

SPEECH BY SENIOR MINISTER OF STATE, MINISTRY OF COMMUNICATIONS AND INFORMATION DR JANIL PUTHUCHEARY, AT CYBERSECURITY INNOVATION DAY, ON 31 AUGUST 2022, 1.05PM

- 1. Good afternoon, ladies and gentlemen. I am very happy to be here at the third edition of our Cybersecurity Innovation Day.
- 2. Firstly, I would like to extend my warmest congratulations to the Cybersecurity Industry Call for Innovation 2021 awardees! You have proposed innovative solutions to effectively address problem statements set out by the end-users.
- 3. In 2021, the Cyber Security Agency of Singapore (CSA) refreshed our Cybersecurity Strategy to build a cyber-resilient nation, in which the development of a vibrant cybersecurity ecosystem was highlighted as a foundational enabler. Such a vibrant cybersecurity ecosystem is going to be essential for our progress in Singapore, for providing economic opportunities for businesses and citizens. The security and the trust that comes with that security is essential.
- 4. The strategy in 2021 emphasised innovation as a key to growing the cybersecurity ecosystem. Building on that, from what we can see our track record here and around the world cybersecurity continues to be a growth opportunity. The importance of innovation in cybersecurity matches this opportunity for growth. Therefore, we are taking a multi-pronged approach to grow our local cybersecurity ecosystem.

Cybersecurity is a Growth Opportunity

- 5. That digitalisation has brought many opportunities and an increased number of risks is well understood, especially by the crowd in this room. Cyber threat actors can now do harm to us at a distance, at scale, and at an increasingly faster pace. So much more of our lives are spent online. Cybersecurity is an imperative for security and resilience, and not just as an enabler for our digital economy.
- 6. Recognising this, Singapore has invested in the development of technology and people. We have also contributed to international cooperation and capacity-building, securing our critical information infrastructure and wider cyberspace. Our ranking as 4th in the world in the International Telecommunications Union's Global Cybersecurity Index 2020 is a testament to the efforts that we have had here in Singapore. It measures our commitment to these ideals.
- 7. With the growing demand for cybersecurity products and services, our market here in Singapore has also grown rapidly. It has tripled from around S\$570 million in 2015 to approximately S\$1.7 billion in 2021. The global cybersecurity market has been estimated at between US\$145 billion and \$165 billion in 2021, and projecting to US\$255 billion by 2026. So we continue to believe that cybersecurity is a growth opportunity for us here in Singapore. We are a small and highly connected country with a skilled workforce. We should be well-placed to harness this as an engine of growth for our economy.

Innovation is Key to Growing the Cybersecurity Ecosystem

8. Getting back to the idea of innovation, it is near axiomatic that this is key for economic growth in developed economies. But this is especially true for cybersecurity and the cybersecurity industry for two key reasons. First, the threat landscape that we face is constantly evolving, and so companies need to constantly innovate to be able to counter new threats, to constantly stay relevant, and grow new business. The second key issue is that



cybersecurity is an enabler of the digital economy and the role it plays in shoring up trust. Innovation is necessary for that sense of confidence in the stakeholders of our digital economy. The consumers, the other businesses that you service, are looking for those products that change, as well as that development within the products to shore up the confidence they have in cybersecurity solutions to be able to drive the digital economy.

