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Headline: ICT sector faces acute skills shortage: Study

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The information and communications technology (ICT) sector is still facing an acute skills shortage despite a recent slew of initiatives to boost talent in the industry.

A study by the Singapore Management University (SMU), in partnership with JP Morgan, has found that demand for ICT workers is expected to keep rising and the labour market is struggling to keep up.

The report outlined skills challenges facing Singapore, Malaysia, Indo-

nesia, the Philippines and Thailand. It found that Singapore's ICT sector – which employs about 150,000 workers – faces an especially pressing skills shortage.

The Government projects that by next year, the industry will require a further 15,000 workers, particularly in the areas of cyber security, data analytics and development and network infrastructure – a number that could rise to 30,000 by 2020.

The shortage of skilled workers in cyber security is acute, especially at the middle and senior levels, owing to insufficient training schemes and entry routes for mid-career pro-

fessionals, the report said.

In 2012, only 0.8 per cent of the 144,300 ICT workers here were considered IT security specialists. Relatively little progress has been made since then to narrow the skills gap, the report noted.

Mid-career professionals, managers, executives and technicians often find it tough to move into the industry because rapid technological change means they face steep learning curves. They also often have to take pay cuts.

There is also a shortage of workers for lower-level software engineering and programming jobs.

Singapore has so far addressed this by importing foreign workers, the report said. But this has created a vicious circle: The influx of foreign workers leads to lower wages, resulting in local graduates shunning this segment, which in turn creates more demand for foreign workers.

Mr Bryan Yeo, the head of capability and capacity development at the Singapore Infocomm Technology Federation, said the speed of technological change makes it difficult for institutes of higher learning to sufficiently prepare students to work in the industry. "They can introduce IT-related

courses, but it's impossible to predict what technology will be the next big thing... Whatever they learn in school now might not be relevant when they graduate," he noted.

The IT sector also needs an image makeover to "make it look sexy again", said Mr Yeo.

"There's a lot of talent leakage as well – students who study IT courses might end up joining another sector, like banking. We have to show them that prospects are good, that it's up and coming."

Mr Foo Siang-tse, the managing director of cyber security provider

Quann, said the local cyber security industry is still in its infancy.

"There is a shortage of professionals with deep cyber security expertise that is borne out of experience. This can only be addressed over time as that is what is needed to build and hone critical cyber security instincts," he said.

The SMU and JP Morgan study also found that electronics and electrical engineering manufacturing – the largest component of Singapore's manufacturing base – faces a significant skills gap.

A lack of necessary work experience and specialist skills as well as the perceived uncompetitive pay are key reasons why engineers are shunning the industry.

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