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Case Study

The Broadband Commission's Agenda for Action provides a valuable and strategic framework for us to build our COVID-19 response upon, by ensuring that everyone is connected and is able to use digital tools in their everyday lives. Technology has strengthened Singapore's COVID-19 response: to protect public interest, support our people and assist businesses. This case study will: (i) explain the oversight and coordination of Singapore's digitalization push; and (ii) examine how Singapore's initiatives align with the three pillars of the Commission's Agenda for Action.

A. Oversight and Coordination

To oversee and coordinate Singapore's digitalization push, we formed the *Ministerial Committee for Digital Transformation* in June 2020. The Ministerial Committee is co-chaired by Minister for Communications and Information S Iswaran and Minister for Trade and Industry Chan Chun Sing. The key priorities of the committee include helping people to learn new skills and seize technology-related jobs, and helping small businesses, especially those affected by the pandemic, to go digital.

In the same month, Singapore launched the *SG Digital Office* (SDO), which will drive our initiatives to accelerate digital adoption in our community, as we embark on a phased recovery post COVID-19. SDO will build on and ramp up existing efforts to equip every individual and business with digital tools and skills to participate meaningfully in the new social and economic environment post-COVID 19.

B. Resilient Connectivity

The solid foundations by Singapore's past digital investments and partnerships with industry have been critical to our response. COVID-19 has re-affirmed that a secure, resilient and robust telecommunications infrastructure is a critical utility for a modern society. Singapore's past investments in high-speed broadband and fibre to the home have built network resilience. 9 in 10 Singapore households enjoy high-speed fibre connectivity. While local internet data traffic has surged, our systems and infrastructure are able to support the increase in demand due to nationwide telecommuting and home-based learning. Singapore continues to work closely with telcos in making

timely investments to upgrade networks and further bolster Singapore's nationwide network capacity. This is part of our Smart Nation strategy.

C. Affordable Access

Singapore recognises that COVID-19 has changed the way people live and work, and how businesses operate. Hence, Singapore is prioritizing our push towards digitalization, with an emphasis on helping those who require more assistance, to ensure affordable access for all.

(1) Helping seniors

Singapore recognises the importance of direct outreach to seniors to enable them to learn digital skills to ensure that services remain accessible during COVID-19. The SG Digital Office rolled out the *Seniors Go Digital* initiative, which will mobilise 1,000 Digital Ambassadors to help 100,000 seniors learn to use digital tools, such as communication apps (e.g. Whatsapp), e-payments and Government digital services. Cybersecurity tips will also be covered. Learning will be delivered through one-to-one or small group learning sessions, including learning journeys.

Prior to COVID-19, Singapore already implemented *Silver Infocomm Junctions* and *Digital Clinics* as learning hubs for seniors to start their digital learning journey. During the COVID-19 period, Singapore migrated these initiatives online for them to remain accessible to seniors.

Recognising that is vital for everyone, especially seniors, to be able to transact and learn online, Singapore launched the *Stay Healthy, Go Digital* initiative. For example, banking partners provided online resources and guides to help seniors and the less savvy pay online and manage their finances using online banking platforms.

(2) Helping students

Ensuring that all students are able to carry out home-based learning smoothly during the pandemic is crucial. Singapore's *NEU PC Plus* programme was launched in 1999 to support eligible low-income households with school-going children or persons with disabilities with broadband access and computer ownership. To further support school-going children's needs during COVID-19, Singapore amended the programme's eligibility criteria to allow more applicants to qualify. Additionally, Singapore's Ministry of Education provides tablets and laptops, and Internet enabling devices including dongles to students on financial assistance schemes.

(3) Helping businesses and skilling workers

Recognising it is vital for everyone, from businesses, households to individuals, especially vulnerable seniors and needy students, to be able to carry out their daily tasks and social activities online amid COVID-19. Singapore's *Stay Healthy, Go Digital* is a call for individuals and businesses to adopt digital solutions so that life and business can carry on as much as possible. This is a partnership with the industry to provide relevant resources and to reach out to individuals and businesses to encourage and help them go digital.

It provides a suite of resources to enable businesses to continue operations remotely and digitally. One such resource is the *Digital Solutions Directory* which comprised relevant digital solutions that helped businesses with remote working, visitor management, selling online, and billing and paying online. The Directory was put together in partnership with industry players who offered the solutions for free or with limited time offers, so that they were more accessible for businesses during the cash-constrained environment. As Singapore eases out of the Circuit Breaker period, the Directory is being re-positioned to focus on digital solutions that help businesses with required safe management measures as they reopen for business.

To help businesses take action to digitalise and adapt to the new normal with COVID-19, the Singapore Government also enhanced its financial support for digitalisation. The *Productivity Solutions Grant* has been enhanced to provide higher levels of funding support for SMEs to adopt digital solutions. New solution categories for remote working and visitor management have also been added for funding support. Additionally, a new E-invoicing Registration Grant is being provided to businesses who sign up for our nationwide e-invoicing network, to enable paperless transactions.

