SPEECH BY DR KOH POH KOON, MINISTER OF STATE FOR MINISTRY OF TRADE & INDUSTRY AND NATIONAL DEVELOPMENT AT THE MANUFACTURING SOLUTIONS EXPO 2016 & MANUFACTURING PRODUCTIVITY TECHNOLOGY CENTRE ANNUAL CONFERENCE 2016, ON 12 OCTOBER 2016, 9.15 AM, AT SUNTEC SINGAPORE CONVENTION AND EXHIBITION CENTRE

Mr Douglas Foo, President of the Singapore Manufacturing Federation,
Distinguished guests,
Ladies and gentlemen

#### Introduction

- 1. Thank you for the invitation to join you today, at the Manufacturing Solutions Expo (MSE) 2016 and the Manufacturing Productivity Technology Centre (MPTC) Annual Conference 2016.
- 2. Both events encourage our local companies to invest in technology and innovation for productivity and growth, and I am pleased to see the good turnout today. In attendance are SMEs from a diverse range of industries, as well as innovative companies from overseas who are here to share knowledge and expertise.

# Technological trends are transforming the manufacturing sector, and creating new opportunities.

3. The manufacturing sector is an important pillar of Singapore's economy, contributing around 20 per cent of Gross Domestic Product (GDP) in 2015. This sector generates good jobs for Singaporeans, contributes significantly to productivity growth, and generates positive spillovers for the rest of the economy, including our services industries.

- 4. Technological disruptions are causing a paradigm shift in the manufacturing sector. We are on the threshold of a new industrial revolution, which some are calling by a range of names, including Industry 4.0 and the Fourth Industrial Revolution. Underpinning these labels is a common theme: new advanced manufacturing technologies will transform the industrial workforce, and lead to increased productivity and growth. Some of the key technologies that will define the future of manufacturing include:
  - <u>Robotics</u>. Robotics will support greater automation and efficiency of manufacturing processes. With technological advances, industrial robots are becoming increasingly intelligent and versatile to support a wide range of manufacturing processes.
  - Additive Manufacturing. Additive manufacturing will inject greater speed, agility and flexibility into the product development and prototyping process. This will enable shortened supply chains, mass customisation and reduced time to market.
  - Industrial Internet-of-Things (IoT). Industrial IoT will allow real-time factory visibility, immediate and predictive equipment maintenance, as well as optimisation of energy usage across manufacturing value chains.

## Companies must be willing to adapt to new trends and embrace change in order to capture these opportunities.

5. It is not easy for a company to transition into the new era of advanced manufacturing. Disruptive technologies will require companies to change the way they operate, to drive the digital transformation of their business.

- 6. However, transformation is necessary for companies to differentiate themselves and remain competitive in the global market. To prepare for the future of manufacturing, companies need to focus on building operational excellence by investing in technology and innovation, and taking on new manufacturing practices. If companies adopt an open and forward-looking mind-set to adapt and embrace change, they will be better positioned to seize new growth opportunities.
- 7. Globaltronic Precision is an example of a local SME that has taken steps to transform and prepare itself for the changing business landscape. It started in 2002 as a small machining service provider. Over the years, Globaltronic Precision has expanded its business to provide assembly, testing and design activities to customers in the medical technology and instrumentation sectors. The company recently invested in a centralised robotics system, which links up 14 of their CNC systems as well as automates various manual processes, such as loading and unloading pallets. The investment will create a fully automated workshop, and is expected to increase the company's production capacity by more than 50% annually.

The government will continue to invest in advanced manufacturing, and foster partnerships to accelerate the adoption of technology among our companies.

8. The government will also do our part in supporting companies to adapt to the new manufacturing paradigm. Specifically, we will continue to invest in new advanced manufacturing technologies, as well as foster partnerships to accelerate the adoption of technology. Indeed, technology, innovation and partnerships are key themes under both the Committee on Future Economy (CFE) and the Industry Transformation Maps (ITMs), which were announced in Budget 2016.

Investments in advanced manufacturing

9. The government will continue to invest in advanced manufacturing to better position our companies for the future of manufacturing. We have committed S\$3.2 billion under our Research, Innovation and Enterprise (RIE) 2020 plan to support research in Advanced Manufacturing & Engineering. The CFE has also identified Advanced Manufacturing as a key growth sector worthy of further exploration.

### **Partnerships**

- 10. The government will continue to support partnerships between public and private sector stakeholders, including our Trade Associations and Chambers (TACs), Institutes of Higher Learning (IHLs) and Research Institutes (RIs), to accelerate the adoption of technology in our industries.
  - <u>TACs</u>. TACs such as the Singapore Manufacturing Federation (SMF) play a key role by helping companies leverage government schemes to improve their business. Through their industry groups and Centres of Excellence, SMF helps companies to improve their competitiveness, upgrade their skills and capitalise on new technologies.
- IHLs and RIs. Our IHLs and RIs, with their deep knowledge and technology expertise, are also important partners to the industry. For example, MPTC (Manufacturing Productivity Technology Centre), which is hosted at A\*STAR's Singapore Institute of Manufacturing Technology (SIMTech), promotes the use of technology and innovation among companies, to enhance productivity and value creation.

### Contributions of SMF and SIMTech

- 11. I was very pleased to note that today, SMF and SIMTech will be signing a Memorandum of Understanding (MOU) to collaborate in initiatives that support technology adoption among local companies, including dedicated technology roadmapping, consultation on implementing relevant manufacturing solutions, and technology transfer of scalable solutions such as RFID technology.
- 12. SIMTech will also be announcing new initiatives to improve productivity across a spectrum of operational processes, which are applicable across many sectors. For instance:
  - wfMOBILE<sup>TM</sup> ["w-f-mobile"], which stands for workflow mobile, provides a convenient, quick and affordable platform for updates and monitoring of workflow activities while on-the-go. This will be especially useful for employees such as drivers and movers.
  - Another initiative is <u>SIMTech's Inventory Planning Programme</u>, which supports improved inventory systems that can simulate inventory policy outcomes to aid in performance evaluation. This will be particularly useful for companies struggling with high inventory costs and low fill rates.

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- 13. There are exciting new technologies, innovations and solutions to view over the course of this event. I strongly encourage our companies to adopt an open mindset, and take advantage of this opportunity to learn about new ideas and practices that can support your growth. I am confident that if our companies are willing to embrace change, and if we work closely together, we will be able to transform our industries and be in a strong position to seize new growth opportunities.
- 14. Thank you.