

## MEDIA FACTSHEET

### *Our Digital Singapore*

#### Ministry of Communications and Information Work Plan Seminar 2019

*As Singapore transforms digitally, the Ministry of Communications and Information (MCI) and its family of agencies<sup>1</sup> remain committed to ensuring inclusive growth. This means working together so that all segments of Singapore society – businesses, workers and our people – are on board the digital transformation journey, and to seize the many exciting opportunities in Our Digital Singapore.*

*The initiatives in this factsheet outlines some of our continued digital transformation efforts as announced at the MCI Work Plan Seminar on 10 July 2019 by Mr S Iswaran, Minister for Communications and Information.*

#### 1. HELPING LOCAL SMEs DIGITALISE

##### More SMEs taking up Start Digital Packs

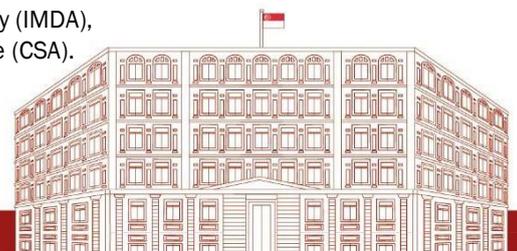
Start Digital is an initiative under the SMEs Go Digital programme for new SMEs to start their business right with foundational and competitively-priced digital solutions. IMDA and Enterprise Singapore work with Start Digital partners (DBS, Maybank, OCBC, Singtel, Starhub and UOB) as new SMEs typically require banking and telecommunication services. The partners curate a suite of digital solutions that are suitable for newly incorporated SMEs, in five categories: Accounting, HR Management System & Payroll, Digital Marketing, Digital Transactions and Cybersecurity.

**[NEW]** Within 6 months of the launch of Start Digital in January 2019, more than 4,000 SMEs have taken up Start Digital packs. This brings to a total of 10,000 SMEs who have benefited from the SMEs Go Digital programme by taking up pre-approved digital solutions that are supported by a government grant. With these packs, SMEs are able to better manage their finances, workers, sales and capture new growth opportunities.

More information on SMEs Go Digital and Start Digital can be found on:

- SMEs Go Digital: <https://www.imda.gov.sg/SMEsGoDigital>
- Start Digital: <https://www.imda.gov.sg/StartDigital>

<sup>1</sup> MCI's related agencies are the Infocomm and Media Development Authority (IMDA), the National Library Board (NLB), and the Cyber Security Agency of Singapore (CSA).



## 2. DEVELOPING TALENT PIPELINE FOR THE DIGITAL ECONOMY

### All Upper Primary Students to benefit from Code For Fun Programme from 2020

The Ministry of Education (MOE) and IMDA collaborated in 2014 to introduce Code For Fun (CFF), an optional enrichment programme for primary and secondary school students to learn Computational Thinking (CT) through basic coding. Since it was launched in 2014, a total of 93,000 students have benefitted from it.

Responding to positive feedback from students and teachers, and to continue equipping our youths with the skillsets needed in a digital future, MOE and IMDA will be expanding the CFF programme.

**[NEW]** In the next phase of CFF, all upper primary students (Primary 4 to Primary 6) will learn Computational Thinking through coding. Students will participate in a 10-hour enrichment programme conducted in school, helping them develop an appreciation of core computational thinking and coding concepts through simple visual programming-based lessons. They will also be introduced to emerging technologies such as artificial intelligence. The programme will start later this year, with MOE and IMDA conducting a pilot for Primary 6 students from selected schools during the post-PSLE period. The programme will be rolled out to all primary schools next year.

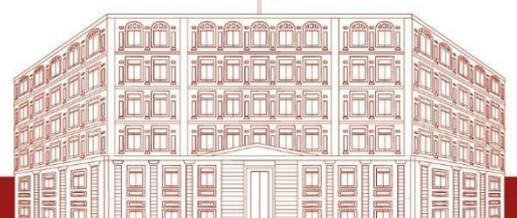
At the secondary school level, the programme will continue as an optional programme to complement existing Computing Education efforts, which includes Computing-related Applied Learning Programmes as well as the O-Level (elective) and A-Level Computing subjects. Collectively, they provide secondary school students with opportunities to reinforce their appreciation of core computational thinking concepts, delve further into coding, and exercise their creativity through digital making.

