

**OPENING ADDRESS BY MR CHAN CHUN SING, MINISTER FOR TRADE AND
INDUSTRY AT THE SME TECHNOLOGY AND INNOVATION DAY AT RESORTS
WORLD CONVENTION CENTRE, CENTRAL BALLROOM, 15 MAY 2018 10:00AM**

Distinguished Guests, Ladies and Gentlemen,

Introduction

1. Good morning. I am pleased to join you at this year's SME Technology and Innovation Day, jointly organised by A*STAR and Enterprise Singapore. I would also like to welcome our Institutions of Higher Learning, A*STAR Research Institutes, Trade Associations and Chambers (TACs), union representatives, SMEs and other industry partners who are here with us today.

***SINGAPORE AS A GLOBAL ASIA NODE OF TECHNOLOGY, INNOVATION AND
ENTERPRISE***

2. We are now in an era where the effects of technological disruption are ubiquitous, touching all aspects of our lives – from the way we work, live and interact with one another. This wave of change, driven by digitalisation, has already impacted many sectors. In the manufacturing sectors, the enabling technologies behind “Industry 4.0”, such as cyber-physical systems, the Internet of Things and cloud computing, are reshaping the manufacturing landscape and, with this, disrupting global value chains. In the services sectors, internet and mobile technologies have enabled the rise of new business models, such as the “sharing economy” and “open

innovation”, which have allowed societies and individuals to redefine the way people work and interact.

3. Technological disruption can be scary and yet exciting. As a country, Singapore must be prepared to take advantage of these shifts. Fortunately, we are at a position of strength today. Our strategic positioning within ASEAN, longstanding investments in R&D, our skilled workforce and pro-business environment put Singapore in a strong position to continually attract talent, ideas, capital, and create good jobs. But we must never forget that our competitors are moving very quickly too. As I was sharing yesterday, competition is no longer linear nowadays. If we are not careful, others will leapfrog and overtake us.

4. In the next phase of our development, Singapore must position ourselves as a Global Asia Node of technology, innovation and enterprise in order to maintain a vibrant and competitive economy. How can we do so?

INNOVATION AS BUSINESS MODELS, MARKETS AND MINDSETS

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5. First, Singapore is at the heart of the dynamic and fast growing ASEAN market. Our businesses must therefore design products and services for the ASEAN market and the world, and not just for our domestic market. ASEAN saw a steady growth rate of 5% in 2017 and is currently the sixth largest economy in the world. Our strategic geographical position puts our companies in an excellent position to seize the business opportunities in ASEAN.

6. Second, for our companies to compete successfully in ASEAN, we must make innovation our core competitive advantage. Under the Research, Innovation and Enterprise 2020 Plan (RIE2020), the government is investing up to \$19 billion to support public sector R&D from 2016 to 2020. This will ensure that Singapore has the technological capabilities to capture opportunities from digitalisation to other emerging technologies.

7. Third, to remain relevant as a Global Asia Node within ASEAN, we must strive to be the location of choice for startups and SMEs to incubate, pilot and scale up new business models and technologies. This requires flexible and receptive mindsets that are pro-enterprise and supportive of innovation. One key area where Singapore can differentiate ourselves from our competitors is our regulatory agility, where regulators, economic agencies and industry players can work together to experiment with new business models, products and solutions. For example, to ensure that our regulations support innovation in the food manufacturing sector, the Agri-Food and Veterinary Authority (AVA) works closely with the industry to facilitate timely regulatory approval for new food products and technology – from upstream creation to downstream commercialisation. AVA also works with Enterprise Singapore as a partner of FoodInnovate, a new multi-agency initiative which equips companies with the knowledge and resources to pursue innovation.

EVERYONE HAS A ROLE TO PLAY

8. SMEs have an important role to play in our ambitions for Singapore to be a Global Asia Node of technology, innovation and enterprise. I am happy to note that

many of our SMEs are stepping up their investments in innovation and technology. According to the 2016 National R&D Survey of Singapore, Business Expenditure on R&D (BERD) by SMEs grew by a Compound Annual Growth Rate (CAGR) of 4% over the period 2006 to 2016.

9. As part of Government's efforts to sustain the growth and competitiveness of our enterprises, the Industry Transformation Maps (ITMs) which address 23 sectors representing 80% of our GDP are being rolled out. Innovation and internationalisation are key components of the ITMs. At MTI's Committee of Supply (COS) debate this year, we shared that Enterprise Singapore will continue to work closely with key partners, such as the TACs, to broaden the reach and impact of the ITMs to bring greater benefits to our SMEs. We have further enhanced the Local Enterprise and Association Development (LEAD) programme to better support our TACs in helping SMEs innovate, build capabilities and internationalise.

