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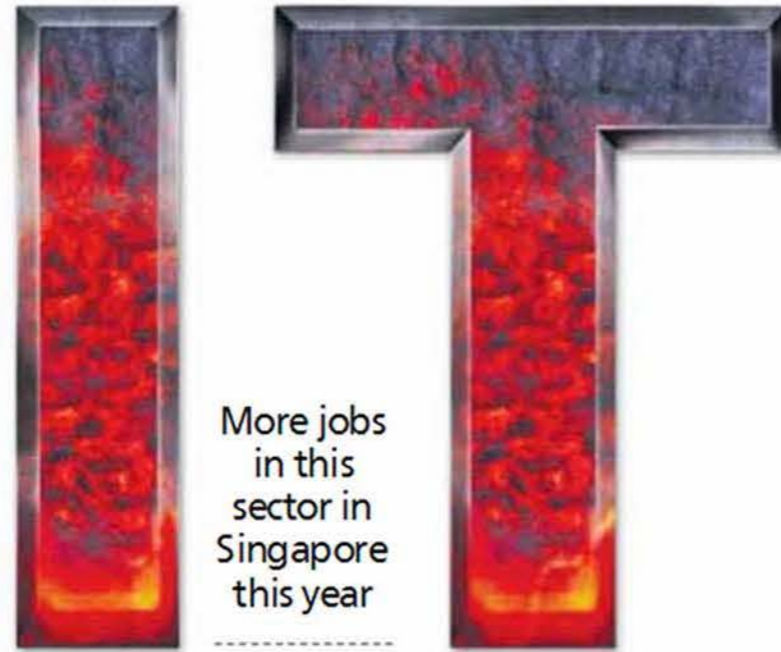
IT is hot

More jobs in this sector in Singapore this year

AS THE Year of the Horse begins to gallop, and gather momentum, IT industry analysts and business leaders are optimistic about the job prospects in the industry in the current year.

With increased mobile adoption and integration by enterprises, as well as the growing importance of cloud, big data and predictive analytics, experts foresee companies here initiating and implementing IT projects. According to them this will create new demand for IT professionals educated and trained in these areas.

In an industry where good talent has always been hard to find, new policy measures relating to foreign workers will increase demand for locally resident IT talent, pushing up salary levels. All in all, talented IT professionals in Singapore should be in hot demand.

What is the fundamental economic logic underlying the optimism? Recent data from the Ministry of Trade and Industry (MTI) showed that Singapore's economy grew by 4.1 per cent last year. The ministry also forecast 2 to 4 per cent growth for the Singapore economy this year.

Consistent with this was an Ernst & Young survey on market sentiments between April and October last year where 59 per cent of Singapore-based respondents predicted that the country's economy will grow between 1 and 3 per cent. Robert Half's 2014 Employment report that surveyed 103 CIOs/CTOs in Singapore found that they had over 90 per cent confidence in Singapore's Business and Economy.

With Gartner projecting a worldwide IT spending of $3.8 trillion this year, Mr Colin Sampson, SVP and CFO Asia Pacific & Japan, of SAP, the leading ERP software maker, told tabla: that business growth and opportunities in the Asia Pacific will continue, including in neighbouring markets like South-east Asia and China. "The company's partner ecosystem and customer base in the region continue to grow and strengthen, indicating a positive outlook for the Year of the Horse," he added.

Take for instance cloud computing, one of the hot technologies of 2013-14. A survey of more than 700 IT decision-makers by NTT Com Security last year showed that 83 per cent of organisations in Asia have been using cloud over the previous six months or longer. According to this report, 31 per cent of companies in Singapore indicated deployment of cloud computing over the last two years.

It is no wonder that SAP's Mr Sampson sees "… a real shift to cloud in key markets including South-east Asia, India, China and Australia/New Zealand". As many regional technology initiatives are driven out of Singapore, it creates a strong demand for highly-skilled IT professionals in Singapore.

The talent shortage in Singapore's IT sector was on top of the mind of Ms Shirley Wong, chairman of Singapore Infocomm Technology Federation, the local infocomm industry association that has members from local start-ups to established MNCs.

She told tabla:: "The top challenges faced by the companies are manpower costs, recruitment of talent and retention of talent."