### 10,000 Youths to benefit from Singapore Cyber Youth Programme in next three years

**[NEW]** The Singapore Cyber Youth Programme (SG Cyber Youth) is a national programme to guide youths in their cybersecurity journey. Led by CSA in collaboration with partners from the cybersecurity industry and academia, the programme will reach out to students from the secondary to tertiary level, and provide them with opportunities to explore cybersecurity as a career, as well as gain exposure to relevant technical knowledge and soft skills.

CSA plans to reach out to 10,000 youths over the next three years through training boot camps, competitions, learning journeys and career mentoring sessions.

A key initiative under the SG Cyber Youth is the existing Youth Cyber Exploration Programme (YCEP) boot camp, which CSA started with Singapore Polytechnic in 2018. This



year, all five local polytechnics have come on board, and some 400 students have taken part to learn about the tools and technologies in cybersecurity. The top 60 students from these boot camps took part in the inaugural YCEP Central Capture-the-flag Competition on 29 June 2019. Going forward, YCEP will be scaled up to reach out to more students. An advanced-level YCEP will also be introduced from next year.

Students can also look forward to participating in cybersecurity learning journeys that CSA curates with MOE and our industry partners. Existing programmes such as the Student Volunteer & Recognition Programme and the Cybersecurity Career Mentoring Programme are also part of SG Cyber Youth.

More information on the SG Cyber Youth can be found on CSA’s website (<https://www.csa.gov.sg/programmes/sgcyberyouth>). New SG Cyber Youth initiatives to groom our top talents and to encourage community partnership will be announced later this year.

**3. EVERY SINGAPOREAN TO BENEFIT FROM SINGAPORE’S DIGITAL TRANSFORMATION**

**A common Digital Media and Information Framework launched to build a discerning citizenry**

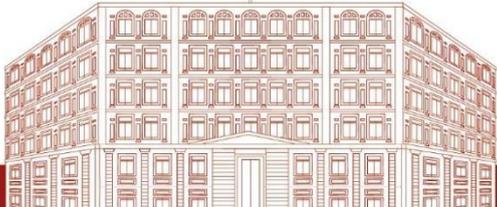
MCI’s Digital Readiness vision is for every Singaporean to be ready to seize the opportunities and benefits afforded by technology in everyday living. To be digitally ready, each individual should be equipped with a fundamental set of skills and attitudes to thrive in this digital age: to have access to digital technology, the literacy and know-how to use the technology, and be able to participate meaningfully and create with this technology.

**[New]** To this end, the Digital Media and Information Literacy Framework guides digital literacy programme owners and public agencies to better plan and develop media literacy and information literacy programmes. It establishes a set of common outcomes for programme owners and public agencies to work towards, and focuses on developing in Singaporeans:

- A fundamental appreciation of the benefits, risks and possibilities that technology can bring and how online platforms and digital technologies work;
- A basic understanding of how to use information responsibly,
- The know-how for safe and responsible use of digital technologies.

The framework sets out 5 key learning outcomes (see table below) as a common frame for programme owners and agencies when developing programmes for all Singaporeans.

1	Appreciate the benefits, risks and possibilities that technology can bring.
2	Understand how online platforms and digital technologies work.



3	Understand how to use information responsibly.
4	Understand how to conduct and protect oneself on the Internet.
5	Understand how to use technology safely and responsibly.

The Digital Media Literacy Framework is developed in consultation with subject matter experts and agencies that run digital literacy programmes. It will be periodically updated in consultation with public, people and private sector agencies to ensure relevance. The Framework can be found at <https://www.mci.gov.sg/literacy/~~/media/literacy/library/topic/dmil%209%20july%202019.PDF>

### Digital Clinics in the Constituencies to Reach Merdeka Generation

As a Digital Economy, there is a need to ensure that everyone in society, including seniors, are ready to participate digitally. With an ageing population, Singapore's silver population, aged 65 and above, is projected to grow to 900,000 by 2030. Although there was a significant increase (30% to 55%) in the percentage of senior internet users (60 years and above) from 2016 to 2018, almost half of seniors (about 45%) aged 60 years and above are still not using the Internet.

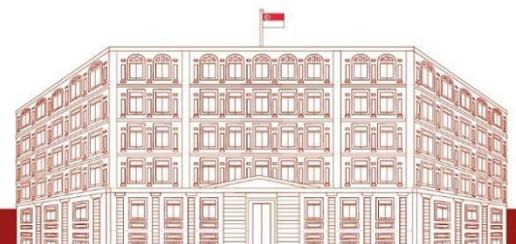
In 2017, IMDA piloted Digital Clinics where participants get one-on-one assistance in using their smartphones with the help of corporate volunteers. Digital Clinics are held at public libraries and other community events, and are part of the suite of programmes under IMDA's Silver Infocomm Initiative (SII). Information on SII can be found at <https://www2.imda.gov.sg/SII>.

