



ASIA-PACIFIC ICT TRENDS 2017

THE FUTURE OF THE INFORMATION
COMMUNICATION AND
TECHNOLOGY MARKET IN
ASIA-PACIFIC

Insurance
POST



SECTION ONE

A BOOMING ASIA-PACIFIC ICT SECTOR

THE INFORMATION AND COMMUNICATION TECHNOLOGY (ICT) sector in Asia-Pacific is booming.

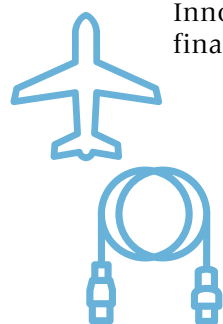
ICT encompasses a wide range of communication systems and information technology: from wireless signals, telephone lines, cloud computing to data storage and transmission, software and hardware.

Across Asia-Pacific there is an increasingly complex ecosystem of start-ups, governments, SMEs and large multinational companies using and developing an array of valuable ICT software applications.

Driven by a combination of a growing middle class, rising levels of urbanisation, technological innovation and government support for the digital economy, the ICT industry is enjoying double-digit annual growth in many countries in Asia-Pacific.

Innovations in ICT inevitably have an impact across industries such as healthcare, transport, financial services, agriculture and the media; examples include:

- Asian airlines investing in high speed wifi
- Submarine communication cables enhancing global data transmission
- Cloud computing helping companies have more flexible IT structures
- Wireless devices giving customers more freedom and control



GROWING REVENUES

ICT investments enhance the productivity of individuals and companies.

Singapore is one of the largest and most mature ICT markets in Asia-Pacific with the sector's revenue reaching US\$133.6 billion in 2015, the latest full year for which figures are available. In five years, the size of the sector has more than doubled with revenues of US\$66.6 billion recorded in 2011. (<http://www.singstat.gov.sg/publications/publications-and-papers/reference/yoscontents>).



The Singapore Government is hugely supportive towards the industry as it looks to accelerate the city state's transformation to a digital economy as part of its Smart Nation initiative – explained as “where people are empowered by technology to lead meaningful and fulfilled lives” - e.g. self-driving cars, weather apps and sustainable city planning.

Government support includes setting up the Government Technology Agency of Singapore (GovTech), the TechSkills Accelerator and creating a regulatory sandbox to encourage innovation in the FinTech sector.

SECTION ONE

A BOOMING ASIA-PACIFIC ICT SECTOR

There are around 8,600 ICT companies operating in the city-state of Singapore, with the domestic market worth US\$37.6 billion and the export market standing at US\$96 billion.

Hong Kong boasts one of the most advanced ICT sectors in the world. The latest ICT Development Index ranked Hong Kong sixth in the world and second in Asia-Pacific, coming behind Korea, which took the top spot in 2016.

Business receipts for the ICT sector in Hong Kong totalled US\$43.1 billion in 2015 (<http://www.statistics.gov.hk/pub/B10800132015AN15B0100.pdf>), with 10,065 ICT companies employing more than 100,000 people operating in the city.

The sector is also enjoying impressive growth in other markets across the region.

For example, in Vietnam, where the government has identified ICT as a key industry to contribute to the country's development, revenue is growing at a rate of more than 50% year-on-year, and is estimated to have reached US\$55 billion in 2016.

Malaysia is also posting impressive growth with ICT revenue of US\$59.4 billion in 2015, while it is projected to grow to US\$69.1 billion this year. (<https://www.export.gov/article?id=Malaysia-Information-Communications-Technology>) ■

\$37.6bn

Singapore domestic ICT market in 2015

\$43.1bn

Business receipts for the ICT sector in Hong Kong in 2015

\$55bn

Estimated ICT revenue in Vietnam in 2016

\$59.4bn

Malaysian ICT revenue in 2015



SECTION TWO

HEIGHTENED RISKS FOR ICT COMPANIES

THE RAPID PACE of technological development in Asia-Pacific is bringing with it increasing risks for ICT companies operating in the region.

Both individuals and businesses face significant potential legal liabilities if a third party suffers a financial loss after receiving services or products from them, or relying on their advice, with claims often running into millions of US dollars (see case study below).