10. On the technology front, we will support the broad base of SMEs in technology adoption, for example, through the Tech Depot. This provides a centralised listing of readily adoptable technological solutions, developed and pre-qualified by A*STAR, Enterprise Singapore and IMDA, on the SME Portal. I am happy to note that to date, more than 1,300 enterprises have adopted over 50 solutions in areas such as customer management and data analytics. These businesses are already seeing benefits, with an average of 25% productivity improvement following implementation of the solutions.

11. To expand the pool of ready-to-go solutions for SMEs, the Productivity Solutions Grant (PSG) was rolled out in April this year as part of the Budget 2018 announcements. These solutions are aligned to the ITMs and are pre-scoped by the sector lead agencies. Examples would include hardware such as automated dishwashers and robotic arms for precision engineering.

12. For SMEs which require access to advanced manufacturing equipment, A*STAR has introduced Tech Access, to provide SMEs with access to A*STAR's installed base of advanced manufacturing equipment, ranging from inspection tools to robotised 3D scanners and high-pressure cold sprays for additive manufacturing.

13. 3D Metalforge, a 3D metal printing company, tapped on Tech Access to expand its additive manufacturing capabilities. It also collaborated with the Singapore Institute of Manufacturing Technology (SIMTech) to build up its know-how in Selective Laser Melting (SLM) equipment.

14. For SMEs which are thinking of accessing intellectual property (IP) from Singapore and around the world, they can also work with the Intellectual Property Intermediary (IPI). IPI, a subsidiary of Enterprise Singapore, offers a global network of technology partners from public and private sectors, to help SMEs match with relevant IP for product research and development. Health Food Matters is one such local nutrition company which was matched with Changi General Hospital by IPI to co-develop texture-modified meals in local flavours for patients with dysphagia, or swallowing difficulties.

15. Most importantly, for SMEs to sustain their competitive edge over the longer term, they must also build up in-house R&D capabilities and be able to attract R&D talent. To support such efforts, A*STAR seconded its research scientists and engineers to the industry through its Technology for Enterprise Capability Upgrading (T-Up) scheme. Since 2003, more than 700 A*STAR research scientists and engineers have been seconded to SMEs to work on over 600 projects. This is a fine example of how we want to translate research and innovation into enterprise and commercialisation.

16. I would like to take the opportunity to recognise our excellent A*STAR researchers who have worked with SMEs under this scheme, and announce the top three winners of the T-Up Excellence awards.

17. The first T-Up Excellence Awards goes to Ms. Georgina Estelle Seah Kim Kui from the Institute of Materials Research and Engineering (IMRE). Ms. Seah was seconded to ChemoPower Technology, a company which provides solutions for analytical chemistry applications.

18. Ms. Seah helped the company develop a methodology to export and process data from Liquid Chromatography–Mass Spectrometry (LC-MS) equipment, in an optimal setting. This has allowed the company's online platform to produce experimental results more efficiently.

19. The second award goes to Ms. Jessica Zhang Jingjing from SIMTech. Ms. Zhang was seconded to Singnergy Corporation, a company that specialises in energy efficient sludge drying solutions.

20. Ms Zhang helped the company develop an anti-stick coating technology which helped to solve one of the major issues of sticking during the heating of high organic sludge feed material. This has allowed Singergy to reduce business costs by up to 55% per annum and expand into other areas like food waste management.

21. The third award goes to Mr Christopher Lee Khee Aik from SIMTech. Mr Lee was seconded to precision engineering firm Wavelength Opto-Electronic.

22. Prior to Mr Lee's secondment, SIMTech had co-developed and licensed the world's first commercial laser calorimetry system – MatCalorie™ to Wavelength. During his secondment, Mr Lee helped build a traceability system that allows for real-time diagnostics of system performance. A patent was also filed for the MatCalorie™ system.

23. I would like to congratulate the 3 winners of the T-Up Excellence awards.

Conclusion National Archives of Singapore

24. Finally, in order for Singapore to remain a vibrant economy with opportunities for our businesses and good jobs for our people, we all have an important role to play. The government, the research institutions, our SMEs, our local enterprises, our workers must work closely with one another so that we can continue to stay ahead of the competition. Today is a fine example of one plank of our enterprise strategy, making sure that we translate all the investment in innovation and technology into

enterprises. Ultimately, we need to complete the cycle. If we only spend on research and innovation without enterprise, we will not get very far. And our enterprises need to make use of all the research and innovation outcomes to grow their enterprises so that we have more resources to put back into further research, further innovation, further enterprise, and the loop must continue.

25. On that note, I wish you a productive SME Technology & Innovation Day ahead, and I look forward to more collaboration among all the enterprises here. We also look forward to more of our research and innovation outcome being commercialised and translated into enterprises. Thank you.

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