

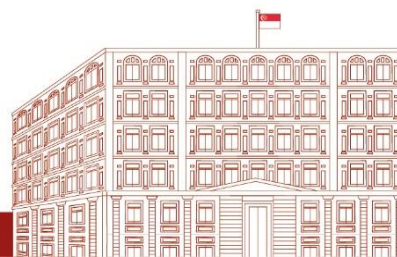
Securing Singapore's Digital Future

Mr Sam Liew, President of the Singapore Computer Society

Distinguished Guests

Colleagues and Friends

1. Good morning. Thank you for inviting me to join you at your annual Tech³ Forum. I remember my participation at this Forum last year, and I'm happy to see familiar faces today.
2. Since the gradual reopening of borders, some of us have had the opportunity to renew connections around the world.
3. However, even as old connections are re-established and new collaborations are formed, we cannot help but notice evidence of an increasingly troubled external environment.
4. US-China relations, which are key in global affairs, are worsening. The growing divide, differences in ideology, and even systems of governance are playing out over a range of issues. These include trade disputes, the South China Sea, and more recently, escalating tensions over Taiwan. The threat of technology bifurcation, already a concern before the pandemic, could materialise more quickly, widely, and deeply.
5. I will not delve much further into the geopolitical climate. The Prime Minister spoke about this at the recent National Day Rally and you will be hearing more from Professor Kishore Mahbubani who will share his insights later.
6. Instead, I want to talk about how Singapore has sought to navigate these troubled waters, and the opportunities we could tap in the digital domain. Let me outline three examples.
7. **First, Singapore's approach towards building our 5G digital infrastructure.** We had decided some years ago, that making 5G standalone services available in Singapore would enhance our digital connectivity and strengthen our economic competitiveness. Many of you would already know the benefits 5G brings – ultra fast speed and near zero latency. It is also key to realising the promises of digital technologies such as IIOT and Metaverse. These emerging domains will require vastly expanded amounts of data to be processed and extensive computing power needs to be made available. And without 5G connectivity, the delivery will be a huge problem.
8. In 2019, we ran a rigorous Call-for-Proposal for 5G. It was a closely-watched exercise, to say the least. But no scrutineer should have been surprised that Singapore took a principled approach.
9. We made clear that the systems configuration were commercial decisions. We stated publicly the considerations that would apply to all proposals. They are – one, performance; two, resilience; and three, security, including cybersecurity.



10. Today, our telcos have achieved at least 50% outdoor coverage for 5G standalone services. We are on track for nationwide outdoor coverage by 2025. However, building the 5G infrastructure is only the first step. We are currently working with enterprises to develop and scale up 5G use cases. I encourage the enterprises to also consider how 5G can help you transform your operations and achieve growth.

11. Beyond what we have today, Singapore is also keenly invested in learning about the Open RAN¹ ecosystem. It has the potential to improve flexibility in vendor choices and strengthen system resilience. We will actively pursue opportunities in Open RAN through industry collaboration and technical trials. We welcome Open RAN players to set up R&D facilities and build up capabilities in Singapore.

12. **The second example is Singapore's efforts on data protection.** Data is an important resource in any digital economy and Singapore has always been committed to two objectives. One, to ensure protection for consumers' personal data. Two, to strengthen Singapore's economic competitiveness and status as a trusted data hub, so that businesses can innovate and thrive.

13. Regrettably, businesses today face challenges complying with many different data regimes. Besides legitimate concerns with data security, some jurisdictions have introduced highly restrictive rules. ST Tech Editor Irene Tham has just written about this a few days ago. For example, about 144 jurisdictions have some form of data localisation requirement today. This number is more than double that a year ago. Data localisation is just one part of it. There are many other rules in place that make it difficult for businesses to operate in different locations.

14. Against this backdrop, Singapore still hopes to facilitate data innovation. To do so, we have been actively forming partnerships, both regionally and globally. These partnerships enable us to establish norms that support cross-border data flows and promote interoperability.

