

IT INNOVATIONS

Where have all the communication technologists gone?

As older ICT professionals retire, the next generation is slow to take up the cause, writes **Helen Meredith**.

Between 70 to 80 per cent of Australia's productivity growth in the past decade has been attributed to information and communication technology. That makes the severe shortfall in skilled workers in the area a matter of extreme urgency.

The crisis comes as the baby boomer generation of ICT professionals nears retirement, as fewer students are attracted to ICT as a career and as the demand for ICT skills explodes across all industry sectors.

A lack of appropriate people power could stall the economy and starve innovation. It also puts at risk prompt improvements to key service areas such as health and medicine and urgently needed work on critical infrastructure. Failure to address the latter could have a negative impact on export initiatives such as Australia's mineral trade with China.

The skills crisis is not restricted to Australia. Tom Kucharvy, senior vice-president at Ovum Summit, calls it a demographic time bomb. He points out that in North America an estimated five million new workers will enter the workforce in the next 12 years, while 25 million will retire.

"North American IT shops may well be facing a staffing perfect storm," he says. "The impending mass retirement of baby boomers will deplete staff and starve many companies of critical skills. Meanwhile a shortage of replacements due to a

smaller crop of college graduates and a dramatic decline in students planning to enter IT-related fields will compound both the problem and the urgency facing corporations."

Few companies had even begun to address the critical need to manage a smooth transition to a new generation of employees, Kuchavy says. He is calling for a coalition of government, educational institutions and the private sector to assess the skills and resources needed in the US over the next five, 10 and even 20 years, rather than trying to duplicate or replace current skills.

Gavin Cooke, director of Altis Consulting, says it's not just a matter of having the right technical know-how. Successful services companies need professionals with high level skills in communications and other so-called soft skills.

"Most people are left to pick up these skills through experience but why aren't we proactive as a country in putting basic communications at the forefront of our tertiary training," he says.

Australia is no longer able to depend on a future supported by resources. The country needs new ideas and new directions. As John Dryden of the Organisation for Economic Co-operation and Development says: "We may not be discovering new continents or encountering vast deposits of new minerals, but growth and living standards are being strongly influenced by innovation."



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OECD experts, quoted in a recent article in *The Economist*, say most innovation is the result of globalisation and new technologies. It is globalisation and the internet that enable countries like China and India to prosper as ideas flow freely across the globe and skills are tapped at source. They are becoming the breeding ground for innovation. Leading

"They want to see that same passion emerge in a new generation."

First World IT companies like IBM, traditionally drawing on vast research and development resources, no longer have a monopoly on innovation or the best skills base.

So where does this leave Australia – short on ICT skills and facing a future with declining productivity?

A debate hosted by the Pearcey Foundation earlier this month in Brisbane asked: "ICT is a great career choice – true or false?"

The two debating teams were led by high school students. The IT professionals who comprise the Pearcey Foundation were hoping that by recruiting student debaters they might gain some fresh insights. They say not enough is being done to tap into the mood of the generation still in school. The Pearcey Foundation was established by a group of ICT elders to celebrate the achievements of Australia's indigenous ICT community and to provide home-grown digital-age heroes as role models for young Australians.

Many established IT professionals are passionate about an industry that has transformed society and are frustrated at the lack of interest shown by Australian students in an ICT career. They

want to see that same passion emerge in a new generation and warn that it is critical to Australia's future as a knowledge economy.

Angus Robinson, chief executive of the Australian Electrical and Electronics Manufacturers Association, says: "Governments and industry together have not put in place the necessary, long-term career development programs aimed at attracting Australia's best and brightest into high technology industries."

Robinson warns that the funding model for universities will need to be changed radically to make any difference. He and Sheryle Moon, chief executive of the Australian Information Industry Association are looking to the "ICT: Start Here. Go Anywhere" program launched last year to help bridge the gap with school students by giving them a chance to meet ICT professionals and hear first hand why they love their jobs.