The emerging hazards are many and varied, ranging from contractual liability and breach of contract disputes, to patent right infringements and accusations of misuse of confidential information.

Klaus Lejon, regional underwriter specialist at QBE Asia-Pacific, says: "In addition to the emerging hazards, the increased competition in the ICT industry is driving down profit margins and is shifting the negotiation power from ICT provider to the buyer often in resulting in less favourable terms and conditions for our insureds."

CASE STUDY

A software company enters into a 12-month contract with a start-up firm for the development and implementation of a financial trading system. Six months into the development, the system is not living up to the client's expectations and as such the client stopped paying the milestone instalments.

After nine months, the company sues the client for non-payment, which results in a counter-suit alleging misrepresentation, breach of contract and un-fit for purpose. The total payout amounts to US\$2.5 million, with consequential damages amounting to US\$500,000 and return of fees amounting to US\$2 million. Without ICT insurance, the company faces a significant financial loss.

LONGER, MORE COMPLEX PROJECTS

Longer and more complex IT projects – where agreed work specifications constantly change – are also leading to a growing number of breach of contract disputes.

Clients may sue ICT professionals and companies because they are dissatisfied with the work or services they have provided.

With companies becoming increasingly reliant on IT systems for their core operations, and with many making significant investments in this area, both the frequency and value of ICT claims looks set to continue to rise.

However, the trend for higher contract values, and longer and more complex projects – including multiple countries and companies – combined with rising litigation in an increasingly challenging regulatory environment, means the severity of claims is on the up.

Intellectual property protection rights are also increasing in the region and companies should be aware of potential lawsuits in this area especially as third parties are often involved.

With such high stakes, it is vital ICT companies, small and large, take steps to manage these risks.

Lejoun comments: "Despite flawless risk management any insured is still at risk of allegations of failure to perform and insurance is therefore an excellent risk transfer mechanism."

HEIGHTENED RISKS FOR ICT COMPANIES

THE BROKER PERSPECTIVE

One of the biggest challenges brokers face in introducing ICT cover to their clients is a lack of broad insurance solutions and product awareness.

Philip Ondaatje, managing director of strategic risk solutions at Jardine Lloyd Thompson Asia, says while many companies in the sector are aware of the risks they face, they are less sure about how an insurance policy would protect them.

Ondaatje says: "The problem with the current ICT insurance environment, particularly in Asia, is a lack of awareness on what the policy is actually covering and how it would respond in the event of a claim."

He thinks it will take real life cases for people to understand how the policies work, as until then the cover is a little hypothetical and people are not sure what they are buying and what protection they are receiving.

Ondaatje adds that part of the problem is the nature of ICT claims means there are high levels of confidentiality surrounding them because companies are worried about their reputation if details of the claims become known.

Andrew Mahony, regional director, financial services & professions group at Aon Risk Solutions, thinks another challenge in Asia-Pacific is that companies tend not to foresee the financial losses they could face in this area.

Research by Aon found that while companies in Asia-Pacific insure 50% of their tangible assets on average, they have cover in place for just 13% of their intangible assets.

Mahony says: "ICT companies have a very clear exposure to things like cyber risk because they often collect large amounts of sensitive data on their clients and they form part of the critical information infrastructure.

"Once we have more loss of data, we will see more ICT companies looking for insurance solutions that deal with these new risks."

He adds that awareness is improving, and once companies see their peers in their country or industry taking out the cover, they tend to also purchase it.

However despite low levels of awareness, Ondaatje thinks there is likely to be growing demand for the product.

He says: "In Asia-Pacific there is a lot of legislation around data protection etc, which is starting to frame the conditions of exposure a lot more from a third party view point. This will make it more tangible for people to understand what they are exposed to."

Two key steps companies can take to protect themselves as part of their risk management are ensuring they include limitation of liability clauses in customer contracts, as well as formal customer sign-off procedures at key stages in the project and at completion.

He adds that contracts should also clearly outline expectations, obligations, timeframes and contingencies, while legal counsel should sign off on all contracts and contract variations.

Companies should also ensure they have robust network control systems in place, including protective measures such as encryption, firewalls and security protocols.

They should also regularly engage external parties to test their systems for any potential vulnerabilities.