Since its launch, Digital Clinics have been gaining traction. To date, close to 5,000 participants have benefitted. Feedback shows that 95% of the seniors that have attended the clinics were more confident in using their mobile devices and 95% of them have said that they have learned a lot from the sessions.

**[NEW]** This year, in support of the Merdeka Generation programme, IMDA will supplement existing Digital Clinics with an additional 100 Merdeka Generation Digital Clinics (Digital Clinics targeting Merdeka Generation residents) island-wide over a year, starting in September 2019 to benefit 10,000 Merdeka Generation seniors. These Merdeka Generation Digital Clinics will focus on providing seniors with foundational digital skills and equip them with the knowledge to protect themselves from online risks. They will also receive assistance on their digital needs where required.

At the Merdeka Generation Digital Clinics, seniors will also undergo a simple Digital Readiness survey to assess their digital needs. This will allow the clinic to prescribe a customised package of assistance. Examples of the assistance available include:

- Downloading the Wireless@SG mobile app and one-time account set up to enjoy unlimited free data at available hotspots



- Tips on personal data protection
- Tips on creating strong passwords
- Tips on discerning online falsehood
- Search for Information Online
- Email / Chatting apps
- Online Shopping
- Government Apps and Digital Services

IMDA will be working closely with grassroots organisations and community partners to organise the Merdeka Generation Digital Clinics. Schedules of these clinics will be published on IMSilver.sg by September this year.

#### 4. SINGAPORE VOICE ON THE GLOBAL CYBERSECURITY STAGE

##### Singapore participates in the United Nations Groups of Governmental Experts (UNGGE)

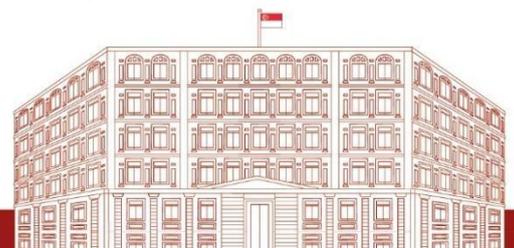
Discussions on developments in the field of information and telecommunications have been on the United Nations (UN) agenda since 1998. Since then, five UN Groups of Governmental Experts (UNGGE), with each lasting for a period of about two years, had been convened, with the most recent UNGGE being convened from 2016 to 2017. These UNGGEs serve as key platforms for international cyber discussions, with the mandate to examine and consider existing and potential threats in cyberspace, and possible measures to address these threats - including the applicability of international law to cyberspace, norms of responsible State behaviour in cyberspace as well as the implementation of cyber confidence and capacity building measures.

In December 2018, the UN General Assembly established both a new UNGGE and, for the first time, an Open Ended Working Group (OEWG), to continue these discussions from 2019 to 2021 and 2019 to 2020 respectively. The new UNGGE comprises 25 countries selected based on equitable geographical representation, while the OEWG is open to all 193 UN Member States. Singapore is one of seven representatives from the Asia-Pacific nations invited to participate in the 25-member UNGGE. Singapore will also actively participate in the discussions of the OEWG.

**[New]** This is the first time Singapore has been included in the UNGGE. Chief Executive of CSA Mr David Koh will be Singapore's representative. The first UNGGE meeting will be held in December 2019. This will allow Singapore to contribute actively to the development of cooperative measures aimed at developing a safe and secure international cyberspace, in continuation with Singapore's own efforts to strengthen our domestic cybersecurity as well as our regional efforts to enhance cybersecurity in ASEAN.

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***Underpinning our inclusive digital transformation efforts are our fundamentals, which must remain robust. Singapore will strengthen our digital ecosystem through trusted***



*infrastructure and future-ready regulations that protect the public's interest. The Government will also work with every Singaporean to build a future-ready Singapore.*

## 5. RESILIENT AND TRUSTED INFRASTRUCTURE AND REGULATIONS AS A FOUNDATION FOR INNOVATION

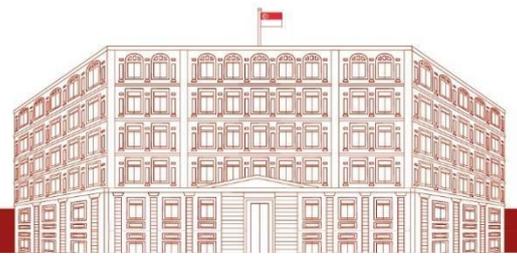
### New Telecom Cybersecurity Specialist Team for Telecom Resilience and Cybersecurity

To achieve Singapore's goal to be a front runner for innovation in secure 5G applications and services, IMDA will prime the 5G ecosystem through four key areas;

- Robust regulatory framework and policies to drive timely and cost-effective 5G network rollout
- Trusted and resilient 5G systems and services to establish a secure ecosystem
- Talent development for 5G and future networks
- Innovative and impactful 5G use cases.

