

## Information Technology In Asia – A Labour Market Perspective



## 1 State Of The Industry

The global economic challenge is forcing Chief Information Officer's (CIO's) to look at their Information Technology (IT) budgets very carefully, with every investment being critically evaluated and analysed to extract the maximum value. This need for almost microscopic dissection of a company's IT needs, however, does not change the fact that businesses everywhere are becoming increasingly digital. Big Data, cloud computing, mobility and social media are just a few of the areas that are giving rise to new marketing and operational capabilities. The growth of the global Software-as-a-Service (SaaS) market, driven by the need for organisations to cut costs by optimising workflows, is just another sign that the IT industry is circumventing the global financial crisis by making itself indispensable to organisations smart enough to know that you have to spend money to save it.

While the US and Europe struggle through a continuing financial crunch, Asia has become the focus for many IT companies looking to establish themselves. In Singapore, Information and Communication Technology (ICT) has become a key contributor to the economy, with the industry projected to grow strongly according to the Singapore Infocomm Development Authority's (IDA) Intelligent Nation 2015 (iN2015) plan. The republic's goal is to double the value add of the ICT industry to S\$26 billion by 2015, generating a 3-fold increase in infocomm export revenue.

*"With fast moving technology trends, companies now understand that IT, as well as people, are the most important parts that can help drive their businesses forward"*

## 2 Trends

With the IT industry expected to see strong and sustained growth, two areas of increasing importance are undoubtedly Big Data and Cloud Computing. Currently, the hot topic in any IT conversation on an enterprise level revolves around cloud, regardless of whether it is about adoption, implementation or optimisation. Cloud is the foundation, the carrier for the other three forces of the industry, namely, Mobile, Social Media and Big Data.

While there are continuing concerns around security and availability, Cloud Computing adoption will accelerate, with advantages outweighing reservations, foremost among them being agility and cost-effectiveness. One of the chief drivers towards organisations ramping up their Cloud adoption, centres around developers, application groups and end user business units, chafing against Central IT not responding rapidly enough to the changing environment and doggedly sticking to time-consuming manual processes and lengthy timelines for internal private clouds.

A by-product of this mass migration to the Cloud, Big

*"Almost every company is now in the cloud. With all organisations heading this way, those not part of it are going to quickly fall behind."* Adam Fisher, Head of Sales, Spring Professional

