

Press release
January 2017

IT security, app development and data analytics set to dominate job market in 2017

- 56% of Singaporean CIOs believe IT and data security roles will dominate IT job growth over the next five years, followed by applications development (46%) and software development (39%).
- 47% say software development is the most challenging area to source skilled IT professionals, followed by IT security (46%) and application development (42%).

Singapore, 24 January 2017 – Independent research commissioned by specialised recruitment company [Robert Half](#) reveals the technology job market will be dominated by demand for professionals specialised in data security, applications and software development and data management. Yet according to Singaporean IT leaders, these high-in-demand IT roles are also some of the most difficult to recruit for, pointing to a supply/demand imbalance of skilled technology professionals.

Organisations in Singapore are especially challenged by this imbalance as the IT landscape in Singapore becomes more innovative, customer-centric, and concern increases amid persistent cyber-security threats.

1. IT and data security

More than half (56%) of Singaporean Chief Information Officers (CIOs) say IT and data security is the key functional area within IT and technology which will create the most jobs over the next five years. Specific roles that are in high demand within the security space are Cyber-Security Consultants, IT Risk Managers and IT Risk and Compliance Managers.

The demand for IT security specialists is supplemented by a recent PwC study¹ revealed that Singaporean executives are observing an increase in security incidents, with almost one in four (22%) reporting at least three incidents in the past year. Robert Half research confirms data abuse and data integrity is the number one business challenge cited by almost two in three (59%) Singaporean CIOs.

Matthieu Imbert-Bouchard, Managing Director at Robert Half Singapore said: *“Cyber-attacks have the potential to cause significant financial, operational and reputational damage, and faced with rising IT security threats, no business operating in Singapore can afford to relax their guard. It is encouraging to see CIOs anticipating job growth in the cyber-security field as this indicates business leaders are, quite rightly, taking IT security very seriously.”*

“To counter and respond effectively to potential cyber-attacks, companies are not only increasingly investing in technology, they are also bringing on board IT risk and security professionals. However, companies need to recognise they are competing for a limited pool of IT professionals with the appropriate specialist skills in IT and data security making the skills shortage within IT even more apparent.”

“Companies who rather opt for a more flexible staffing solution are relying on temporary IT security experts and consultancy agencies to manage cyber-risks and oversee the installation of IT defence systems and processes.”

¹ <http://www.pwc.com/sg/en/risk-assurance/assets/gsis/global-state-of-information-security-survey-2017-sg.pdf>

2. Applications and software development

Other areas that are predicted to create significant IT jobs growth over the next five years is applications development (cited by 46% of CIOs) and software development (cited by 42% of CIOs). As companies become more innovative and consumer-focused with the development of their own apps, there will be particular demand for Head of Applications, Software Engineers and Software Developers. These professionals need to be proficient in iOS, Android, Javascript, HTML5, PHP or Java technologies.

“Software and application developers will be in hot demand as many companies move to a web-based platform in Singapore. The development and enhancement of company software will only continue to drive demand for adequately qualified and experienced software development professionals,” added **Matthieu Imbert-Bouchard**.

“Developing innovative and market-leading apps is a highly specialised area, one that calls for IT professionals with a unique blend of specialist technical skills, creative thinking and business acumen. As apps increasingly become a means for businesses to differentiate themselves in a competitive market, demand for IT professionals with experience in applications development is set to soar.”

3. Data Analytics

The next area predicted for strong jobs creation is data/database management and data analytics (cited by 37% of CIOs). The demand for IT professionals within these functional area can be attributed to the rise of companies increasing their advanced methodologies and adoption of Big Data practices. There will be particular demand for Database Administrators, Business Intelligence Developers and Data Analysts, all of whom will need to be skilled in SSIS, SSRS and SSAS systems.

“Data-driven markets are influencing the way companies plan their business strategies, and the use of Big Data is enabling businesses to make more informed decisions. When the right IT professionals are managing the Big Data analytics of a company, the business is then free to focus more on their customer’s needs, identify new trends and unlock new business opportunities. Because of this, IT professionals who specialise in Big Data will find themselves in increasing demand over the next few years,” added **Matthieu Imbert-Bouchard**.

Singaporean CIOs were asked:

	Which functional areas within IT and technology will most jobs be created in the next five years?	In which function areas is it most challenging to find skilled IT professionals?
IT and data security	56%	46%
Applications development	46%	42%
Software development	42%	47%
Data/database management (Data analytics)	37%	38%
Networking	35%	28%
Help desk/technical support	35%	22%
Systems administration	18%	20%
Web development or web design	14%	21%

Source: Independent survey commissioned by Robert Half among 100 CIOs in Singapore – multiple answers allowed.

The IT roles most likely to experience strong demand in 2017 are also some of the most difficult to recruit for, pointing to a supply/demand imbalance of skilled technology professionals. Almost half (47%) of CIOs surveyed say software development is the hardest area to recruit for, followed by IT and data security (46%), applications development (42%) and data analytics (38%).

“Demand for qualified IT professionals in Singapore is outstripping supply, and companies need to take a proactive approach to offset the potential impact of a talent shortage on their business. Upskilling existing IT staff can have the added benefit of improved retention rates, though employing contract IT professionals or external consultants are both cost-effective interim measures. The key is to have a recruitment plan in place from an early stage so that the integrity of IT systems is protected, and the business is able to leverage the full potential of new technologies,” concluded **Matthieu Imbert-Bouchard**.

##

Notes for the editor

About the research

The annual study is developed by Robert Half and conducted in April 2016 by an independent research company, surveying 100 CIOs/CTOs in Singapore. This survey is part of the international workplace survey, a questionnaire about job trends, talent management and trends in the workplace.

About Robert Half

Robert Half is the world’s first and largest specialised recruitment consultancy. Founded in 1948, the company has over 325 offices worldwide providing interim management, temporary and permanent recruitment solutions for accounting and finance, financial services and technology professionals in Singapore. More information on roberthalf.com.sg.

Follow Robert Half Singapore



Read related articles on our [Robert Half’s work life blog](#)



[Why digital transformation needs to be on your radar](#)

Digital transformation represents the new wave of opportunities that can be leveraged to implement change through technology. As a matter of survival, organisations will need to adapt to digital transformation to stay a step ahead. Read more here.



The growth of big data and its opportunities

Big data offers big potential. It's an area of IT offering enormous possibilities for business organisations, and as companies race to make the most of everything big data has to offer, career opportunities are unfolding for IT professionals. Not so long ago the term 'big data' was rarely understood outside IT circles.

For more information

Gabrielle Nagy
Public Relations Manager Robert Half Asia Pacific
gabrielle.nagy@roberthalf.com.au
+61 02 8028 7751

Rebecca Stanway
LEWIS
RobertHalfSG@teamlewis.com
+65 6571 9140