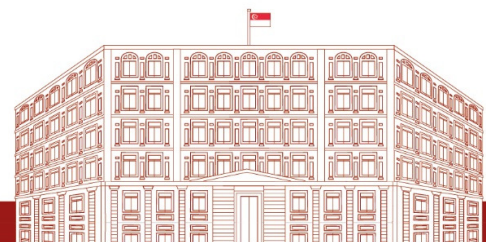


SPEECH BY MINISTER FOR COMMUNICATIONS AND INFORMATION S ISWARAN, AT THE MINISTRY COMMUNICATIONS AND INFORMATION COMMITTEE OF SUPPLY DEBATE, 2 MARCH 2021

Introduction

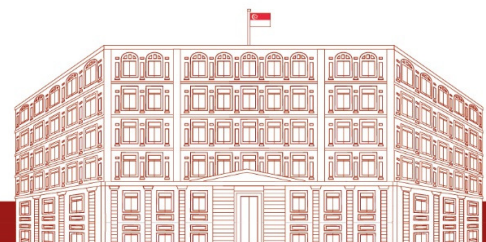
1. Thank you Mr. Chairman. Let me start by thanking all the members who have spoken for their questions, suggestions and above all, for the act of interest and support for the work of the Ministry of Communications and Information (MCI).
2. The past year has been marked by discontinuities and disruption in our schools, our workplaces, our homes and our lives. In many ways, it has been a period of profound learning, adjustment and adaptation. 2020 saw years of digital transition occur in a matter of months.
3. Digitalisation is here to stay, and digital technologies can be a force for deep and lasting good. Most of us have experienced this first-hand – families staying in touch with loved ones, students and teachers having virtual lessons, employees working from home, businesses and customers transacting online.
4. But, as noted by several Members, a larger digital footprint also means new and growing risks such as cyber-attacks, data breaches, the rapid spread of misinformation and cyberbullying.
5. Against this backdrop, my Ministry strives to build a safe, inclusive and thriving digital future, where our citizens and businesses can fully reap the benefits of digital technologies while keeping the associated risks at bay.
6. The digital future we envision is underpinned by:
 - a. Competitive enterprises that leverage digital technologies to innovate and grow;
 - b. An inclusive society where every member can realise the benefits of globalisation and digitalisation;
 - c. Safe and secure digital spaces protected from malicious actors and online harms;
 - d. Robust digital infrastructure with fit-for-purpose regulations; and
 - e. Close collaboration with our community and enterprise partners.
7. As we respond to the various issues raised by Members, my colleagues SMS Sim and SMS Janil, and I will elaborate on the work of MCI to realise this vision.



Digitally Transforming our Economy

Supporting businesses to reap the benefits of digitalisation

8. Let me start with how we are supporting businesses to transform digitally.
9. Impelled by COVID-19, many traditional brick-and-mortar businesses have pivoted towards hybrid online-offline models to engage and transact with their consumers. Scent by Six, a fragrance retailer at Bugis, took up an e-commerce solution under the SMEs Go Digital programme during the circuit breaker. Its digital marketing efforts were so effective that revenues have increased by 25%, of which 60% were online. The founder, Jason, is now exploring AR solutions that integrate social media with in-store shopping to create an omni-channel experience. Scent by Six's experience is not unique.
10. Mr Liang Eng Hwa and Mr Don Wee asked about the progress of schemes to help enterprises transform digitally.
 - a. To date, more than 63,000 SMEs have adopted digital solutions with the support of the SMEs Go Digital programme which was launched in 2017. About 40,000 of them in fact signed up just last year, in 2020 alone..
 - b. At least 2,000 enterprises have gained access to overseas markets through e-commerce platforms under the Grow Digital scheme. Over 1,000 enterprises have engaged the SME Digital Tech Hub for advice.
 - c. Over 35,000 enterprises are now registered for e-invoicing, compared to 1,000 a year ago.
11. So the numbers are growing, and we have to build on this progress, so that more businesses, and the workers they employ, can reap the benefits.
12. Ms Tin Pei Ling, Ms Mariam Jaafar, Mr Eric Chua and Mr Sitoh Yih Pin asked how the government could aid businesses to digitally transform and unlock economic value.
13. MCI and IMDA will ramp up efforts to both broaden and deepen the digital reach among our SMEs. We will support enterprises at every stage of growth, from start-up to scale up, to seize opportunities and realise the potential of emerging technologies and data.
14. For example, many SME leaders need help to devise a digitalisation plan to meet their needs. Therefore, IMDA will launch the Chief Technology Officer-as-a-Service initiative later this year. The CTO-as-a-Service initiative will include a one-stop self-help web app for SMEs to assess their digital needs and gaps. SMEs can then access customised recommendations on digital solutions based on the company profile, and information on Government support. SMEs that need more in-depth advice can tap on a shared pool of CTO-equivalents or Digital Consultants with

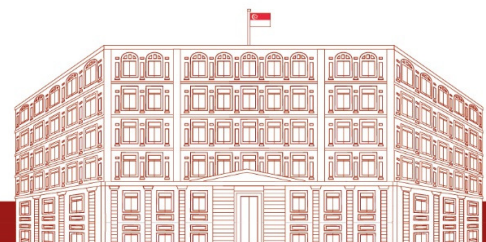


expertise in areas such as data analytics, cybersecurity, and artificial intelligence. They will receive both digital consultancy and project management services to not only identify needs and solutions, but also manage project implementation. Ms Mariam Jaafar talked about working with SMEs throughout their digitalisation journey. These are the kinds of measures we believe will help facilitate that.