- 9. We see CyberCall as an important effort by our Government to grow the cybersecurity ecosystem. It provides a platform for companies to innovate in partnership with large, trusted end-users in Singapore, and private and public sector owners of critical infrastructure. We hope this approach benefits both cybersecurity companies and end-users that we have engaged. For cybersecurity companies, you have an opportunity to innovate for a potential reference customer, as well as access data and implementation testbeds. For the end-users, you can potentially benefit from innovative solutions to their cybersecurity problems.
- 10. Since 2018, CyberCall has supported 22 cybersecurity companies to develop over 30 solutions in areas such as cloud security, artificial intelligence, Internet of Things and Operational Technology security, and privacy-enhancing technologies. A total of S\$10 million was awarded to all projects in past CyberCalls. Companies were able to raise another S\$40 million in external investments to support the next-stage development of these projects, reflecting their significant commercial potential.
- 11. Among the successfully completed projects, 60% have then subsequently been implemented. One example that emerged from CyberCall 2019 called Asset Based Cyber Defence. It is the product of a collaboration between three companies SecureAge, InsiderSecurity and ReaQta. They came together to provide a product to help Small and Medium Enterprises (SMEs) secure themselves against cyber threats through an automated end-to-end cybersecurity solution covering multiple attack vectors. Currently, there are more than 120 customers using the product.
- 12. Another interesting solution from CyberCall 2021. UK-based company CyberOwl will be setting up an R&D team here, recruiting Singaporeans to work on an automated solution to detect vulnerabilities in computer systems onboard shipping vessels. CyberOwl decided to anchor itself here in Singapore because of the use case and testbed provided by the industry partner Eastern Pacific Shipping, and the potential market of other shipping companies located here in our international maritime centre. CyberOwl's automated solution will help ship operators to manage and respond to cybersecurity incidents while out at sea.
- 13. For CyberCall 2022, we have end-users from the financial, energy, media, transport and public sectors putting forth their problem statements seeking innovative solutions. I urge cybersecurity companies to challenge themselves in developing solutions to these problem statements.

Taking a Multi-Pronged Approach to Grow the Cybersecurity Ecosystem

- 14. Even as CyberCall helps to drive innovation to grow our cybersecurity ecosystem, we need to recognise that innovation is one piece of a bigger puzzle. Having a good idea is certainly a good start, but it is sometimes not enough. Local cybersecurity companies also need access to markets, technology, funding and very importantly, talent to grow good ideas into scalable solutions.
- 15. The Innovation Cybersecurity Ecosystem at Block 71 by NUS Enterprise and Singtel Innov8. It is an example of how cybersecurity innovators and start-ups are supported on multiple fronts throughout various growth stages. The ICE71 Scale programme is targeted at



growth-stage and late-stage start-ups to help them grow their businesses in Singapore and in the region. As a result of that programme, start-ups have access to office space and facilities, mentoring opportunities, networking events, workshops and access to go-to-market channels.

- 16. To date, the ICE71 Scale programme has housed and supported 45 cybersecurity start-ups. One example which has started to scale up is Responsible Cyber, which provides cybersecurity as a service to businesses, including the IMMUNE platform, an Al-powered cyber risk management platform. Earlier this year, Responsible Cyber received the "SME (Vendor)" award at the Cybersecurity Awards 2021 in recognition of its contributions to the cybersecurity ecosystem here in Singapore.
- 17. As I mentioned, another way that we want to work on growing our cybersecurity ecosystem is supporting our local cybersecurity companies to access markets beyond Singapore. Many of the challenges that they are solving, and those surfaced in CyberCall, are also faced by end-users overseas. We encourage local companies to expand into new markets outside of Singapore to capture the growing global and regional demand. One example where this is happening is Flexxon, which is bringing the world's first solid-state drive embedded with Al-based data security, developed out of CyberCall 2018, to enter the US market. We hope in this way to turn global and regional demand into engines of growth for our local cybersecurity ecosystem.
- 18. Underpinning all of this is the close partnership between the public and private sectors. Our cybersecurity industry, our Institutes of Higher Learning and our research community collaborate with one another to develop and build advanced cybersecurity solutions and products. In this process, the Government plays an important role to shape a conducive environment, supporting local companies and enabling the entire network to grow. All of us are key stakeholders in this effort.

Conclusion

- 19. This effort is a foundation for Singapore to digitalise confidently and to achieve the goals of transforming our nation using technology. Innovation in cybersecurity is key to creating a safe digital environment for all of us, and building the trust that we so importantly need in Singapore's digital economy.
- 20. Thank you, and once again, congratulations to the CyberCall 2021 awardees.