OPENING ADDRESS BY MINISTER JOSEPHINE TEO
AT BUSINESS AND PHILANTHROPY FORUM
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NAVIGATING THE INTERSECTION OF ARTIFICIAL INTELLIGENCE, IMPACT, AND OUR FUTURE

Dr Lim Chun Leng Michael, Chairman of the Organising Committee

Mr Zheng Wei, Director of the Alliance for Good

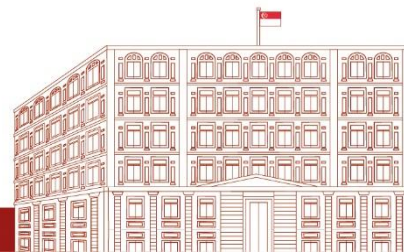Mr. Benjamin Fok, Deputy Chairman of the Forum Organising Committee

Distinguished Guests

Ladies and Gentlemen

1.   Good morning. I am delighted to join you today at your annual Business and Philanthropy Forum.

HARNESSING AI FOR THE PUBLIC GOOD

2.   I was invited to talk to you about how we can navigate Artificial Intelligence for a better future.

3.   We begin with the conviction that AI has the capacity to change the world. And especially so for Singapore, where human capital is critical, AI presents the opportunity to power our next wave of economic and societal transformation. In fact, for us, AI is not just a "good-to-have" option, it is a necessity.

4.   We intend to do all we can to harness AI for the Public Good, both for Singapore and the world. We want to direct AI to address the pressing challenges of our time. Like many other countries, we have an ageing population with considerable healthcare needs. Our densely-populated urban environment also means that energy efficiency is paramount for our environmental sustainability. AI can enable excellence to be achieved in these domains and more, from personalised healthcare to system-optimal sustainability. We also want to empower our people and businesses to uplift
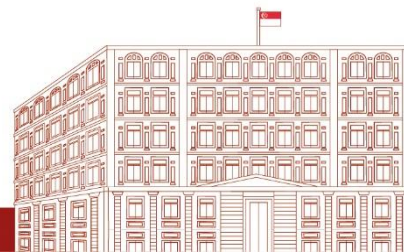
their potential through AI, and equip them to be confident and discerning in an AI-enabled future.

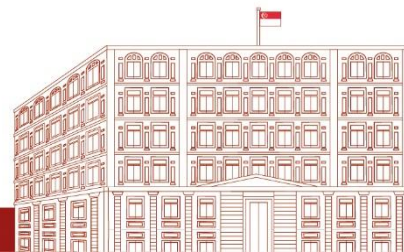## STARTING FROM A POSITION OF STRENGTH

5. It's taken a long time for us to get from what was described as an "AI Winter" to the immense potential that was observed through the introduction of ChatGPT. But as PM Lee said at yesterday's Bloomberg New Economy Forum, we are only still just at the beginning, and the first thing to know about AI is that there is a lot that we don't know about it. PM Lee also said that in order to be able to make the best of AI - in order to perhaps regulate it in the future - government itself must gain experience in operating AI.

6. Hence, from the perspective of trying to make the most of AI for our people and businesses, Singapore was among the first countries to publish a National AI Strategy in 2019. Incidentally, we were also among the earliest to articulate the AI Governance framework. And we have continued to build up our AI innovation capacity across academia, industry, and government. For instance, we have invested over $500 million in AI R&D over the last five years. Our researchers are well-regarded internationally, particularly in areas like natural language processing and computer vision. This enables us to advance AI techniques, models, and technologies; and translate them into impactful solutions. For example, in the not-so-distant future, citizens will be able to enjoy passport-less immigration clearance.

7. We are also home to globally competitive industries, with a good concentration of talent, industry, and capital. This is invaluable as breakthroughs in AI increasingly depend on intersections – where tech and domain experts apply their specialised knowledge and perspectives to tackle the challenges of our time. We have built up expertise across broad domains like advanced manufacturing, healthcare, legal, aviation, and maritime, and we can activate linkages to reinforce our AI edge.

8.   Perhaps the most important point to make here is that many of our citizens are becoming confident users of digital technologies, and they generally trust the Government to ensure that technologies are harnessed responsibly.

STEWARDSHIP FOR AN AI-ENABLED FUTURE

9.   Building on this, we are determined to help Singapore stay ahead of the curve as we enter the new AI-enabled future. Let me say upfront - we have no illusions of grandeur. Indeed, our modest aim is to be a place that develops and deploys AI for Good.

10.   The Government sees itself as a steward, investing in the future so that the next generation can lead even better lives.

11.   Let me share with you briefly, our key lines of effort, which we hope will help Singapore make the most of AI.

12.   As with all things, we start with infrastructure. AI can be very energy intensive. But it is not possible, nor efficient, for us to process all workloads off-shore. So, we will invest in more sustainable solutions, such as green Data Centres and associated technologies, as we implement our Digital Connectivity Blueprint. This enables us to host enough compute for our AI needs.

13.   Our second line of effort is around AI capabilities. We will need AI capabilities across all sectors of economy and segments of society. In our governance, we make sure we are walking the talk to develop our proficiencies. For instance, we are one of the first in the world to obtain secure access to the LLMs underlying ChatGPT. 2 out of 3 public servants in Singapore can already use generative AI tools to enhance their productivity, and that number comes to around 100,000.

