What CIOs need from IT schools

Over 60 per cent of business respondents in a recent US survey said IT graduates weren’t trained to work in the real world. Susan Tsang finds out how Asian schools are revamping to stay current.
A recent roundtable held by MIS Asia was that IT graduates weren’t ready to hold jobs in the real world. Among the complaints: Choosy attitudes that lead to job-hopping. Graduates who think they know everything. And grad who want to only handle servers and networks, shying away from heading projects or facing users and the business.

To boldly go where no techie has gone before

With businesses leaning more heavily on technology, the demands on new hires are growing beyond simple office skills. Admin and sales staff, for example, now need IT knowledge. However, IT workers, who already have those skills, are expected to have strong business acumen as well. "IT functions as a support, enabler and driver for business activities," explains Mohammad Irfan, CIO of Bank Rakyat Indonesia. Irfan defines most IT initiatives as "IT-based business projects instead of just IT projects."

While their needs are clear, employers generally believe that IT courses have not kept up with the times. In a survey by US-based publication CIO Insight conducted last October, over 61 per cent of the 580 respondents felt that college graduates are poorly prepared to work in the real world of business IT. These young techies may be able to write code, but 74 per cent of the CIOs surveyed believed they lacked skills in areas such as project management, and 71 per cent considered them woefully unprepared for business operations.

The good news is that educational institutions in the region are not blind to these developments in the business world. From the vantage point of their ivory towers, IT academics have been designing curricula to turn out more business-savvy graduates with the right mix of skills for the workplace. It is the main job of Bangkok University to offer curricula that allows students to successfully work after their graduation," says Attipa Jullapisit, the director of Bangkok University’s Computer Centre.

Far from passing the buck to hiring companies to train up their own staff, Jullapisit feels that since universities specialise in teaching and training, "it is fair enough that the companies leave the training part to the university."

Her words are echoed by Steven Miller, dean of Singapore Management University’s (SMU) School of Information Systems. "Our entire program is designed to produce business IT professionals," he asserts. "As a university, it is our job to prepare students to enter the workforce, and to adapt to what we know will be a very dynamic and uncertain future over the next several decades. It is essential that we do both of these things."

Miller, who also serves as practice professor of information systems, sees the responsibility of educational institutions as
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Steven Miller, Dean, School of Information Systems, Singapore Management University

stretching far beyond simply training students to become employable. “If we only aim to prepare students to enter their very first job, they will not have the mindset needed to grow over time,” he says. “So we have to look very closely at both near-term and long-term needs for professional development and education.”

The new U

With these goals in mind, SMU has designed its undergraduate IT degree so that one-third of its focus is on technology, design, and applications. Another third consists of a non-IT “second major,” where students may choose courses offered by SMU’s business, accounting, economics and social science faculties. The remaining portion comes from the common university core, modelled after the liberal arts component of American-style universities.

“As a university program, we have the obligation to prepare students to more effectively integrate into the workforce,” notes Miller. “We need to inculcate the ‘learn how to learn’ mindset, and give students both the means and the confidence to face new situations and figure out how to proceed, combining what they know, what they can research on their own and what they can learn through working with and through networks.”

The IT component naturally aims to equip students with enough basic skills to handle the technical aspects of their work. The second major allows students to opt for studies in areas such as finance, marketing, supply chain operations, management, corporate communications or sociology. “Any one of these options adds an incredibly important dimension and new perspective to our business IT students,” observes Miller.

The common core courses are aimed at helping students improve their reading and writing skills. After going through the wide scope of subjects, it is expected that “all of our students have strong grounding in business-related areas and in the soft skills that are so important for effective communication and consultation,” says Miller.

Students at Bangkok University can choose between two paths. Those who prefer to concentrate on technical issues can opt for the traditional computer science program. The IT program, on the other hand, adds business and legal courses into the mix. Subjects on offer include business law, financial information systems and strategic management. They are aimed at giving students a stronger grasp of the non-technical issues that their jobs might entail.

Bangkok University not only seeks to turn out well-rounded IT graduates, but to boost the tech savvy of their business graduates by offering a computing program to its business students. Besides their core studies, students learn about computer applications in manufacturing and finance, statistical software for decision-making and microcomputer applications in business.

Students who enter institutions like Bangkok University and SMU can rest assured that their degrees don’t just look good on paper. The programs have been designed in consultation with the business world. “We talk to business people frequently, and they are strongly supportive of our vision of the hybrid business-IT professional,” Miller says. “The university is producing business-IT graduates. This is a result of the way the whole degree is structured and the culture of the entire SMU community. Our students feel very comfortable with projects that include both business process and strategy issues, as well as technology issues related to how service and process innovation can be driven and supported by IT.”

Jullapit concurs. Honed by interaction with IT companies, Bangkok University’s program now produces students who conform to “an instant package that can immediately plug into a position and work.” The university also cooperates closely with firms such as Cisco Systems, Oracle, Sun Microsystems, Microsoft, and Sybase to cover topics like networks, databases, Java programming and mobile devices in its curricula.

No room for complacency

However, neither IT graduates nor the companies that hire them should fall into the trap of assuming that all the hard work is behind them. It is unrealistic to expect an undergraduate program to deliver real-world business experience.

“It is a fact of life that industries and IT change and evolve continuously,” says Miller. “Therefore employees will somehow have to keep changing mindsets and learning a lot of new details in order to survive over time. Our students will have to learn an incredible amount once they enter their first job, or any subsequent job.”

“IT makes it possible, to some extent, for people to learn more on their own. But in addition, people in the workforce will have to be always mentoring others through a structured training program or informal means,” he adds.

Just as tertiary institutions have already taken up the challenge of preparing students that businesses want to recruit, the firms that hire them have to ensure that they stay relevant. Observes Miller: “A company that has no need to train its employees really has nothing special to offer to either its employees or its customers.”

Susan Tsang is a contributing writer to MIS Asia.