Mr Sampson added: "Enterprise app mobile developers, cross-functional data analysts, security specialists and database managers are in demand and more challenging to find. Other emerging skill sets include business analytics and cloud computing."

Obviously Singaporeans and PRs who want career growth over the next five to seven years in the IT industry need to acquire relevant new IT skills should they want to be among those sought after in the industry.

Cynics can argue that businesses would naturally talk up their industry and highlight resource crunch. So what does industry regulator Infocomm Development Authority of Singapore (IDA) have to say on this?

In its annual survey on Infocomm Manpower for 2012, IDA reported that 144,300 people were employed in the infocomm sector, as at June 2012. This was against a demand for 157,000 professionals which resulted in 12,700 infocomm job vacancies in 2012. This showed an increase of 6.7 per cent from 11,900 vacancies in 2011.

On the employment of Singapore residents in the in-

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dustry, according to the report almost four out of every five persons employed in the industry were Singapore citizens and permanent residents.

The top four categories with a high number of vacancies were operations, software and applications development, managing databases, and website, multimedia, computer games design and development. Experience is highly valued in the industry as six in 10 of the infocomm vacancies were not for fresh grads.

Vacancies in database administration, testing and quality assurance as well as IT audit were all for experienced manpower.

How skilled are Singapore's infocomm manpower and how well are they compensated?

According to the IDA report, more than half of them had a bachelor's degree or a postgraduate diploma as their highest qualification. About 12 per cent had master's and doctorate degrees.

The Ministry of Education's Graduate Employment Survey (GES) 2012, published in 2013, has the data on gross monthly salaries for fresh computer grads in Singapore. (See chart at right.) On the higher end, they earned $4,100 per month. This is below what entry level lawyers, doctors and dentists earn but above what many chemical, mechanical and electrical engineering graduates earned, according to the survey.

At the other end of the experience spectrum, according to the Robert Walters Global Salary Survey 2013, chief information and chief technology officers in Singapore were paid in the region of $320,000 to $400,000. A software architect with over 10 years' experience had earnings in the range of $150,000 to $250,000. The Hay's Salary Guide 2014 – Asia indicates an analyst programmer's salary in Singapore to be in the $45,000 to $65,000 region.

When the analysis is completed, even those who have witnessed the evolution of the IT industry from the 1970s when new programming languages emerged, through to the PC era in the '80s and later the advent of the World Wide Web in the 1990s, will concede one important fact. IT is hot in recent times due to a combination of recent technological trends such as social, mobile, cloud and big data/analytics, which have enabled real-time availability, analysis and response to information.

Mr Sampson has the best last word on this. "Professionals at any level in any industry would benefit from a working familiarity with cloud, mobile and social software and applications, as well as an understanding of big data analytics.

"As the future of work evolves in a real-time networked economy, now is the time to get up to speed. In addition, those who are able to combine technical skills with strong management skills will have a combination of assets that is of great benefit to any technology company."

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Optimistic... chairman of Singapore Infocomm Technology Federation Shirley Wong (below left) and SAP SVP and CFO Asia Pacific & Japan Colin Sampson.
PHOTOS: STF, THE BUSINESS TIMES

GROSS MONTHLY SALARIES FOR FRESH COMPUTER GRADS IN SINGAPORE			
University Degree		Mean	75th Percentile
SMU	Information Systems Management (4-year programme) Cum Laude (High Distinction) and above	$3,946	$4,100
NUS	Bachelor of Computing (Computer Science)	$3,683	$4,000
NTU	Business and Computing	$3,651	$4,000
NUS	Bachelor of Computing (Computer Engineering)	$3,630	$3,942
SMU	Information Systems Management (4-year programme) others	$3,383	$3,800
NTU	Computer Science	$3,371	$3,700
NTU	Computer Engineering	$3,336	$3,500
NUS	Bachelor of Computing (Electronic Commerce)	$3,289	$3,500
NUS	Bachelor of Computing (Information Systems)	$3,169	$3,500
NUS	Bachelor of Engineering (Computer Engineering)	$3,403	$3,450
Source: Ministry of Education Singapore: The Graduate Employment Survey (GES) 2012 – published in 2013			