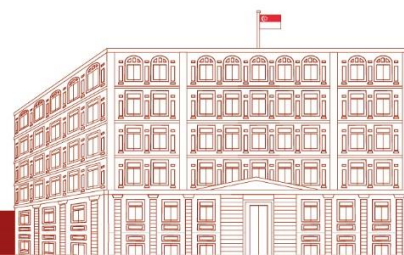
15. One example is the ASEAN Model Contractual Clauses. It allows businesses to do inter-company transfers of personal data across borders, and is recognised by all ASEAN Member States. We also subscribe to the APEC Cross Border Privacy Rules system, or CBPR, to help reduce barriers to data flow. We are working with partners to make global data flows a possibility through the establishment of the Global CBPR Forum.

16. Next week, I look forward to participating in the G20 Digital Ministers' Meeting in Indonesia, where cross-border data flows will be discussed.

17. **The third example I would like to highlight would be Singapore's efforts to strengthen our cybersecurity.** Cybersecurity is one of our key priorities in developing the digital domain. Cyber threats have grown in frequency and sophistication, and we need to do more to counter them. It is also a common global threat that cannot be resolved by any one country alone. Despite international tensions, we have a joint interest in ensuring that the cyberspace remains safe and secure.

18. Singapore has therefore consistently advocated for a rules-based multilateral order to build a secure and peaceful cyberspace. To this end, we have been actively participating and where opportune, leading discussions at UN platforms like: (i) the United Nations Group of Governmental

¹ Open Radio Access Networks (RAN)



Experts (UNGGE); and (ii) the Open-Ended Working Group (OEWG) on Developments in the Field of Information and Telecommunications. Issues like cyber norms are covered at these platforms.

19. We also strive to work with our ASEAN neighbours to apply these norms in our region, as we have done in our efforts on data protection. In fact, ASEAN was the first regional body to adopt the UN principles on responsible state behaviour in cyberspace. It's not quite United Nations Convention on the Law of the Sea (UNCLOS), but it is a start.

20. To enable Singapore IoT manufacturers to stand out from their competitors and develop more secure devices, the Cybersecurity Agency (CSA) introduced the Cybersecurity Labelling Scheme. This Labelling Scheme is one of the first of its kind in the Asia-Pacific region and many of you here are quite familiar with it. CSA has signed an MOU with Finland to mutually recognise the cybersecurity labels. To open even more doors for our IoT manufacturers, CSA intends to bring on board more international partners.

21. These three examples are some of the efforts that we have taken to better position Singapore for the digital future, in spite the geopolitical tensions and persistent threat of decoupled technology ecosystems.

22. Of course, more needs to be done, but we cannot make progress on our own. **New partnerships will need to be built with industry and with our international colleagues.**

23. To support our businesses, Singapore has signed Digital Economy Agreements² (DEAs) with four countries to foster common standards for digital trade. These arrangements and partnerships ensure an inclusive, interoperable and secure ecosystem for Governments and businesses. They are built on the emerging international consensus of rules, norms and standards for the digital domain. Ultimately, the DEAs aim to lower the cost of operations for businesses, increase business efficiency, and facilitate access to overseas markets.

24. We will continue to work with international partners, industry, and our citizens to forge a vibrant, dynamic, and secure digital future.

25. **In this spirit of building partnerships, I am happy to announce that our National Library Board (NLB) and the Singapore Computer Society (SCS) will be signing a MoU.** This partnership will connect the community with IT experts, to encourage the public to learn about IT trends, innovations and applications to their daily life. SCS members will also help to mentor and educate NLB ground up interest groups known as their Learning Communities. There are many such Learning Communities, and NLB is a wonderful institution with a footprint that is spread very evenly across our island, so their touchpoints with the community are very strong.

26. I am grateful to SCS for your commitment and contribution to bettering our society, and I look forward to the exciting programmes that will be planned.

27. While the external environment is likely to remain challenging, I believe Singapore has what it takes to emerge stronger, together, and also for us to architect a digital future in a way that serves the best interests of our people.

28. I wish you all a productive time at today's forum. Thank you.

² The DEAs are: Digital Economy Partnership Agreement (with Chile, New Zealand); Singapore-Australia Digital Economy Agreement; UK-Singapore Digital Economy Agreement.