Even so, preventative measures can only do so much, and having ICT insurance to fall back on provides companies with the peace of mind that they are protected from liabilities arising from the failure of any products, services or advice they have provided.

However, despite the significant benefits ICT cover offers, anecdotal evidence suggests the sector is significantly under-insured.

A lack of product awareness means some companies are instead purchasing Miscellaneous Professional Indemnity cover, which does not cater well for the specific technology related exposures they face.

Insurance cover for legal costs and expenses is particularly important as litigation involving the ICT sector can be both complex and expensive. The key is to assist insureds throughout the entire claims process so the insured can continue focusing on their business operations.

Another issue companies and insurance brokers should be aware of is the inconsistency and often restricted breadth of coverage provided by ICT policies across Asia-Pacific.

With the stakes so high, it is important companies and their advisers ensure they find an ICT policy that covers all of their needs. ■

SECTION TWO

HEIGHTENED RISKS FOR ICT COMPANIES

RISK MANAGEMENT CHECKLIST FOR YOUR ICT HEALTH CHECK (SOURCE: QBE ASIA-PACIFIC)



QUALITY CONTROL

- Do your quality control procedures include: Alpha testing? Beta testing? Formal customer acceptance procedures? Total Quality Management? Formal product recall plans? Vendor certification?



- Do you have a clear quality control procedure framework?

NETWORK CONTROL

- Do you employ protective measures such as encryption, firewalls, virus protection, etc to protect the data stored on your networks and servers?



- Do you regularly engage an external party to conduct network vulnerability and penetration testing of your systems?

- Do you employ a patching policy including testing and the ability to roll back to previous versions?



- Do you back up data daily and store such backups in an offsite location?

- Does the design of your network allow for load balancing in times of peak demand?



CONTRACTS AND AGREEMENTS

- Do you always use a standard contract and/or does legal counsel sign-off on all contracts and contract variations?



- Do you apply limitations of your liability in all contracts to avoid consequential, punitive and liquidated damages?

- Do you use warranties and other disclaimers in your contracts and promotional material?



DUE DILIGENCE AND OPERATIONAL CONTROLS

- Do you employ a governance framework/policy supporting a consistent and structured approach to information security?



- Are all advertising and marketing materials signed-off by legal counsel to avoid over-promising capabilities explicitly made or implied to customers?

And more...

CASE STUDY

ICT TRENDS IN INSURANCE

DRONES



FROM DRONES TO BIG DATA to wearable devices, technology is transforming the way insurers and brokers operate and interact with customers.

The insurance industry has tended to lag behind other sectors in terms of its adoption of new technology due to a combination of factors, ranging from regulatory hurdles to legacy computer systems. Meanwhile insurers in Asia-Pacific have also tended to lag those in other regions in terms of innovation.

The situation is changing as companies wake up to the transformative benefits technology brings.

CLAIMS

One area in which insurers in Asia-Pacific have been relatively quick to incorporate technology

is in the use of drones to enable risk adjusters to assess the damage caused by natural disasters or other catastrophes, long before areas are declared safe and roads are passable.

Several insurers used drones in the aftermath of the devastating chemical explosion in Tianjin, China in 2015 to assess damage and start the claims payment process while the area was still closed.

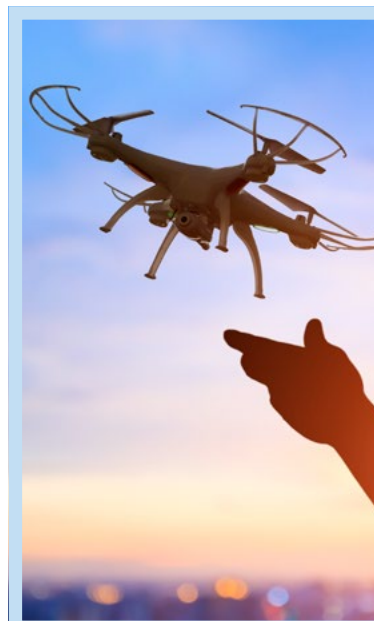
Last year, QBE used drones to assess damage in the aftermath of the earthquake in Ecuador, enabling it to pay out 90% of large claims totalling US\$65 million within 90 days.