14.   More broadly, we must crowd in talent to be part of our AI ecosystem. In AI, good talent is attracted to the prospect of solving interesting challenges. Singapore can offer this. We want to be a place which focuses less on hype, and more on practical
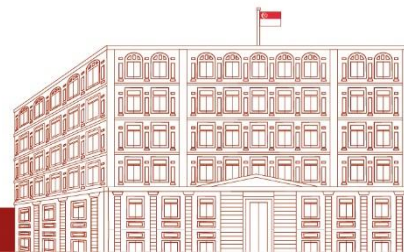
use cases across all settings. It can be in precision medicine, drawing on the genomics database we're building, or using AI for energy management in dense built environments; or in wide-ranging and prolific government applications, developed together with the private sector.

15. A related issue is around access to relevant data for use in AI. We often say, "if there is no good data, there is no good AI". We have invested in getting businesses to use and share data in a trusted manner. But this may not be enough. So, we are considering ways to ensure that projects that serve AI for the Public Good can harness relevant government data.

16. The third line of effort is in AI governance. Singapore would like to grow and cement its reputation for trustworthy AI development and deployment. But we will always retain a practical orientation, building on the AI Governance framework, we have introduced practical initiatives such as AI Verify, which is a testing framework and software toolkit for developers and owners of AI systems to demonstrate its responsible use. Our focus has to be on pragmatically assessing the evolving risks and addressing them – whether it is around bias and cybersecurity, or possible disruptions to our workforce.

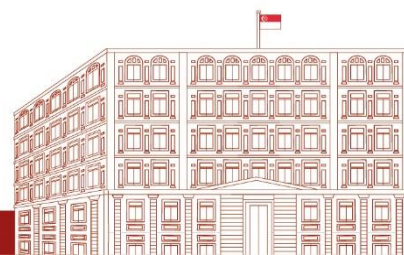## PARTNERSHIPS TO ADVANCE AI

17. This leads me to the fourth line of effort, which is that we will forge partnerships to advance AI. We have always benefitted from partners taking the leap of faith to journey with us.

18. In AI, our international and industry partnerships have borne fruit. Take the field of AI Governance as an example. We are working closely with other countries to shape "rules-of-the-road" and invest in cutting-edge research. For instance, the joint-mapping of our AI Verify with the US National Institute of Standards and Technology (NIST) AI Risk Management Framework enhances inter-operability, benefitting our businesses. It also forms the basis for Singapore and the US to engage international partners and standards bodies, as a pathfinder for the wider global community.

19. We are also excited to collaborate with enterprises, and to encourage them to do more to co-create a culture of innovation and experimentation. Companies like Salesforce, SAP, and Alibaba have all set up AI R&D Centres here. We also partnered Google Cloud to launch the Trailblazers initiative in July this year, to identify and address 100 Generative AI use cases across government and industry in 100 days.

20. I also want to highlight the strong complementary role that private capital can play in this journey. Through the years, many businessmen and philanthropists have left an indelible legacy on Singaporeans' lives, in fields like healthcare and education. For instance:

    (i) Tan Kah Kee devoted his family fortune to the cause of promoting education, establishing a network of schools across Singapore.

    (ii) Likewise, the Aljunied family supported the social needs of diverse communities – including establishing a madrasah for the education of Muslims, donating a tract of land for the building of St Andrew's Cathedral, and also contributing funds to the Chinese Pauper Hospital.

21. Similarly for AI, we hope to join forces with private capital to pursue meaningful projects together. For instance, Schmidt Futures has partnered with NUS in 2022 to launch the Eric and Wendy Schmidt AI in Science Post-doctoral fellowship. This fellowship programme aims to enhance discoveries in Science, Technology, Engineering and Mathematics through innovative AI technologies.
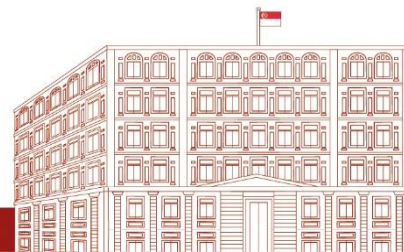
CALL TO ACTION

22. We hope that whenever Singapore is mentioned, what comes to mind is a country with strong fundamentals – one that is globally-oriented and always aims high, and yet never forgets to look inwards to support its most vulnerable, so that we are always moving forward together. This ethos is not a recent invention. Since our

founding, successive generations have sought to build a prosperous Singapore, that is also fair, just and inclusive.

23. In many ways, we have a unique social compact, recently refreshed through the Forward Singapore exercise. We remain committed to building our shared future together, and standing united in our many common goals and aspirations - even as we celebrate our diversity.

24. Our focus on AI for the Public Good is equally our commitment to our people. That in the harnessing of the power technology, we are anchored in how it serves them, and helps to unlock our collective potential.

25. So, as we write the next chapter of our national AI journey, we challenge ourselves to shape a positive agenda, and strengthen partnerships with like-minded stakeholders.

26. The theme of today's forum – "Asia Vision: Wealth and Purpose" – resonates well with our goals. And your discussions over the next two days all speak to how we can collectively align our resources to meaningful causes, to achieve the Public Good.

27. I hope you will partner us to drive impactful AI innovation in Singapore, through:

   (i) Supporting efforts to build up AI R&D capabilities, in industry and academia;

   (ii) Curating and investing in meaningful causes that serve the Public Good; and

   (iii) Joining us in empowering people and businesses to be confident users of AI.

28. We can move forward together, harnessing AI to help society maximise its benefits and mitigate its harms; to empower Singaporeans from all walks of life to achieve

their full potential; and to give the next generation a brighter future to look forward to.

29. I wish you all a fruitful and meaning conference ahead. Thank you.