

# "Insight of the TOP"

Ms. Aileen Chia

Deputy Chief Executive, Policy, Regulation & Competition Development and Director General, Telecoms & Post of the Info-communications Media Development Authority (IMDA), Singapore.

At the occasion of CommunicAsia 2018 on 26-27 June in Singapore, we had an opportunity to interview Ms. Aileen Chia, Deputy Chief Executive, Policy, Regulation & Competition Development and Director General, Telecoms & Post of IMDA about the current ICT policy stance and Singapore government's perspective of the future.

## “Framing a World Leading Digital Economy”

**Singapore is one of the leading countries in the world in utilizing ICT and its applications. This time we had a chance to visit IMDA's very nice and advanced office to meet with Ms. Aileen Chia.**

**Q1) First, how does IMDA see the current landscape of Singaporean ICT industry and regulatory environment?**

Let me give you a little bit of background where we stand in terms of some of the economic indicators and how we think we will play our part in the region. The ICM (Infocomm Media) is a strong, growing sector for the Singapore economy. We now call the sector under our purview the ICM Sector because of convergence of ICT and media. The ICM Sector's nominal value-add is around S\$32.9 billion in 2016. It employs about 5.3 percent of our workforce, which is not a small number. It contributes to about 8.6 percent of our Singapore nominal gross value-add, and it is expected to grow at about 6 percent from 2015 to 2020. For a mature economy like Singapore these are very good growth numbers. When we look at how we digitalize our economy or grow the digital economy, we see South East Asia as an important market for Singapore. Countries in this region are also talking about digitalizing their economies. We think that some of the infrastructure we have in place put us in a good position to serve the region. We have quite a good, world-class digital infrastructure in terms of connectivity and we are one of the top choice locations or hub for start-up talent. In particular, we are at the heart of ASEAN, and ASEAN together today is the 6th largest economy in the world, with an annual growth of about 6 percent. There are some predictions that by 2030, ASEAN will be the 4th largest economy globally. Against this backdrop and growth projections, we hope we are in a good position to serve the region as we move towards a digital economy.



## Q2) As a government, how do you shape or encourage the ICT or ICM industry in terms of regulation or promotion policy?

As you know, IMDA is not just a regulator. We also have a role in developing the infocomm industry and helping our economy digitalize. We recently launched the Digital Economy framework for action and announced our strategies in 3 verticals and several horizontal layers. The vertical pillars are strategic priorities to ‘accelerate’, ‘compete’ and ‘transform’. We want to help the industries to accelerate their growth, encourage companies to compete by adopting technology and to stimulate transformation. As we see many traditional sectors being disrupted, we believe it is important for us to facilitate our sectors to transform the way they have been doing business by adopting digital technology. Under the vertical pillars are several horizontal layers, which we call "Enablers". They are – "Talent", "Research & Innovation", "Policy, Regulations & Standards" and "Physical & Digital Infrastructure". In terms of capacity and capability development, IMDA is looking at developing talent and research and innovation capabilities. Policy and regulation continues to be an important facilitative horizontal layer. Infrastructure, where the traditional telecom industry lies, also forms part of the key enablers.

This is how we see our role, and the scope of our work has been expanding as we help different sectors of the economy embrace digital technology. Our work is no longer just to regulate, and it is also not just about developing the infocomm sector. We now support initiatives across different sectors economy like logistics, retail, and even things like e-invoice.

## Q3) Could you explain the horizontal enablers? For instance, do you have a specific field focusing in capacity-building?

We identify key factors that are important in enabling a digital economy, for example, "Talent". We then develop the next level of details to develop talent. People are talking about business analytics, cybersecurity and AI. We need to focus on how we ready the workforce today with relevant skills to take on these jobs. As some sectors are being disrupted, some parts of the workforce need to be retrained. We need to have programs that help to retrain some of our workers where some of the skills are no longer useful. So, we find ourselves having to do many new pieces of work that may not be very typical of a traditional Infocomm regulator.

