Shortage of info tech workers leaves employers disconnected

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Even with a thriving resource-based economy, a low unemployment rate, and lucrative job opportunities, the "Alberta Advantage" has proven to be a disadvantage for some other industries—especially for the information technology (IT) sector.

Combined with rising wages, record-low enrolment in IT postsecondary programs, and negative perceptions in society of IT careers, the demand for qualified IT professionals already greatly outnumbers supply. The North American Computing Research Association predicts that there will be a shortage of 100 000 IT-related jobs by the year 2012.

"It's becoming more difficult to find new people with the right qualifications. We're even having trouble recruiting summer students and interns. This year, we will likely be looking to locations outside Edmonton to find new hires to the company," explained Fraser Gallop, President of Onware Software Corporation, a local University of Alberta spin-off company that develops online event management software.

With an abundance of well-paid employment opportunities, especially in the trades and the oil/gas industry, some IT employers are having difficulty recruiting and retaining existing employees.

"The other problem that we're facing is that retail jobs are paying well above the minimum wage. This is forcing us to raise salaries to retain our current staff," Gallop said. "We have interviewed people that expect more than double the salary that we're willing to pay," he said, adding that Onware even supplements salaries with stock options to prevent employee turnover and attract new employees.

The IT shortage may also be the result of low rates of enrolment in postsecondary IT programs, including the U of A's Computing Science program.

"Beginning in about the year 2001, we started noticing a decline across North America in students going into Computing Science, and over the years that decline accelerated," explained Dr Jonathan Schaeffer, chair for the Department of Computing Science, last Tuesday at a career forum for computer science students.
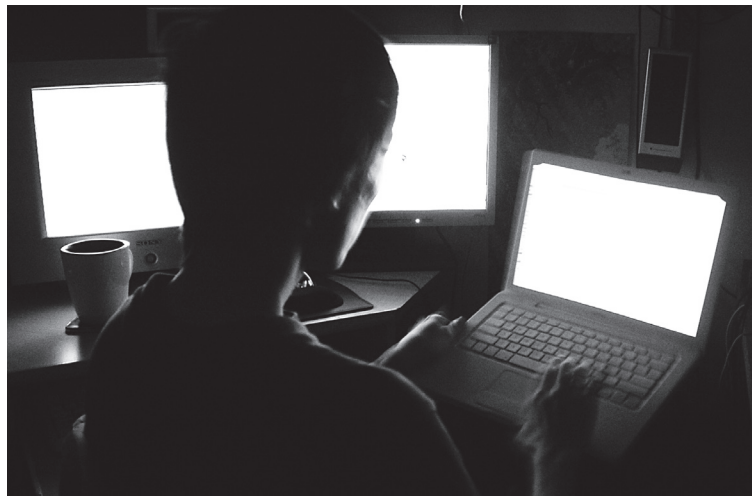
"Enrolment in first-year is about 25 per cent of what it was five years ago," Schaeffer said. "Last year was the last of the big graduating classes—we graduated about 140 people in Computing Science. I think this year we'll probably have about 40 [graduates]."

While enrolment and demand for IT postsecondary programs saw a considerable drop following the dot-com bust at the start of the decade, Schaeffer also believes that negative perceptions of computing science and IT careers may be a deterrent to enrolment—especially among high-school students.

"Parents are discouraging students. Parents will read about companies like Nortel and other unemployed computer scientists. They'll hear about outsourcing to India—that was true a few years ago, but it's not true now. The job market is bigger than it ever was—greater than the peak of the dot-com era," he said.

Schaeffer believes that parents, teachers and high-school guidance counsellors need to be better informed and educated about the importance and demand for IT careers. To address this concern, the Department of Computing Science has hosted youth summer camps, paid high school internships, tours, conferences with teacher and private industry, and even a new advertising campaign to attract applicants.

Yet, negative stereotypes of computer science and IT careers still exist amongst greater society.

"It's a credibility problem, that computer scientists are perceived as more individual workers as opposed to team workers—that they're working long hours and they're nerdy hackers. Those kind of connotations hurt the field; women for example don't like those negative connotations. The number of females going into computing [sciences] has seen even a more dramatic drop in the last few years," Schaeffer said.

But new initiatives to attract women stress the value of an IT career.

"Through joining WISEST—Women in Scholarship, Engineering, Science and Technology—in high school, I was introduced into the world of computing sciences. I subsequently decided to follow that for my university career," explained computer science student Leah Hackman.

Despite the looming shortage, at least today's computer science students will have a selection of job opportunities to choose from.

"The number of employers that contact us in the hope of finding an intern has been growing steadily over the past three or four years, to the point where our internship students now have considerable choice when it comes to deciding where to work," said Dr Ryan Hayward, director of the student internship program for the Department of Computing Science.

When asked about the possibility of companies outsourcing more white-collar IT jobs and computer programming jobs to foreign companies, in order to mitigate the IT worker shortage, Schaeffer remains optimistic that opportunity will still abound in Canada.

"The real demand is for computer scientists—people who understand the technology well enough that they can develop the leading edge products that Canadian companies want to develop," Schaeffer concluded.

ALL WORK, NO PLAY Negative IT job stereotypes leading to fewer recruits.

PHOTO ILLUSTRATION: JAMES LEUNG

Research discourages using public arenas for storage of dead bodies

"Right now the discussion is at what point do we start to initiate an action plan."

Yonge also explained that, while Capital Health's Medical Officer of Health has the legal ability to shut the University down and tell Administration what to do, he has throughout deliberations indicated he wants a relationship where he consults with and works with the University. And to date the University and Capital Health only have one memorandum of understanding completed—regarding the care of dead bodies and where and where not to store them.

"The capability of storing dead bodies in the province is actually quite low and so we do have a lot of facilities for this [but] from past readings and research Capital Health knows they cannot use a [hockey] arena for the storage of a dead body ... that would be typical ... but after that has happened people refuse to use that recreational facility, and rightly so," Yonge said.

Drawing from past experiences, Yonge outlined the Committee's desire to have future chaotic events handled as calmly as possible.

"The meningitis [outbreak] was a huge scare for us—it killed young people," Yonge said. "[And the next time a pandemic hits] we don't want people panicking. We want people being level headed, making really good decisions [and] working together."

But while talking about the worst-case scenario can be an eerie process, Omer views the work and planning being done by the Public Health Response Committee as reassuring.

"It's a really scary process, but what's really satisfying in my mind is that the University really is mobilizing on this topic and really is looking at what is best for students [and staff]," Omer said.