

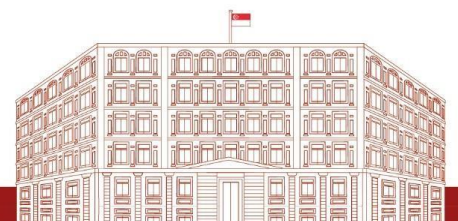
SPEECH BY DR YAACOB IBRAHIM, MINISTER FOR COMMUNICATIONS AND INFORMATION  
AT  
THE LAUNCH OF THE INFOCOMM MEDIA INDUSTRY TRANSFORMATION MAP ON 3 NOV  
2017, AT 11:30 AM, SUNTEC CITY CONVENTION AND EXHIBITION CENTRE

ICM SECTOR: A BRIGHT SPOT IN SINGAPORE'S FUTURE ECONOMY

1. Good morning everyone. Thank you for joining me today to celebrate the one year anniversary of IMDA's formation. It has been an eventful year for IMDA and also all our partners – agencies, companies, trade associations, unions, and the educational institutions.

Thank you all for your strong support.

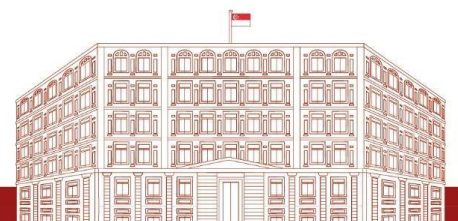
2. All of us know that digitalisation and technological transformation will become pervasive. From 2005 to 2014, data flows have increased by 45 times, and computer processing costs have declined by 60 times.
3. Technology and digitalisation can bring many opportunities. Whether you are a mom and pop shop or a large company, in any sector of the economy, you can seize the digital advantage to enhance your operations, serve your customers better, and find new sources of growth.
4. To unlock the opportunities that technology and digitalisation can bring, we will have to strengthen the InfoComm and Media (or ICM) sector core. The transformation of this sector will also serve as a growth multiplier for other sectors in the economy.



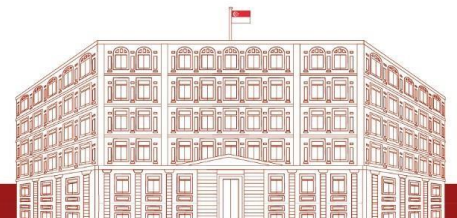
5. I am happy to launch the ICM Industry Transformation Map (or ITM) today, in conjunction with IMDA's first anniversary. The ICM ITM details the government's plans to transform the ICM sector, and thus catalyse the growth of Singapore's future economy.
6. The ICM sector itself shines brightly in Singapore's future economy. The ICM industry's value-add is expected to grow at around 6% annually, almost twice as fast as the overall economy. By 2020, more than 13,000 new PMET jobs will be created, and the ICM sector will employ more than 210,000 workers.
7. This presents immense opportunities for both companies and workers in the ICM sector, and stands at stark contrast to the larger backdrop of global slowdown. However, getting there would not be an easy task, and we will be putting in place a comprehensive set of strategies to achieve these targets.
8. It is especially important to do this because strengthening the ICM sector will bring benefits to Singapore's economy that goes way beyond the ICM sector itself. Today, I would like to share with you two specific initiatives that IMDA will be implementing to achieve this.

## GUIDE DIGITALISATION JOURNEY OF OTHER SECTORS

9. First, IMDA will guide the digitalisation journey of key sectors in our economy through the Industry Digital Plans. The IDPs will help the various sectors capitalise on digital technologies for growth.



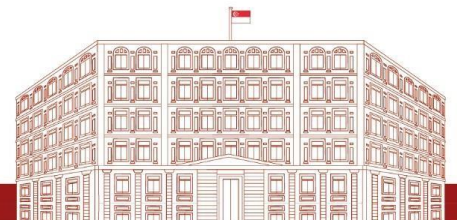
10. I am pleased to announce the Retail IDP for SMEs that IMDA has developed in partnership with SPRING. It will accelerate the pace of transformation for more than 22,000 establishments in the Retail sector. We will level up the base of SME retailers through three key approaches.
11. Firstly, retailers can refer to the IDPs for a self-assessment checklist to understand how digitally ready you are. Secondly, with an understanding of your digital readiness, the IDP can guide you on the type of pre-approved digital solutions you could employ for your business.  
Thirdly, retailers could also refer to the IDP to better understand the types of skills that your workers would need to ride the waves of digital opportunities.
12. If you require further assistance on how best to use the IDP for your business needs, the SME Centres and SME Digital Tech Hub can help.
13. To complement the Retail IDP, IMDA has also worked with partners to use digital technologies to create richer and more immersive retail experiences for consumers. We aim to create such immersive consumer experiences in shops, malls, as well as for entire precincts.
14. One such precinct-level initiative will be for Kampong Glam, a neighbourhood rich in culture and heritage. Through this innovative initiative, retailers in Kampong Glam can look forward to using data analytics to provide personalised services to consumers. Consumers can navigate the precinct more easily, accessing real-time discounts and offers on-the-go.