Since May 2019, IMDA has launched its second 5G public consultation to seek views on the regulatory framework and policies for 5G. To further build Singapore's 5G innovation ecosystem, S\$40 million has been set aside to support 5G technology trials to demonstrate transformative impact of 5G, creating a series of open 5G testbeds to enable research and innovation, and for 5G research and development.

**[NEW]** To strengthen trust and resilience in Singapore's telecoms ecosystem, IMDA is establishing a Telecoms Cybersecurity Specialist team within the next few months. Working closely with government agencies such as CSA and industry partners such as telecom operators and equipment providers the team will set-up testbeds to perform cybersecurity vulnerability assessment, conduct cyber exercises and testbed new technologies. As a start, the team will focus on 5G. The specialist team will look to strengthening the resilience and cybersecurity of other aspects of Singapore's digital connectivity infrastructure in subsequent phases.



## 6. WORKING WITH EVERY SINGAPOREAN TO BE DIGITALLY READY

### Harnessing ideas and mobilising energies of Singaporeans to help one another - NLB Volunteer Engagement 2.0

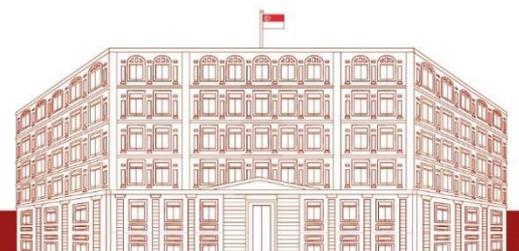
As part of Singapore's push towards digital readiness, the NLB is engaging digitally-savvy volunteers to enhance digital readiness and literacy in our libraries.

NLB recognises the collaborative strength of publically engaged spaces, and is increasingly adopting a volunteer-run model for our libraries. The Volunteer Engagement 2.0 initiative will drive innovation, sustainable competitive advantage and breakthrough performance among our volunteers.

**[New]** NLB's Volunteer Engagement 2.0 initiative takes existing volunteer efforts further by customising volunteer engagement for highly skilled and digitally-savvy volunteers, to enhance digital readiness and literacy in our libraries. The initiative helps NLB attract working adult PMET volunteers such as professionals, consultants and venture capitalists. Along with Digital Readiness@Libraries, this initiative works hand-in-hand with working adult PMET volunteers from various organisations to bring new digital offerings, workshops and technology programmes to the public. This is in addition to existing volunteer-run services provided at libraries and archives.

NLB has curated a long-term strategy of managing a volunteer-talent pool that is increasingly multigenerational, multicultural and dispersed across the entire NLB network of libraries and archives. NLB will continue to support volunteers who are keen to contribute time, knowledge, and expertise to give back and be part of this community of digitally ready learners. NLB has always worked closely with volunteers and the community to co-create an inclusive environment where knowledge is accessible for all. There are about 5,000 active volunteers aged between 4 and 90 who contribute to the NLB network of libraries and archives annually. Over the years, libraries in Singapore have evolved into one-stop community spaces for present and future generations of Singaporeans to connect, read and learn.

NLB welcomes speakers, Tech Geeks and Tech Coaches to co-create digital projects, programmes or workshops that can continue to enhance digital readiness and digital literacy. The programmes also aim to promote digital participation among our community who visit the NLB's PIXEL Labs located in our library network at Tampines, Jurong and Woodlands Regional Libraries. In another collaboration between NLB and the Smart Nation and Digital Government Office of PMO, more than 90 NLB volunteers have been trained to double-up as Smart Nation Ambassadors in June 2019. Between 29 June 2019 and 28 July 2019, these volunteers will guide and coach the Merdeka Generation on eight whole-of-Government digital apps through a series of "Smart Ah Ma Top Picks" Roadshows.



