

# Information Technology In Asia – A Labour Market Perspective 2014



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## 1 State Of The Industry

In recent times, CIOs have been forced to look at their Information Technology budgets very carefully, dissecting and critically evaluating every investment in order to extract the maximum value possible. At the same time, they were faced with the fact that businesses everywhere are becoming increasingly digital. Big Data, cloud computing, mobility and social media were just a few of the areas that gave rise to new marketing and operational capabilities.

These trends have reached a flashpoint and IT is now no longer just about the IT function but has become a catalyst for the next phase of innovation in personal and competitive business ecosystems. The world is now on the cusp of the Digital Industrial Revolution, which will bring IT to the forefront of every industry through a confluence and integration of cloud, social collaboration, mobile and information.

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.

Regional prospects seem to be just as promising with Gartner Inc predicting that spending on IT in Asia Pacific will reach US\$767 billion in 2014, an increase of 5.5 percent over 2013.

*"The importance of IT in the development of one's business is becoming more widely recognised, particularly in this age of fleeting technology trends." Kaira Kim, Country Director, Spring Professional Korea.*

Fuelled by the continuous digitisation of diverse aspects of enterprise, this predicted growth is the result of every budget becoming an IT budget. Corporations are throwing more and more resources into their technology budgets, giving rise to what Gartner is calling 'the Digital Industrial 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 a phenomenon that has been dubbed 'The Internet of Everything'. As the internet expands beyond PC and mobile devices into enterprise assets such as field equipment and consumer items like cars and televisions, the economic impact will be large and diverse.

In 2009, there were 2.5 billion connected devices with unique IP addresses to the Internet, most of which were PCs or smart phones. By 2020, it is predicted that there will be up to 30 billion devices connected with unique IP addresses, most of which will be products.

The overall outcome is a creation of a new economy and a very competitive space, with technology companies opening up 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. The IT industry in Asia is now growing at a rate that has resulted in a talent shortage, thus turning it into a seller's market.

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## 2 Trends

The Internet of Everything has created a whole new economy and one that, in many cases, most enterprises and technology vendors are not ready for, operationally or organisationally. There are large areas of opportunity that come from an expanded Internet that have yet to be explored, opening avenues for IT professionals to get in on the ground floor.

Big Data and Cloud Computing are still hot topics in any IT conversation on an enterprise level, and enterprises are now looking towards cloud services with a hybrid future in mind, making sure that future integration/interoperability is possible. The role of cloud service brokers will be critical to navigate enterprises through aggregation, integration and customisation of their services. This will also provide 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 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 that 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 incorporating 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.

*"The success of cloud computing has exceeded most expectations, with many organisations quick to leap onto the bandwagon. Those companies who don't embrace these advances in technology are ultimately going to fall behind." Jeff Bonnin, Country Director, Spring Professional Malaysia.*



### 3 Industry Development

IT 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 are entering the 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 and offering freebies 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 before tailoring complete solutions unique to each customer. As a result, IT sales professionals have had to evolve. In the past, a technical background was sufficient to get through to IT department heads, but in today's environment, it is no longer the IT professional who needs to be convinced and a business background, as well as knowledge of the business of the people being sold to is essential.

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 facing a candidate driven market and the ability to find, attract and secure the best talents will give successful employers an edge over the competition. Innovative and efficient attraction and retention plans should be at the heart of any HR Management strategy this year." Serge Shine, Managing Director, Spring Professional Southeast Asia*

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## 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 about IT capabilities, as more and more often, IT professionals needing more business acumen. IT professionals no longer work within a silo and those who understand how a business works and grows will stand out.

Educational institutes are not oblivious to this fact, most likely because of the importance of the IT industry to the economical growth and recovery of a country. Governments today are very interested in producing highly skilled candidates into 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 institutes 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 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 students' project work is structured so that every participant'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 do a second major outside of the IT field. Currently 98% of SIS students are doing either a second major or a double degree. The purpose behind this reflects SMU's belief that their graduates are not just IT professionals, they are change agents and in today's enterprise environment, IT specialists are no longer dealing only with the application world but are also required to make business decisions.

*"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."*

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## The Future

The IT industry in Asia Pacific continues to rise, with the region proving to be a bright spot of the global IT market. 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, and organisations are realising that IT is much more of a business function than ever before. The result is a shift towards IT professionals who are able to see more of the big picture, and a focus on only IT topics is no longer sufficient. Professionals have to understand how IT solutions improve business efficiency and both sales and technical people should be able to articulate the value proposition of their IT solutions. IT products and systems today have a purpose – usually business enhancement and cost saving – and this purpose make sense when it is relevant to the entire value chain of the business.



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