15. I want to assure Mr Sharael Taha that all registered SMEs, including home-based businesses that are sole proprietorships, will be able to access these digital resources as well. Beyond this broad-based approach, we also want to raise the peaks of our SMEs' performance through a more holistic digital transformation of enterprises who are ready.
16. In that regard, the questions raised by Ms Tin Pei Ling on grooming the next wave of companies who can be digital leaders, and Mr Alex Yam on strengthening our competitive advantage globally, are most pertinent.
17. The new Digital Leaders Programme that we have launched aims to equip firms with the capabilities and talent to accelerate their digital transformation journey. The programme will provide up to 70% support on qualifying costs to help companies build a core digital team to develop and execute their digitalisation strategy. It will also connect companies with tech partners to develop new digital products and services, and better position them to compete internationally.
18. The DLP will support up to 80 companies for a start, beginning with those more advanced in their digital journeys, with management teams that are committed to drive digital transformation for sustained growth. The DLP will be managed by IMDA, in partnership with ESG and other economic agencies.
19. To Ms Tin's question about support for local companies, IMDA's Accreditation@SGD programme recognises promising and innovative local tech companies, and their products are considered first by government agencies for ICT procurement. In 2019, IMDA and CSA launched a new SecureTech track under the Accreditation programme to help local cybersecurity companies gain greater access to government projects. MCI will continue to study what more can be done to raise the competitiveness of local companies, including the several suggestions offered by Ms Tin.

Supporting businesses to make better use of data, while addressing privacy concerns

20. As more businesses go digital, and more transactions go online, the volume and value of data will grow in tandem. As noted by Ms Tin and Mr Edward Chia, data can yield valuable insights that improve business efficiencies, and enhance products and services for consumers. However, we also recognise the counterpoint. As more data is collected, the risk of data breaches also increases. If data is not used responsibly, trust can be eroded, even undermined. We therefore must strike

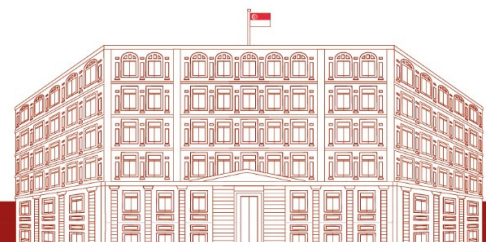


a judicious balance. On the one hand, we must accord due protection to personal data and privacy. On the other, there is scope for businesses to use data responsibly for growth and innovation.

21. To help businesses better use data, and better serve their customers, IMDA will launch the Better Data-Driven Business programme. This programme will provide businesses, particularly SMEs, with free tools and guidance to use their data responsibly to drive business growth. It will also provide a free business intelligence tool that can convert raw data into visual dashboards that can aid business outcomes, such as better sales or operational efficiency. It will also enable more advanced data uses, such as for R&D and innovation, through curated resources such as case studies and videos.
22. We are also strengthening the accountability of businesses for the personal data they handle, a question raised by Mr Christopher de Souza. The recently amended Personal Data Protection Act has rules and a penalty framework to incentivise organisations to take proactive steps to minimise and manage data breaches. But going beyond that, the PDPC has also issued guidelines that organisations can adopt to develop accountable governance practices.
23. The Data Protection Trust Mark also enables businesses to signal, and for consumers to discern, good data practices. Ultimately, we need to nurture a culture of good data governance, use and practice. And that has to come from not just regulations or penalties, but also from education and industry efforts to share best practices.

Translating technology and accelerating digital innovation

24. We are scaling up our efforts to go digital, we must continue the search for technology solutions that can power the next bound of our economic growth, and strengthen our position as a hub for digital innovation. 5G is key to this as it will be the backbone of our digital infrastructure. Singapore will have at least 50% 5G standalone outdoor coverage by the end of next year, and nationwide coverage by the end of 2025.
25. Ms Jessica Tan asked how we can ensure that consumers and businesses will benefit from 5G deployment. The key is to build an ecosystem that supports innovation and the test-bedding of novel solutions. It is not just about providing the infrastructure, but it is in catalysing the collaboration between solution providers, service providers and end users to come up with validated use cases. IMDA will facilitate such test-bedding through facilities such as PIXEL, the 5G Living Lab, and initiatives such as the Open Innovation Platform.
26. Under the Research, Innovation and Enterprise 2025 plan, translation will be a primary focus. MCI will work with partner agencies to drive the co-creation and



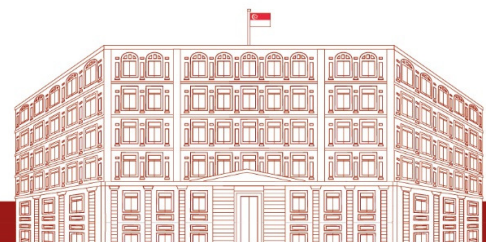
commercialisation of intellectual property, and enable capability transfer between research institutes and enterprises, to have that virtuous interaction between our public sector's R&D effort with private sector value creation. This is how we are building up our local ecosystem for digital innovation as asked by Mr de Souza .