## Framing a World-Leading Digital Economy

“We have what it takes to achieve this vision — the capabilities and daring to pull it all together and to make a quantum leap forward.”

LEE HSIEN LOONG,  
Prime Minister of Singapore<sup>1</sup>

Singapore's goal is clear: To be a leading digital economy that continually reinvents itself.

Informed by a framework for action, Singapore's digital economy transformation is focused around three priorities, which are in turn supported by four enablers.

The framework for action, represented by the acronym **ACT**, aims to build a thriving network of businesses and workers that is fully-immersed in the digital economy.

- 1. Accelerate:** We will accelerate the digitalisation of industries, and support businesses and workers to use technology more intensively in their operations and workplaces. Ramping up digital adoption across our economic sectors will better position our companies to seize growth opportunities, boost labour productivity and provide an uplift to economic growth in the medium term.

- 2. Compete:** Digitalisation is hastening the blurring of sector boundaries. Enabled by digital platforms, customers can increasingly dictate how products and services are designed and delivered around their needs, resulting in the formation of new business ecosystems and market intermediaries. These new ecosystems will form the foundation of future industries. Singapore aims to foster a conducive environment for the growth of such integrated ecosystems and support our businesses to innovate and evolve their business models, and become competitive in the global marketplace.
- 3. Transform:** A strong Infocomm Media (ICM) sector that is competitive and dynamic will be crucial for Singapore to realise its digital economy aspiration. We will continue to partner the industry to transform the ICM sector, nurture the next generation of digital champions and develop the sector as a key engine of growth for Singapore's future economy.

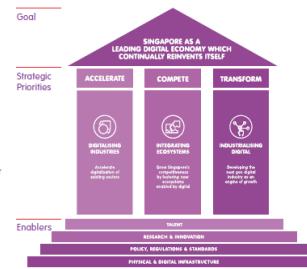


Figure 1. A Framework for Action to Develop Singapore's Digital Economy

<sup>1</sup> Transcript of Prime Minister Lee Hsien Loong's speech at Smart Nation launch on 24 November 2014, November 24. Retrieved from <http://www.pmo.gov.sg/newsroom/press/prime-minister-lee-hsien-loong-speech-smart-nation-launch-24-november>. Accessed on 2018, May 11.



**Q4) So, the digitalization trend and incorporating such a trend in policy and regulatory field require one to move from infrastructure centric regulation to promotion and facilitation centric attitude and encouraging development becomes more important, doesn't it?**

**E**ncouraging development, yes. There will be new policies from IMDA. We are looking at new technologies like Blockchain, new areas like AI, for example. We are keeping an eye on what new issues would be brought about by the increased adoption of AI. While countries like China, Japan and US, are very much ahead in terms of R&D in AI, Singapore is pushing ahead to be a big adopter of AI and, as a user of AI, how do we deal with the issue of ethics.

**Q5) Dealing with ethics would be a difficult issue. You may need to think how to strike the balance between innovation and ethics or how to establish a common understanding of ethics. Let's take AI as an example. What kind of activities in this field do you do in IMDA?**

**I**MDA has always had the 'D' in our name which stands for 'Development'. We have been used to the idea that regulation is only a means to an end. As we constantly need to deal with new technologies and market environments, we are very aware that regulation at the end of the day is for the development of the industry and our economy. We have to deliver a conducive environment that brings about innovation, and encourages a competitive market to benefit consumers. We have been very careful in balancing industry development policies, incentives and initiatives, and regulations especially when technologies like AI is relatively new. Looking back, there were several instances where we had to strike such a balance. One of them was when we were planning the nationwide broadband infrastructure, rolling out fibre to all homes. This was a case where we had to incentivize the market to roll out the fibre infrastructure ahead of demand in 2006-2007. If we had used regulations alone, we would not have achieved the outcome we wanted. We had to combine it with industry development incentives to get players to roll out the infrastructure, and then apply regulations to ensure that those who received funding from the government would provide services in an open-access and non-discriminatory manner. We struck a good balance in using industry development and regulatory instruments so as not to distort the market. That project has been very successful for us. We now see very high-speed broadband of up to 1Gbps to every home in Singapore at very low prices (around S\$39 per subscription).

