

## **No quick fixes for ICT skills shortages**

By Bruce McCabe

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*"We'll all be rooned," said Hanrahan,  
In accents most forlorn,  
Outside the church, ere Mass began,  
One frosty Sunday morn.*

So begins Said Hanrahan, an iconic Australian poem penned by John O'Brien in 1921. Hanrahan is an inveterate country-town pessimist, and the disaster he is wailing on about is the possibility of drought. Eventually, just over halfway through the poem, it rains and keeps raining, only for poor old Hanrahan to start up again: "We'll all be rooned" he says, but this time he is certain it will flood.

In this newspaper and others, every week without fail, you can read wailing about Australia's ICT skills crisis. If it isn't the manager of an ICT company, it's the head of an industry association or a politician. "We'll all be rooned" they say, "because the universities aren't producing enough of the right graduates and we can't find technical skills we need!"

Ironically, if you go back a couple of years you will find stories about unemployment in the ICT sector, complete with quotes from workers on the breadline that have been looking for IT jobs for a year. "It's a buyers market", they wail, "and technology professionals have become the new working poor!" The same industry associations scream blue murder, but this time over lack of jobs. Reading these stories side by side makes your head spin.

Far too many people out there are thinking short term and believe in quick fixes such as cutting visas to foreign workers or telling universities to make courses more attractive.

Like Hanrahan, these panic merchants need to take a pill and understand what can and cannot be influenced. The ICT "industry" has booms and busts like any other (what else would you call the dot.com era versus what came afterwards?) and when it comes to highly technical skills there will always be shortages of some kind—Linux administrators one week, SAP administrators and C# programmers the next—technologies evolve too quickly for it to be any other way. New demands never stop coming and supplies never quite catch up before the next spike.

All we can really ask of universities is graduates with sound computer science and high adaptability—adaptability being the core skill of every successful ICT professional. Asking governments or educators to micro-manage the mix of technical skills coming into the community is ridiculous.

That doesn't mean Australia wouldn't be better off with a bigger ICT skills base, or that governments don't have a role to play in building it. We would, and they do. The real answers, however, lie at more fundamental levels in the Australian economy, a message that many government ears prefer not to hear.

Students do not enrol in computer science because universities make courses attractive; they do so because the jobs they expect to get afterwards are attractive, and attractive jobs have as much to do with working at the cutting edge of innovation and being immersed in a creative environment alongside interesting colleagues, as they have to do with salaries. While many graduates end up taking jobs in traditional companies, the picture in their heads on enrolment day is the R&D centre at Google, not the data centre at Qantas, and in case you haven't noticed there aren't many Google's in Australia.

Building up Australia's ICT skills base is much more closely tied to building up innovation intensive industry in this country (which means succeeding at the very significant challenge of creating an environment much more favourable to research, development and commercialisation) than anything else.

Another fundamental issue is the massive shift towards 'user pays' tertiary education in Australia. No matter that the fees only need to be paid when graduates earn a salary, I constantly meet students choosing not to go to university because being saddled with what they see as a huge debt scares the hell out of them. Furthermore, a computer science lecturer told me only last week that many of his graduates secure jobs overseas with no intention of returning explicitly to avoid the debt altogether. These outcomes don't help build an ICT skills base, nor a skills base of any other kind.

I note that Queensland Premier Peter Beattie is sponsoring a national ICT skills summit in Brisbane this June. All power to him. It is an important subject and such a conference could be very valuable. I only hope the attendees will be brave enough to ignore the 'quick fixes' and tackle some of the real issues.

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