

# Many Professional Hats Yield a Unique IT Vantage Point

*Breadth of Front-line Business Experience Drives Technology*

**T**he hat rack for Alex Siow would be overflowing with hats if it included a hat for all of the different professional roles and responsibilities he has held throughout his career. The genesis of his career began in civil engineering; after completing undergraduate and graduate degrees in civil engineering, he served in civil engineering positions

By Patrick E. Spencer

of greater scope and responsibility for Singapore's Housing & Development Board. Then, involved in various computer-aided design projects, he took a position in the IT department in 1989. And only one year later, in an almost meteoric rise, he was named CIO.

Not one to turn down new challenges, Siow left the public sector in 2003 to join StarHub, a Singapore-based info-communications company that delivers information, communications, and entertainment services, initially as the head of strategy relations and regulatory and subsequently as the head of the corporate sales division. Then, earlier this year, he returned to his professional hat rack for his technology hat, assuming the charge as the head of information systems and programs office at StarHub.

The breadth of Siow's professional experience—ranging from the public to private sector, civil engineering to technology, marketing to sales—provides him with a privileged perspective most technology executives do not possess. In particular, Siow, not unlike other technology executives, is faced with demands to ensure closer linkages between the business and technology initiatives, and his breadth of knowledge creates unique opportunities for him to do so.

"The CIO must understand every aspect of the business," he says. "That is the only way you can advise



and also help facilitate the implementation of relevant IT initiatives to the business." In addition, according to Siow, successful technology executives should have a stint at the front line, the ability to gain greater insight into the business.

## Making the transition from civil engineering to IT

While one might ostensibly see a number of distinct skill sets and competencies between civil engineering and IT, Siow found there was not much difference. "Engineers are very process oriented and very disciplined in their methodology," he explains. "When adherence to such fails, then buildings fall down." In the case of IT, according to Siow, these same disciplines apply. "Although I actually knew very little about the core disciplines of IT," he quips, "I was able to manage the implementation and facilitation of the business and

our IT initiatives using the project management disciplines I'd learned in civil engineering."

Convinced of the core importance of project management to the IT profession, Siow, when serving as the president of Singapore's Computer Society, helped launch an IT Project Management Certification for IT project managers. "If you want IT to be recognized as a profession, you must start from the very top of the 'food chain'," he says. "And at the very top in IT are project directors and managers."

### Advancing to new spheres with COBIT and ITIL

Once project management standards are instituted, the next sphere of maturation of an IT organization is the adoption and proliferation of ITIL and COBIT standards. "After an organization implements project management at the lower levels, it is time to move up the chain to governance," Siow explains. "IT governance, by leveraging ITIL and COBIT standards, creates an executive-level governance methodology that aligns investments with actual business requirements and identifies all of the appropriate stakeholders."

### Tackling the challenges of an acquisition

Prior to Siow assuming his current role as the head of information services and programs office at StarHub, his predecessor had architected and built a comprehensive technology infrastructure. And even though the organization is relatively young, the team has tackled a flurry of different challenges and opportunities.

The biggest is probably the merger with Singapore Cable Vision in 2002, when StarHub added multimedia services to its portfolio, transitioning from a traditional telecommunications provider to an info-communications company. "Like all mergers and acquisitions, the initial objective was to integrate the IT infrastructure and underlying systems," Siow explains.

## The Hub of StarHub Details

**Revenue (2007):** More than SGD2 billion  
**Employees:** 2,770  
**Founded:** 2000  
**Public:** Listed on the Mainboard of the Singapore Exchange since October 2004  
**Reach:** Second largest info-communications company in Singapore, delivering information, communications, and entertainment services over fixed, cable TV, mobile, and Internet platforms  
**Web Site:** [www.starhub.com](http://www.starhub.com)



Alex Siow, the head of Information Services & Programs Office at StarHub, has blazed many trails in helping to create and build the IT profession in Singapore.

For StarHub several different technology initiatives rose to the forefront with the merger. The top priority was the rollout of a comprehensive customer relationship management (CRM) system. It was important for StarHub to have the ability to pull up a consolidated customer database. Next in line was information security and data protection—customer data had to be kept secure while stored in the event of a system failure.

Despite myriad complexities and hurdles around the acquisition, "the foremost lesson learned was in the management of the people and getting them to adopt new systems, as well as roles and responsibilities," Siow states. "Technology is quite simple. The complexity is in the people managing the technologies."

### Building a robust, agile data center

The relationship between StarHub and Symantec goes back a number of years. "Our relationship with Symantec has been a very success-

ful one—and it is also a very comprehensive one," Siow says. "We started off leveraging data center infrastructure software such as Veritas NetBackup, Veritas Storage Foundation, and Veritas Cluster Server. The data center must be robust—the systems must deliver to virtual 100 percent uptime."