UNDERWRITING CAPABILITIES

The technology is also being used in underwriting, enabling insurers to get high quality aerial footage of businesses or agricultural land, without having to take the time to send an employee to assess them.

Drones are expected to be particularly useful for the underwriting of infrastructure projects in remote areas of Asia-Pacific and for assessing claims made under agriculture and aquaculture policies, with farms often located in areas that are difficult to reach.

If drones appear capable of speeding up the underwriting process, Big Data has the potential to completely transform it.



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CASE STUDY ICT TRENDS IN INSURANCE BIG DATA

Big Data, or the ability of computer algorithms to analyse vast amounts of information for patterns, looks set to lead to the old actuarial underwriting models being thrown out of the window.

Instead insurers are tapping into the vast amounts of data they now have at their disposal to reassess risk

and even introduce dynamic pricing, based on an individual's personal circumstances.

Motor insurers have been the early adopters of this technology, offering telemetry-based cover, under which an individual's premium is based on the amount they use their car and their driving skills, with data captured through a device fitted to their car or an app on their smart phone and transmitted back to their insurer.

While telemetric insurance has been offered in the United States and Europe for some time, Asia-Pacific is beginning to catch up, with telematics motor cover now available in Thailand. Trials are also being carried out in other markets, including Malaysia and Singapore.

ECLECTIC BIG DATA



8.6bn

The number of connected devices is expected to soar from 3.1 billion today to 8.6 billion in 2020

This is only the beginning and the use of Big Data is spreading rapidly to other areas of the market, from analysing weather patterns to predict the likelihood of serious weather events, to tailoring medical insurance premiums according to an individual's profile.

Big Data is also the latest weapon in insurers' battle against fraud. The increased speed of analysis enables all claims to be compared to previous claims that have been identified as fraudulent, with a computer programme often able to identify similarities that would be missed by someone assessing a claim manually. These claims are then flagged for further investigation.

Wearable devices and the Internet of Things are also having a significant impact on the insurance industry. The number of connected devices is expected to soar from 3.1 billion today to 8.6 billion in 2020.

A number of insurers in the region are already using wearable devices in health insurance policies, with customers rewarded with lower premiums for improving key metrics, such as their body mass index (BMI), or leading more active lives. This is creating a win-win situation in which policyholders can access cheaper cover and insurers are likely to face fewer claims.

However insurers are using technology, it is clear those who do not harness it and innovate are in danger of being left behind. ■

CASE STUDY

ICT TRENDS IN INSURANCE

ARTIFICIAL INTELLIGENCE

THE IMPACT OF TECHNOLOGY on the insurance industry seen so far is likely to be just the tip of the iceberg, with future trends likely to encompass artificial intelligence and increased use of the Internet of Things.

REPLACING HUMANS

A Japanese insurer made headlines earlier this year when it replaced 34 employees in its claims settlements division with computers.

The company claims the machines are able to review medical certificates and information relating to hospital stays, surgical procedures and medical histories far quicker than a human.

It predicts the innovation will lead to faster payouts and a 30% increase in productivity, while saving the company US\$1.2 million a year.

With computers now able to “think like a human” and analyse both visual data and speech, it is estimated nearly half of all jobs in Japan could be carried out by robots by 2035, according to the Nomura Research Institute.

Artificial intelligence and the use of algorithms is already a major trend in the investment industry, with so-called ‘robo-advisers’ replacing their human counterparts, and this is likely to spread to the insurance sector, with computers able to help identify the best product for customers, collect application data and carry out risk assessments on them.

