proudly SA' while acknowledging that real challenges exist. South Africa's many homegrown ICT success stories should not distract us from acknowledging that we have not solved the deep ICT skills shortage. How else do we solve it if we don't face it? Indeed, we might have had a dozen and not half a dozen cellular networks in South Africa if we had more invested in training telecoms engineers years ago.

Innovation out of affluent communities

South Africa has a great track record for innovation with Snapscan and LifeQ being two recent examples, but it's a reality that most of the innovation around hardware and software comes out of affluent communities.

This means a huge pool of bright potential talent remains untapped.

This skills shortage presents a huge constraint to the much-needed economic growth necessary to make headway into South Africa's socio-economic issues. Growing the sum total of what the country can produce is the best tool we have to deal with grinding poverty – particularly when new jobs are the natural result. The ever-growing software market, and particularly mobile uptake, seems to present the perfect opportunity.

Unfortunately, the skills shortage isn't going to go away, by 2025 or even by 2030. And we can't look to India or China's massive outsourcing success stories and expect to replicate them here.

These stories have been decades in the making, and as we stand today, South Africa just doesn't have the broad foundational skills coming out of our primary and secondary education structures.

We are simply not producing enough school leavers with the analytical thinking tools required to make it in the ICT sector. The computational thinking skills that are required of the great developers who can help boost our economy are common in our affluent schools yet all but absent from standard government schooling.

The software developer talent pool that we can call upon is primarily focused on university towns, and it's terribly small.

The challenge

And this is where the real challenge lies. Communicating the complex world of app development, from responsive design to web servers, is hard enough without the added challenges posed by a poor foundational education complete with nonexistent access to skilled maths and science training.

We have accepted the challenge of finding new ways to approach training and the initial identification of coding talent. This has culminated in a locally-developed approach that works. It includes pre-course bootcamps that put all applicants through their paces to evaluate learning progress against a complex set of indicators.

We train developers in a way that enables them to quickly transition to a rewarding career while contributing almost immediately at a very high level. This is not your basic tech support.

This is about bright young South Africans creating the building blocks of a future knowledge-based and information-powered economy.

This home-grown solution to a global problem is set to change the shape of software training in South Africa and we are very excited about that. Working with the talent available and alongside like-minded supporters in the form of prospective software developer employers, we plug promising school-leaving talent into the industry after one year's intensive industry training in current programming and collaborative skills.

A cooperative approach to nurturing SA's software developer talent

We employ a cooperative approach to nurturing SA's software developer talent, constantly reviewing what we do and what industry needs, identifying patterns for success that replicate with each new engagement.

These efforts have proven to make a positive impact on the future prospects of codeX graduates.

A rushed, copycat approach to building a viable local software sector just won't work.

Software development, like nation-building, is a team sport and collaboration is how we'll all create something worthwhile and unique for our children to inherit.

ABOUT THE AUTHOR

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