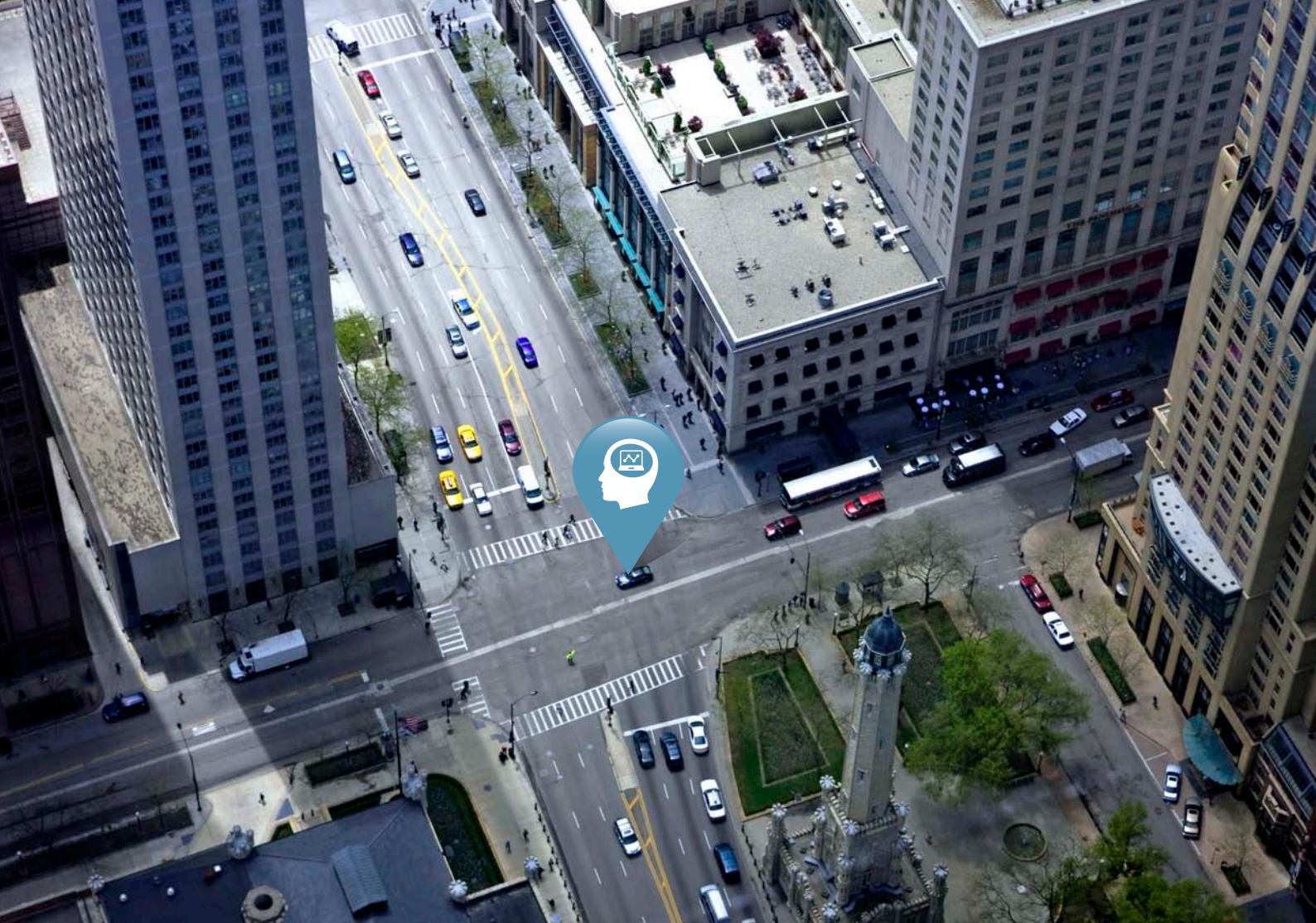
Regional prospects seem to be just as promising, with Gartner Inc predicting that spending on IT in Asia Pacific will reach US\$743 billion in 2013, an increase of 7.9% over 2012. With all five segments of IT spending (devices, data centre systems, software, IT services and telecom services) expected to grow, it is clear that IT will continue to be the enabler of development and see increasing integration into all aspects of the economy.

Part of the reason that the ICT industry is helping to shape the economy, empowering many sectors and supporting economic and social growth, comes from the emergence of new products, such as tablets, which has made IT more mobile. This has given birth to numerous companies working either on hardware or on software mobile-friendly solutions - with many offering cloud type solutions.

The overall outcome is the creation of a very competitive space, with technology companies opening in Asia to take advantage of the boom. A strong need for talent has emerged, with companies competing for skilled candidates, in some cases trying to outbid each other to build the right team. The IT industry in Asia is now growing at a rate that has resulted in a talent shortage in many areas, allowing job seekers to often take their pick of job offers.

Data is the figurative 'killer app' for Cloud Computing. It is predicted that by 2015, 4.4 million IT jobs globally will be created to support Big Data, and almost a quarter of these will be in the Asia Pacific region. Big Data provides a continual stream of information from internal and external sources that businesses can potentially utilise. New opportunities abound, from transforming decision-making to discovering new insights, optimising businesses and innovating industries.

What Big Data brings to the mix is an opportunity to turn information into revenue, thus accelerating growth in the global economy and creating jobs. Highlighting the importance of analytics, Big Data is all about looking ahead, beyond the obvious, combining insights from structured and unstructured data and the incorporation of what has become known as 'dark data' – data that is being collected but is going unused despite its value. What will set an organisation apart from its competitors is the quality of its predictive algorithms.