A suite of new initiatives in 2019 has been rolled out on the Friends of the Library and Archives Portal ([www.nlb.gov.sg/volunteers/](http://www.nlb.gov.sg/volunteers/)). Highlights of NLB's volunteer-run tech programmes can be found in [Annex A](#).

**Ministry of Communications and Information**  
**10 July 2019**

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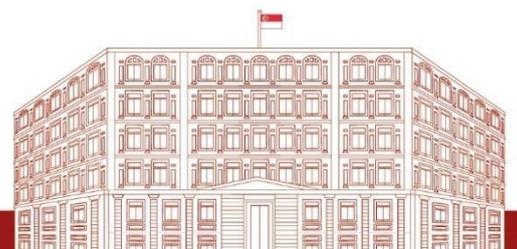
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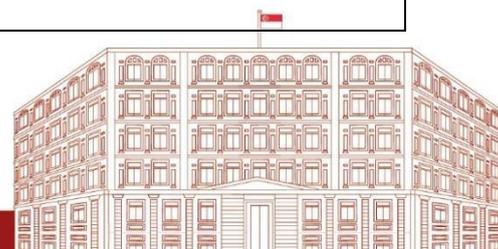
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For more information, visit [www.mci.gov.sg/wps2019](http://www.mci.gov.sg/wps2019) or scan the QR code below:



**HIGHLIGHTED NLB VOLUNTEER-RUN TECH PROGRAMMES**

<p><b>Joint CSR Collaboration Between NLB and Standard Chartered Bank</b></p>	<p>Since the inception of a joint CSR collaboration between NLB and Standard Chartered Bank in September 2018, NLB staff have provided a series of customised training workshops to</p> <ul style="list-style-type: none"> <li>• More than 150 highly-skilled StanChart staff (PMETs - IT, Finance &amp; Corporate Affairs) who volunteer their service as Tech Service Stewards at Yishun Public Library Digital Learning Zone and Bukit Batok Public Library digital services on a regular basis.</li> <li>• Volunteers who run Seniors Tech and Read session (ie. Provide one-to-one assistance in library-related info-tech enquiries) every Friday, 11am – 3pm at Bedok Public Library.</li> <li>• Storytellers who conduct weekend storytelling sessions at Bukit Batok Public Library, Yishun Public Library, Sengkang Public Library, Serangoon Public Library, Sembawang Public Library and Tampines Regional Library</li> <li>• Volunteers who facilitate the Project Deliver Me programme whereby they help to deliver library materials to medically certified homebound library patrons on a regular basis.</li> </ul> <p>In June 2019, NLB carried out a pilot programme, 3 volunteer-run workshops helmed by Mr Samson Lee from Standard Chartered Bank's Financial Crime Compliance Monitoring and Surveillance Team at Tampines Regional Library's PIXEL Labs. He guided library patrons aged 15 and above on Python, a programming language and shared coding fundamentals such as control flow, conditionals and types.</p>
<p><b>Code Breakers Championed by Volunteer Tech Geeks from Credit Suisse Singapore</b></p>	<p>Since January 2019, both volunteer Tech Geeks, Mr Manik Ghai (Director, Middle Office IT) and Mr Surendra Kumar Jaiswal (Assistant Vice President, Solution Architect, Middle Office IT) from Credit Suisse, have been championing monthly coding workshops on Saturday mornings at Tampines Regional Library's PIXEL Labs. They aim to nurture a community of learners who are interested in coding. To date, 54 participants (youth and working adults) – many whom have been following the sessions consistently – have benefited from the programme.</p>



**Volunteer Tech Geeks “Addi(c)tive Builders” at Tampines Regional Library’s PIXEL Labs**

Since the inception of Addi(c)tive Builders at Tampines Regional Library’s PIXEL Labs in November 2017, the wholly volunteer-run initiative led by a core team of five NLB volunteers (Catherine Chia, Jennet Koh, Stephen Ong, Mike Tan and Edmund Ho) organised 11 monthly sessions of 3D Printing & Modelling Workshops, 3 projects and participated in the PIXEL Labs Maker Faire from April to November 2018. A total of 94 participants across all ages benefited from the programme in 2018. In the same year, the Addi(c)tive Builders group also initiated a Braille Tiles Project, targeted at making Scrabble accessible for the visually-impaired community. With their expertise in 3D Printing and Modelling, the group collaborated with 3 social service organisations serving the visually impaired community in Singapore. On 5 April 2019 at Tampines Regional Library, they kicked-off the first meeting with SPD to gather feedback and fine-tune their prototype.

