Transcript of Speech by Minister of Communications and Information, Mrs Josephine Teo, at the Launch of the 'AI Trailblazers' Initiative on Monday, 24 July 2023

Mr Karan Bajwa, Vice President Asia Pacific, Google Cloud,

Colleagues and friends,

Good morning.

1.   I'm thrilled to be here for the launch of the Trailblazers initiative. This is a timely and exciting partnership between Google, the Ministry for Communications and Information (MCI), the Smart Nation and Digital Government Office (SNDGO), and Digital Industry Singapore (DISG). Thank you for working with us on it.

Harnessing the Transformative Potential of AI

2.   The name 'Trailblazers' is an apt one. Not only for the 20 teams from the public and private sectors who are participating in today's workshop, but for all of us in Singapore who are eager to enter new territories and chart new paths in AI.

3.   AI itself is not such a new technology. It has been around for several decades. For some of the companies that have set up their exhibits here, they have been doing AI in Singapore for well over a decade.

4.   In the last 20 years or so, innovations in machine learning have come to shape our daily experiences: from finding the quickest way to meet our friends, to picking your next show on Netflix, Disney+ or YouTube. AI is working in the background, influencing our choices, with the hope of serving us better.

5.   Such innovations are not confined to the private sector; in the public sector, we have also found ways to harness machine learning to improve lives. For instance, the Singapore Police Force works with banks to deploy AI in monitoring transactions and detecting fraud. Public health institutions

like the National University Hospital use AI to predict the availability of hospital beds up to two weeks in advance, to optimise capacity and reduce waiting times. You and I, who on occasions have had to rush family members to the hospitals, will appreciate how useful this is.

6.   Technology continues to develop at light-speed, with interesting twists and turns. Not so long ago, the Metaverse was all the rage. People could not stop talking about it. More recently, advances in large language models and image diffusion-based models have turned the spotlight on generative AI. These models can not only be deployed as point solutions to raise productivity, but also embedded deep within our business models and tech stacks, delivering new kinds of value for consumers and citizens. With generative AI as a new beachhead, I think we will see very exciting developments in customer operations, marketing and sales, software engineering, as well as many applications in research and development. This will raise the quality of research because we will be better able to target the pathways that could produce results.

7.   As a result, the transformative potential of AI appears to be much more within reach and for many more people. With the expanding possibilities, the scope to harness AI for public good outcomes – at speed and scale – have multiplied accordingly.

Singapore's ambitions for AI-driven value creation

8.   These opportunities can be realised through ensuring a robust environment to support AI innovation in Singapore. Since launching our National AI Strategy in 2019, we have made important strides in nurturing our research and development (R&D) ecosystem here.

9.   Singapore has more than 4,000 researchers publishing on AI today, and their combined research output is more than respectable. Some, like Professor Ong Yew Soon – the Chief AI Scientist at A*STAR, who is here with us today – are recognised at the top of their fields, while up-and-coming names such as Google alumnus Yi Tay are developing cutting-edge products.

10.   Where we still have some distance to go, is in translating this research into widespread and meaningful use-cases across different industries.

11. Such efforts are important because they push us to iron out kinks. These kinks could be data issues, but they could also be issues to do with security. Responsible implementation of AI needs us to be ensure that you do not leave these questions unanswered, but to develop satisfactory answers. This will allow us to unlock the fullest potential of AI for Singapore.

12. Earlier this year, I shared some areas where AI can be deployed to address the major challenges of our time.

13. Beyond our existing national AI programmes in sectors like education, logistics, or finance; AI can help Singapore tackle the healthcare needs of our ageing population through preventive care and precision medicine, or meeting our net-zero commitments through energy efficiency and load optimisation.

14. We should enhance our AI ecosystem to be more capable of generating solutions to these major challenges. This means building on our foundations in R&D, to anchor key capabilities here on a larger scale.

15. Among the many efforts needed, we must aim to attract the world's best talents to develop their ideas and build products in Singapore, and gather communities of innovation around them.

16. We must also ensure we have the capacity to support the rapid development and testing of AI, by making compute accessible to developers, and fostering AI-ready businesses to trial and adopt new solutions.

17. These are just some of the prerequisites that will allow us to pursue our ambitions: to foster a thriving and competitive AI landscape, and ultimately, to uplift the lives and livelihoods of Singaporeans.

Partnership with private sector and Trailblazers initiative
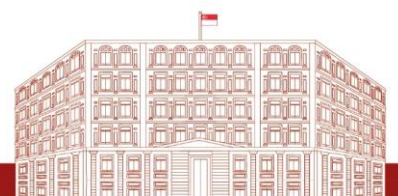
18.   Close coordination across the Government will help to ensure all the ingredients are in place. But equally important are partnerships like these, which allow us to tap on the dynamism and capabilities of the private sector.

19.   Earlier this year, the Government announced a strategic collaboration with Google Cloud with the AI Government Cloud Cluster (AGCC). The Trailblazers initiative builds on this collaboration, by helping organisations – from both the private and public sector – identify real-world challenges, build AI solution prototypes, and bring those solutions to production.

20.   Participating public sector agencies will be able to access a dedicated Innovation Sandbox, within the AGCC, where they can leverage Google's generative AI tools to build and test their solutions. Singapore-based private sector companies will also benefit from a similar Sandbox, administered by Digital Industry Singapore, to develop products within a cloud-based environment.

21.   All in all, the Innovation Sandboxes will identify and address 100 generative AI use-cases across government and industry within the next 100 days. Of course, our ambitions don't stop in the hundreds, our ambitions have to be in the thousands, and in the not-so-distant future – the tens of thousands. But the journey of a thousand miles still has to begin with the first step. I think that's exactly what this initiative is.

22.   One of the teams participating today, from the Ministry of Manpower, hopes to use AI to provide workers with targeted career guidance, including job and training recommendations, which will allow them to navigate the job market much more confidently. This is one of the issues that we face. We want to do a better job of matching jobseekers to jobs. But we also know that it is not just a matter of putting them in touch with each other. It is about understanding the individuals and job requirements deeply. There is also an important gap in between, which is that even if the matches are not a 100 percent, even if it is mere 60 percent, what kinds of interventions can you encourage the individual to take to close the gap? And this is very difficult to do so. We have career coaches, but they have an immense workload to deal with. With this tool, I think that could dramatically change the level of advice they provide to their clients.

23.   Another fascinating use-case, which was one of the winning teams in the 'Build for Good' hackathon organised recently by the Open Government Products team at GovTech, aims to help school counsellors produce comprehensive case notes more efficiently, freeing up time to focus on the wellness of their students. By taking away the most mundane and routine tasks, and doing a better job of documentation so that they can help each student, is also a way in which the issue of inequality can be addressed.

24.   For so many workers and students out there, these use-cases – given the right resources and opportunities for development – could make all the difference.

25.   I hope you will join me in encouraging the Trailblazer teams which have stepped forward to build such meaningful products with Google's support. I also urge more organisations to make the most of this partnership, to develop game-changing solutions in your respective domains.

26.   Thank you, and I wish all of you a fruitful journey ahead.