### 3 Industry Development

Information Technology has always been a rapidly moving industry, but with the advent of the Cloud, speed has become the key factor to how the industry develops. IT today is travelling at break-neck speed with organisations and professionals racing to keep up. Mobility plays a large part in this, as competition between developers set the pace. Technologies and innovative solutions come to market quicker than ever before and the skills needed to stay ahead have to follow. With the emergence of new vendors plus the fact that established companies are fighting to retain and improve their market position, talent has become paramount to success. The result is a candidate driven market, with organisations willing to enter into a bidding war to attract new talent.

Service levels have also seen considerable evolution over the past few years. Organisations are realising that it is no longer a game of providing packaged, 'one-size-fits-all' solutions in order to secure a deal. Today's IT service providers need to understand their client's business, know their pain points and what their issues are and to then tailor complete solutions unique to each customer. As a result, IT sales professionals have had to evolve. The reason for this is simply because the conversation has elevated and IT sales professionals will, more often than not, find themselves talking to a CIO or CFO. C-Suite executives are getting much more involved on an operational level, especially with the need to cut costs and optimise work streams to maximise productivity. As such, decision making, especially in the area of IT investment, which can be a long term cash saver for organisations, will definitely get the attention of those in the boardroom.

*"We are currently in a candidate driven market, with some companies entering into a bidding war for talent to ensure that they attract the very best people"* Serge Shine, Managing Director, Professional Staffing, SEA

## 4 Education

Education has always been an important factor in the IT industry, however, the focus of skills has changed drastically over the past few years. It is no longer just about IT capabilities, as now IT professionals require more business acumen due to no longer working within silos. Those who understand how a business works and grows will develop quicker and stand out.

Educational institutions are not oblivious to this fact, most likely because of the importance of the IT industry to the economical growth or recovery of a country. Governments today in Asia are very interested in producing highly skilled candidates for the IT market, with the intent of bolstering an industry that could, and most likely will, boost the country's economy. Singapore, for example, has put in place the National Infocomm Scholarship and Integrated Infocomm Scholarship as part of the IDA's iN2015 initiative. In Thailand, education around IT has become more focused and the results are showing in the increasing number of candidates with higher levels of education. Education institutions in Taiwan, on the other hand, work directly towards getting graduates into the work force, with the end of specific training courses being marked by group interviews with enterprises relevant to those courses. Of

course, internships and campus recruiting exercises are a stalwart part of the university experience.

For some institutes, such as the Singapore Management University's (SMU) School of Information Systems (SIS), preparing students for the transition into the work force starts from year one and is an integral part of the curriculum. According to Professor Steven Miller, Dean of SIS, the project work is structured so that every student's work will affect everyone else in the group and so deep interaction on the project is necessary, mirroring real-life work situations.

Further enhancing their marketability, SIS students are strongly encouraged to complete a second major outside of the IT field. Currently 98% of SIS students are completing either a second major or double degree. The purpose behind this reflects SMU's belief that their graduates are not just IT professionals, but that they are change agents and in today's enterprise environment. IT specialists are no longer dealing only with the application world but are now required to make complex business decisions that have wider ramifications.

*"We are always asking ourselves, 'How do we keep changing'? The fact is that we, as educators, focused on IT Applications in the context of business, always need to keep changing". Professor Steven Miller, Dean, School of Information Systems, Singapore Management University*

## The Future

The IT industry in Asia continues to grow at a rapid rate, with the region a bright spot of the global IT sector. Economies in emerging markets are experiencing rapid growth in demand for customer support services, supply chain management, business process optimisation and innovation, all of which enterprises are looking toward IT to cater for. The focus, however, has become much more holistic, with organisations fast realising that IT is more of a business function than ever before. The result is a shift towards IT professionals who are able to see the big picture, with a focus on IT solutions being part of the requirement. Professionals need to understand how IT solutions improve business efficiencies, with both sales and technical employees in an organisation able to articulate the value proposition of their IT solutions.