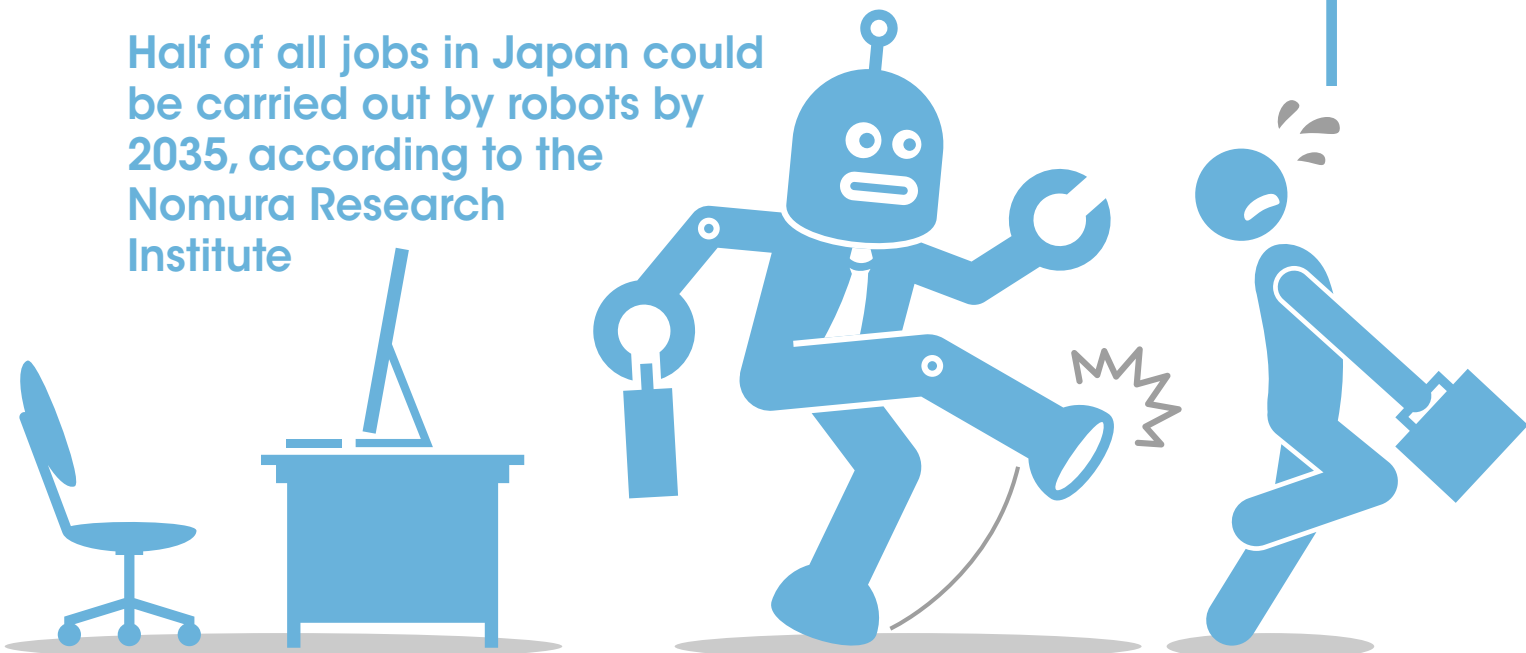
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CONCLUSION

NEW OPPORTUNITIES, NEW RISKS

AS THE ICT SECTOR IN ASIA-PACIFIC rapidly develops, it will bring new significant GDP growth to the region. Asia-Pacific will be a hotbed for new companies in this sector.

While ICT improves the way people do business, boosts efficiency and productivity, the rapid growth and changes always come with increasing hazards and risks. The threat of significant disruption in the ICT sector is likely to see a surge in challenging incumbents.

As liabilities in the region grow, the winners are likely to be those companies that strive to exploit the possibilities created by the expanding ICT sector, while also ensuring they have the appropriate insurance cover in place to protect their balance sheet against unforeseen circumstances. ■

ABOUT QBE ASIA PACIFIC

QBE Asia Pacific is part of the Emerging Markets Division of QBE Insurance Group, one of the top 20 insurers and reinsurers worldwide. QBE Emerging Markets Division has a presence in 22 markets in Asia Pacific and Latin America.

QBE has a history of more than one century in Asia Pacific. Over the years, QBE Asia Pacific has developed a wealth of local knowledge and expertise in each of its operating markets in the region. It has also built very strong partnerships with professional insurance intermediaries. These give QBE Asia Pacific unparalleled advantages in understanding the environments in which its customers operate and the specific risks they face.

QBE believes Asia Pacific will play an even more important role in the future expansion of the Group, recognising the region as a growth engine. With a presence spanning 16 markets in the region, QBE Asia Pacific will continue to grow its business and presence through the provision of all major lines of general insurance cover for personal and commercial risks.

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