



Ms Chan and Mr Sim work in the InfoComm Infrastructure Programme Centre of DSTA, where they manage and support the IT infrastructure for a Mindef network used by the Singapore Armed Forces and defence technology personnel. PHOTO: DSTA

Never at a standstill

Ms Chan Mei Lin Melene and Mr Sim Sze Liang are kept on their toes in their dynamic IT jobs at DSTA

by Lynn Seah

INFORMATION Technology (IT) is a sector that is constantly changing and where opportunity abounds.

Ms Chan Mei Lin Melene should know, having been in the industry for almost two decades.

After graduating with a Bachelor of Science (Computer Science) from the National University of Singapore (NUS), she joined the Systems and Computer Organisation (SCO) in the Ministry of Defence (Mindef) in 1997.

SCO later merged with several other organisations to form the Defence Science and Technology Agency (DSTA) in 2000.

Now the head of a team in the InfoComm Infrastructure Programme Centre of DSTA, Ms Chan, 40, says: "It has been a good 18 years of working here, and I still don't feel like I have come to a standstill.

"IT is changing rapidly, all the time. For example, cloud computing technology did not even exist when I first joined SCO. But now it is very much a part of our IT infrastructure.

"There will always be a need for people who can bring new knowledge and fresh perspectives to the team."

She currently leads a team of 18 that manages and supports the IT infrastructure for a Mindef network used by the Singapore Armed Forces and defence technology personnel.

The infrastructure consists of the network, server, storage, plus other components.

"Think of it as a layer where business applications like e-mail, logistics and human resource applications sit on top," she explains.

"As head of the team, I set the direction my team takes to enhance the IT infrastructure for the Mindef network.

"I keep a close watch on technological trends to see how new developments could be tapped to strengthen network resilience and security, and how technology can help us manage our IT infrastructure more efficiently," she adds.

Opportunities to learn

One of her team members is Mr Sim Sze Liang, 30, who joined DSTA in 2009 after graduating from NUS with a Bachelor of Engineering (Computer Engineering).

He was attracted by "the ample learning opportunities it offered".

"At DSTA, staff are encouraged to build their technical knowledge and expertise continually.

"For instance, my bosses supported me to take up a course on data science – a relatively new area to me – which could help me to learn new and innovative ways to extract knowledge from data," he says.

Ms Chan is also grateful for DSTA's strong emphasis on learning, having benefited from in-house seminars that took her technical and leadership skills to a higher level.

Last year, she attended a conference by American IT research company Gartner overseas.

"It was a great opportunity to hear from other IT professionals worldwide and to find out how to integrate or customise IT solutions that are in the market into our own IT infrastructure," she recalls.

Regular upgrading of skills is a must in this line of work, says Mr Sim.

"Be excited about acquiring new expertise, even if you have to start from base zero," he advises.

"To stay ahead, take advantage of new opportunities, as current technologies may become obsolete quickly."

Solving problems

Other qualities that are prized in this industry are foresight – to pick up problems before they crop up – and a pro-active mindset that seeks solutions to nip these potential problems in the bud, says Ms Chan.

Openness to new ideas is another trait that Mr Sim finds important.

"We should be hungry for new ways of doing things more efficiently and effectively," he says.

Once, when a data centre in an SAF camp reached its maximum capacity and required more space to expand, the team had to consider their options.

"Taking the traditional approach by setting up a new data centre in another building was not an ideal solution because the new data centre would have required its own set of basic network and server infrastructure – wasting server space when there was already a capacity crunch," says Ms Chan.

In the end, they did establish a second data centre in another building, but it was one that tapped on the infrastructure of the existing centre.

"This optimised data space and mechanical and electrical resources," she explains.

"Thinking of new and innovative solutions to solve old problems, and then delivering better results than before was extremely gratifying for my team members and I," she adds.

A people job

One would think that jobs in IT are all about machines, but Ms Chan does not agree.

"I am also fascinated by people," she says. "Connecting those who design and manage the IT infrastructure with users of the system and creating the middle platform for good user experience drives me."

She strives not only to keep up with new technologies in the market but also to understand human needs.

"Our work forms the basis for operations and activities, and knowing that what I design can influence people's behaviour to work more efficiently, makes me happy," she says.

Mr Sim adds: "I find purpose knowing that I can make positive changes in my work. I also love how DSTA stays abreast with emerging opportunities, which keeps me motivated.

"I've seen my goals evolve over my time at DSTA and I'm really thankful that there's room to grow both technically and professionally."

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– Mr Sim Sze Liang, Acting Manager, InfoComm Infrastructure Programme Centre, DSTA