As we look at the new environment, we recognise that the application of AI to data brings about ethical issues. It is a difficult issue and nobody has the answers. We have established a council and prepared a paper to start the discussion and invite ideas and views from the industry and public. We hope this process will assist us in identifying the issues that the government needs to look at. We are still at an early stage of our journey, opening up discussions on the sorts of issues we need to look at.

**Q6) Singapore is advanced in utilizing digital data effectively. Data protection is a big issue now. What is Singapore's policy towards data protection, and what are the challenges it faces in this area?**

**I**n a digital economy, the telecom community needs to understand and deal with issues such as protection of personal data and ensuring that their networks are cyber secure. The connectivity infrastructure comprises mixed layers of intelligence and information flow, through the connectivity pipes. Traditional telecom players are now providing a myriad of services such as media, e-commerce and e-payments, and many of their business models are changing. As policy makers, we also find ourselves revising our policies in order to respond to these changes. Protecting consumer data is an important area as the use of technology in analyzing consumer data becomes a lot more advanced in making business decisions. At the same time, we need



to balance the cost and impact of data protection on businesses, to make sure that the framework continues to remain reasonable and proportionate to business activities and at the same time keep pace with technology. Some of the areas of the personal data law the Personal Data Protection Commission (PDPC) has been reviewing include enhancing the consent framework such that it is more progressive, to move toward greater accountability, and requiring more transparency when there are data breaches. There will be requirements to report such breaches to the Commission or customers. We are also looking at harmonizing the framework for cross-border data transfer. It is important to facilitate data flows across economies. The PDPC has signed up to the APEC CBPR (Cross Border Privacy Rules) along with several other countries in the region, and we would like to encourage more countries to come on board.



**Q7) You mentioned that the Singapore government consults with the industry and the public with regard to regulations. What is the decision-making system in Singapore when you consult with the private sector?**

We consult the public and the industry, and consider their views before we make our decisions. Certainty and clarity of regulatory frameworks and transparency of decision-making processes are important to the business community. Businesses will then know what to do in order to comply and how they can innovate within the environment. From our experience, the industry welcomes the dialogue with policy-makers, and over time, they appreciate what are our considerations and understand why certain positions are taken, even if they disagree. Policy making is never static. We might arrive at a certain decision at a certain point in time, but with market movement we

may need to adjust it for the future. We constantly look at what new technologies are out there, consumer demand and market changes, what people are saying, and we take them in all when making policies.

**Q8) What do you think about APT's role and its future for ICT development in this region?**

**A**PT plays a very important role in our region as we look at how technology is transforming the sector. A good example would be in the harmonization of spectrum in APT. APT plays a very important role to make sure that we come to a consensus in harmonizing spectrum globally and regionally. Without harmonization, we cannot optimize the use of spectrum, and bring about the social and economic benefits for our people and society. For example, for 4G, APT successfully led the way in harmonizing the 700 MHz band for the benefit of the region. The APT also provides a good platform for representing the voices of Asia-Pacific member states. For capacity-building, there are forums, workshops and many capacity-building programs, such as the Telecommunication/ICT Development Forum, through which APT assists countries with segments of population that are still not connected to be connected. We appreciate APT's role.

2018. 6. 27

[Editor's Note]

We visited newly renovated IMDA's office for this interview. It is both functional and nicely decorated and people in the office walk around with smart steps. In order to be a creative policy maker (for both regulation and development), working environment would be important for those talented staff. IMDA is also playing a leading role in embodying such an idea. We may need to consider working environment in our APT's office...