The Singapore Government's support for digitalisation has been an ongoing effort, even before COVID-19. Singapore's *SMEs Go Digital* programme was launched in 2017 to make going digital simple for SMEs. It continues to provide guidance to SMEs through sector-specific Industry Digital Plans, access to pre-approved digital solutions with funding support, Start Digital Packs with affordable basic and easy-to-deploy digital solutions, Grow Digital B2B and B2C e-commerce platforms so that SMEs can sell overseas, as well as digital consultancy services for SMEs that need help.

Another initiative is *Hawkers Go Digital*, which will encourage our hawkers to adopt contactless payment options through financial incentives. Furthermore, the *Digital Resilience Bonus* will be awarded to qualifying enterprises in food services and retail (for a start) should they adopt nationwide e-payment and e-invoicing solutions, as well as the pre-defined digital solutions that help them to improve business processes, access customers online and make data-driven business decisions.

In the push for digitalization of enterprises, national broadband infrastructures will serve countries as a critical foundation for enterprises to tap on emerging technologies such as 5G, cloud computing, AI, AR/VR and develop new microservices to serve consumers and enterprises. Many of these technologies will require support for reskilling and upskilling of workers to reap the maximum benefits for society and economy. To ensure a digitally skilled economy, the *TechSkills Accelerator* (TeSA) initiative was started in 2016 to support Information and Communications Technology (ICT) professionals and non-ICT professionals to upgrade and acquire new skills and domain knowledge that are in demand, and to stay competitive and meet the challenges of a fast-moving digital landscape. Through partnerships with leading companies in various sectors, TeSA has helped trained and placed Singaporeans into in-demand tech jobs such as Artificial Intelligence, Cybersecurity, Software Development, and Network Engineering.

D. Safe use of online services for informed and educated societies

(1) Ensuring data protection

Singapore recognises that building a trusted digital environment that supports COVID-19 measures is crucial. In this regard, Singapore was an early adopter of robust data protection measures such as the *Public Sector Data Security Review Committee* and *Personal Data Protection Act* (PDPA).

In November 2019, the Committee published a set of recommendations on data security practices across the Public Service and how the Government secures and protects citizens' data, which will enhance the public's confidence in the government's data security regime. It also made clear that the standards and requirements for the public sector are no less stringent than for the private sector.

For the private sector, the PDPA ensures that organisations have reasonable standards of protection for personal data that they collect, use and disclose. At the onset of the COVID-19 outbreak, the Singapore's Personal Data Protection Council (PDPC) issued an advisory clarifying that organisations are permitted to collect, use or disclose personal data without consent for the purposes of contact tracing and other COVID-19 response measures. The advisory also made clear that under the PDPA, organisations must make reasonable security arrangements to protect the personal data and ensure that the personal data is not used for other purposes. PDPC issued further advisories to provide guidance to premise owners and employers on protection safeguards when adopting Government-developed digital applications (e.g. SafeEntry) or other safe management solutions (e.g. temperature screening, safe distancing technologies). In addition, IMDA/PDPC worked with various government agencies to ease organisations' and individuals' understanding of the application of the PDPA in the context of COVID-19 (e.g. collection of personal data for contact tracing during COVID-19) by disseminating PDPC's advisories across various government websites, social media platforms and disseminated to strategic partners through eDMs. PDPC also provided guidance on personal data risk and impact assessment, personal data protection by design considerations for the contact tracing application, *TraceTogether*. With these personal data protection measures in place, individuals can trust that their personal data is protected even in times of a pandemic.

<u>Implementing Trusted Digital Communication Channels to Prevent Disinformation</u>

Singapore is aware that the dissemination of reliable, clear and timely information on COVID-19 is vital to combat disinformation and to dispel unnecessary fear. In response, Singapore has rolled out trusted digital communication channels. We have implemented the *Gov.sg Whatsapp account*, which provides citizens with timely and trusted updates on the COVID-19 situation. Available in all four national languages (English, Malay, Tamil and Mandarin Chinese), the system has been optimised to send multi-lingual messages to all subscribers within 30 minutes. Additionally, the *COVID-19 Biz Chatbot* leverages the use of an online bot that is programmed to provide employers with answers to queries on the latest measures and guidelines, to ease the disruptions faced by businesses and provide smoother access to key information.

E. Conclusion

Singapore recognises that the fight against COVID-19 will be long-drawn but we are confident of seeing this through. Digitalization plays a key role in ensuring that our communities and economy can recover from COVID-19. Singapore is cognizant that just as this pandemic requires a global response, Singapore will need to continue to reach outward to hone our existing partnerships and build new ones. In this

regard, Singapore will continue to support the work of the Broadband Commission for Sustainable Development to strive for a connected world.