Building a data center software infrastructure that would evolve with its business and provide the agility needed to address new requirements were important concerns and requirements for the StarHub team. They needed a solution that would accommodate dramatic growth in data, the introduction of new technology solutions, and the complexity of data center operations. "We don't have the luxury of increasing headcount," Siow explains. "Like all good IT organizations, we try to do more with less, and we must rely on technologies to provide us with a multiplier effect." The



### Podcast

Check out the Executive Spotlight Podcast with **Alex Siow** at [go.symantec.com/siow](http://go.symantec.com/siow)



## Creation of an IT Profession in Singapore



**A**lex Siow, the head of Information Systems and Programs Office at StarHub, has played a critical leadership role in the creation and evolution of the IT profession in Singapore over the past two decades. Siow became the first CIO in Singapore when he was named CIO for Singapore's Housing & Development Board. He also helped found the Singapore Computer Society and currently

participates on various boards and councils. His portfolio of involvement includes:

- > Vice President of the Singapore Manufacturing Federation
- > Chairman of the Industry Advisory Committee of the School of Computing, National University of Singapore
- > President of the Singapore Chapter of Project Management Institute
- > Member of the IT Governance Institute Advisory Board
- > Adjunct Professor at the School of Computing, National University of Singapore

Recognized for his contribution to the IT community in Singapore, he was conferred the IT Leader's Award for Person of the Year by the Singapore Computer Society in 2002. He has presented papers at various conferences and written articles for publications such as the *Computer Times*, *Digital Life*, among others.

results speak for themselves: StarHub lowered data center operating costs by 20 percent and improved IT staff productivity by 43 percent using several Symantec data center software technologies.

For backup and restore, StarHub relies on Veritas NetBackup. Implemented shortly after the company was launched, the solution supports a heterogeneous server and database environment and has scaled to support rapid growth in data. Yet, despite this growth, StarHub has been able to avoid adding more IT staff to manage backup-and-restore operations.

StarHub also adopted Veritas Storage Foundation early on in its existence. "Storage Foundation provides us with the ability to maintain a standard set of tools for managing

our explosive data growth, optimizing our hardware investment and providing data protection," Siow explains. For high availability on its Solaris-based systems, StarHub uses Veritas Cluster Server.

### Out-tasking security management

The relationship with Symantec underwent further maturation in 2004, when StarHub elected to implement a next-generation security infrastructure with the help of Symantec Consulting Services. The solution includes endpoint security technology from Symantec and security monitoring and management by Symantec Managed Security Services. The latter provides proactive management of 22 differ-

ent devices scattered across the StarHub network.

Siow explains the rationale behind engaging Symantec Managed Security Services: "We adhere to the philosophical approach of selective outsourcing—or out-tasking—on the contention that there are certain IT tasks which are not core intellectual competencies. Out-tasking these allows us to focus on more strategic initiatives." Overall, Siow estimates StarHub would need to hire an additional eight IT staff for security monitoring and management without the help of Symantec Managed Security Services.

### Gaining control of email data

The StarHub team recently began implementing Symantec Enterprise Vault for email archiving with

the help of Symantec Partner BT FrontLine Pte Ltd., which has worked with Symantec and StarHub on the deployment of each Symantec-based solution. The team made the decision for two primary reasons: to gain control of growing mountains of email storage, and to improve the productivity of end users who were spending valuable time managing email quotas.

"We could not continue to throw more and more backup servers and storage systems at email storage," Siow explains. "We sought a technology solution that would automatically move our Microsoft Exchange email into an archive that could be easily and quickly retrieved at later times."

### Plotting the future

"Since we are a relatively young organization, there are a number of interesting opportunities for us—to become more competitive, more efficient, more productive," Siow concludes. "The challenge for IT personnel is to keep ourselves relevant to the business organization. Things like the greening of the data center is something that is important. We have a corporate social responsibility as an organization. In addition, we will continue to explore opportunities wherever technology will allow us to reduce the total cost of ownership through initiatives such as virtualization and out-tasking." ■

*Patrick E. Spencer (Ph.D.) is the editor in chief for CIO Digest and the author of a book and various articles and reviews published by Continuum Books and Sage Publications, among others.*



## The Symantec Spoke in the Hub at StarHub

- > Veritas NetBackup
- > Veritas Storage Foundation
- > Veritas Cluster Server
- > Symantec Enterprise Vault
- > Symantec AntiVirus
- > Symantec Managed Security Services
- > Symantec Consulting Services