15. When completed, it would be an interesting showcase that interweaves tradition and digital technologies. A Memorandum of Intent has been signed between IMDA, SPRING, SMCCI and One Kampong Gelam Association to effect this initiative.
16. The launch of the Retail IDP follows on Minister Heng Swee Keat's announcement of the Logistics IDP two days ago at the Future Economy Conference. Both the Logistics and Retail IDPs will help guide SMEs in the logistics and retail sectors in their transformation and digitalisation journey. In 2018, we will be launching more IDPs to help even more sectors ride the waves of digital opportunities in the future economy.

#### BUILD FRONTIER TECH CAPABILITIES IN OUR ECOSYSTEM

17. Apart from digitalisation, companies across all sectors will need to harness frontier technologies to capture new sources of growth in the future economy. Hence, the ICM ITM will help to build a strong ICM core with capabilities in frontier technologies, within our ecosystem.
18. We will invest in building the following four key frontier tech capabilities: Cybersecurity, Internet-Of-Things, Immersive Media, and Artificial Intelligence (or AI) & Data Science. In the upcoming months, we would be sharing with you concrete and specific initiatives in these four frontier technologies, beginning with a spotlight on AI today.
19. And that leads to my second announcement today, which is the launch of a series of AI initiatives. At first glance, AI may sound high-brow or obscure to most



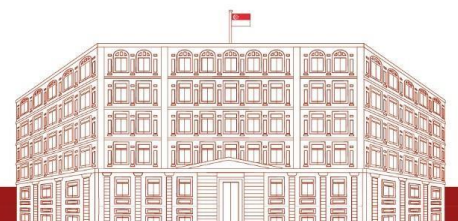
companies. This is not the case. AI is already present in our daily lives, and companies both big and small can leverage existing AI solutions to improve your business offering. Here is an example – many of you may know about online retailer Zalora.

20. They have a catalogue of more than 200 thousand items, so sometimes it is hard for customers to navigate and find products or alternatives. To provide customers with a better shopping experience, they turned to a solution by a newly Accredited local AI company – ViSenze.
21. By tagging products that look similar, this solution recommends products that customers are more likely to be interested in, and suggests alternatives when products are out-of-stock. This has led to more satisfied customers and increased revenues.

#### *AI Spotlight (I): Help Companies Adopt AI Solutions*

22. Like Zalora, companies can grow their businesses by adopting existing AI solutions. Hence, the first of IMDA's AI initiatives is to help companies adopt AI solutions. IMDA is launching an AI Business Partnership Programme to help local companies adopt AI, by matching them with AI solution providers for their business challenges.

23. IMDA will also conduct workshops where AI solutions providers will share their technologies with interested companies from specific sectors. IMDA has conducted the first workshop for the retail and advertising sector with 12 companies.



24. For SMEs that are not sure if you have business challenges that can benefit from AI, IMDA can also help you to assess if you are AI-ready, through the SME Digital Tech Hub I mentioned earlier in my speech. So it doesn't matter whether you are a start-up or an SME, or which sector of the economy you are in. We are committed to helping companies supercharge your growth with AI adoption.

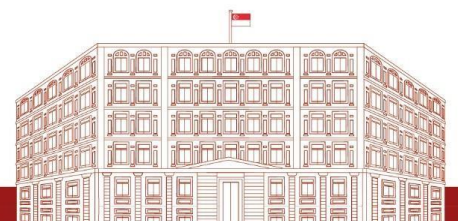
*AI Spotlight (2): Grow Companies in AI Technology Creation*

25. Secondly, IMDA wants to help grow companies that create AI products and solutions, in building deep frontier tech capabilities within our ecosystem that all companies can tap on. IMDA will lead the government's efforts in this area by building on its Accreditation@IMDA programme.

26. I'm sure many companies would be familiar with Accreditation, a programme that provides customised assistance to high-growth tech companies to accelerate their growth and to internationalise.

27. Kai Square, a local video analytics company accredited in 2014, recently shared with us that they appreciated how the Accreditation programme has helped them strengthen their product and gain business traction. Their business and operations have since been successfully acquired by NCS.

28. Accreditation has also helped to nurture companies in the space where ICT and media converge. One good example is the newly-Accredited iVideoSmart, a local tech start-up that has developed innovative video and advertising technologies to help publishers and media companies monetise video traffic and increase user engagement.



29. For example, instead of having to watch a commercial on dresses in the middle of a video, viewers can just click on or mouse over the dress that the actress in the video is wearing to purchase that dress!

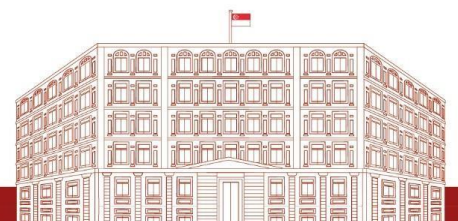
30. Moving forward, I am happy to share with you that Accreditation@IMDA will be expanded and rebranded to Accreditation@SG Digital, to help companies leverage the Singapore brand for better recognition overseas. It will have a dedicated focus in the four key frontier technologies I have talked about, such as AI.

31. Two newly accredited AI companies, Taiger and Data Robots, started their operations overseas but have decided to set roots in Singapore's AI ecosystem. Taiger has plans to more than triple their R&D headcount in AI, thus providing more job opportunities in this area.

32. Taiger and Data Robots, together with 6 other AI companies on the Accreditation@SG Digital programme such as Cashshield and Visenze, will play a pivotal role in growing a strong base of companies with deep tech capabilities in our ecosystem.

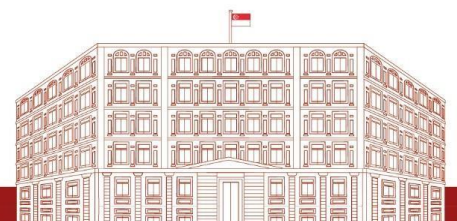
### *AI Spotlight (3): Develop AI Talent for Companies*

33. Ultimately, how successful we are in adopting and creating AI technologies will be dependent on a strong and steady pipeline of AI professionals. To do so, we will build on the good work done by the TechSkills Accelerator (or TeSA), a SkillsFuture initiative driven by IMDA and in partnership with strategic partners. To date, more than 16,000 individuals have benefitted from various TeSA programmes.



34. Moving forward, as a key pillar of the ICM ITM strategies, TeSA will also equip the Singaporean workforce with frontier tech skills, such as in AI. I am happy to share that TeSA will work with AI Singapore to launch an inaugural AI apprenticeship programme. Through this programme, apprentices will be trained as AI professionals through a combination of indepth AI training courses and on-the-job training (OJT) on industry projects.
35. For a start, we will be targeting 200 apprentices to be trained over the next 3 years. The AI apprenticeship programme will equip professionals with key AI skills, such as in machine and deep learning, and in deploying AI. This will be an exciting space, I encourage our younger generation to explore, and consider a career in AI.
36. This programme is just a beginning, Singapore will continue to invest heavily in developing our people. IMDA will work closely with our partners to develop a strong pipeline of frontier tech talent that all sectors could tap on to grow your businesses.
37. Next week, I will speak about a national skills framework in tech skills that companies and workers can look forward to.
38. In sum, this series of AI initiatives targets three areas of opportunities – AI adoption, AI tech creation and AI talent development. AI is one of the four key frontier tech capabilities we will build within Singapore’s ecosystem. I will speak more about the other three frontier technologies in the upcoming months when our plans are ready.

Where will we be in one year’s time?





39. I hope you are excited about the opportunities that the ICM ITM, the Industry Digital Plans, and our series of AI initiatives will bring. When we gather next year to celebrate IMDA's second anniversary, I believe that we will hear many more stories about how companies across all sectors have adopted technological solutions to grow your businesses.

40. We will see more companies that build frontier tech capabilities within our ecosystem.

We will also have a stronger workforce of digital talent, more fluent with frontier technologies.

41. As Singapore pushes on in our transformation journey, the transformation of the ICM sector is critical, and will also catalyse the growth of companies across all sectors as we ride the waves of digital opportunities in our future economy.

42. Congratulations once again to IMDA on a very impactful first year, and for all your efforts to help Singapore go digital. Thank you.