27. We want to go further in driving ground-up digital innovation. IMDA's Open Innovation Platform (OIP) was launched in 2018 to crowdsource and match the demand from business challenges to a supply of innovative solutions. It has grown into a vibrant ecosystem with over 10,000 registered users. Over 190 challenges have been launched, and over 60 solutions have been successfully developed.
28. We will invest \$50 million over the next five years to enhance the capabilities of this platform. This will help more enterprises access innovative solutions, and accelerate the deployment of digital innovation at scale. IMDA will also co-fund the prototyping of matched challenges to help innovative tech companies expand their market base.

Building an Inclusive Digital Society

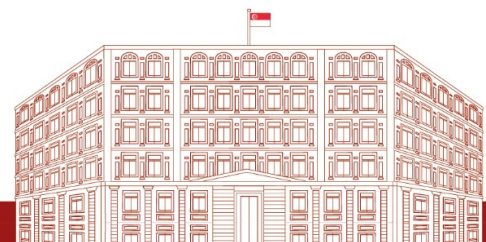
Upskilling the workforce to secure good jobs for Singaporeans

29. Mr Chairman, even as we pursue these exciting opportunities, we must pay heed to the very real concerns of mature workers and seniors, and also our youth and fresh graduates, over the accelerated pace of digitalisation. They worry if they will have a place in this digital future, especially if they do not have backgrounds in tech, or an inclination for engineering and software development.
30. Mr Sharael Taha raised a similar point asking how we can further support mature workers or those who have no ICT background, enter the tech sector. We are intensifying our efforts to create good jobs for Singaporeans and equip our workforce with digital skills. Under the SGUnited Jobs and Skills programmes, there were more than 18,000 available opportunities in the InfoComm sector as at the end of last year, of which more than 10,000 were jobs openings, going beyond training and apprenticeships.
31. Since 2016, over 8,000 Singaporeans, from fresh graduates to mid-career professionals, have been placed in ICT jobs through the TechSkills Accelerator (TeSA) programme.
32. I met Nurul Baizura, a part-time undergraduate, who was selected to participate in Google's Skills Ignition SG programme. She previously worked at a data storage company, handling network infrastructure and patching. Today, she is learning skills in an entirely new area – cloud technology – and is passionate about her role as a cloud engineer.

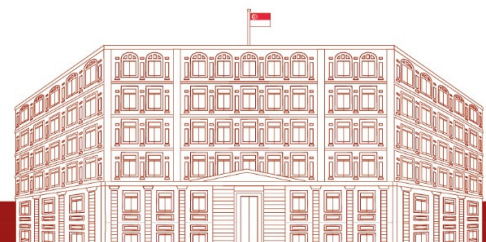


33. Last year, we also launched the TeSA Mid-Career Advance programme to train and transition workers in their 40s and 50s into tech jobs. Ganapathi, whom I also met recently, is a mid-career project manager who was previously from the education sector. Though he lacked the technical expertise, Gana joined the programme with NCS (one of our tech company partners) in 2020 and is well on his way to becoming an applications consultant.
34. We will continue to expand our TeSA programmes, to develop more local talent in areas such as digital marketing, as well as for more tech-intensive roles in product and software development. These programmes will provide a wide spectrum of Singaporeans, like Nurul and Gana, with more opportunities to develop their careers in such roles across the economy.
35. Several members have emphasised the importance of attracting talent to this sector. This is a global challenge. As we invest in the development of our local pipeline of talent, nurturing the tech leaders for the future, we also have to ensure that we are able to attract quality talent from around the world to come in and have a judicious complement of them to support our overall effort. This is how we will ensure that we sustain our position as a digital innovation hub.
36. And in that regard, it is not just MCI, but across the economic agencies and beyond. We are undertaking a whole of government effort to attract Singaporean talent that is based overseas, and other talent, so that they can come in working with our local companies, our large and mid-sized players, in order to contribute to the evolution of the digital ecosystem in Singapore.
37. Ms Jessica Tan and Ms Tin Pei Lin emphasised that employers must leverage the talent pool of women in STEM. I fully agree. MCI aims to grow the ICT talent pipeline; this includes attracting more women to join the sector.
38. In collaboration with community and industry partners, IMDA launched the SG Women in Tech initiative in 2019 to encourage more women to explore careers in tech. There has been good momentum with the movement reaching more than 117,000 through activities and events such as SG100 Women in Tech.
39. The signs are promising. In 2017, 28% of the intake to Information Technology courses in our local universities were female. This figure increased to 35% in 2019. So the momentum is there, and the message is getting through. We certainly need to enlist the help of women tech leaders, including the likes of Ms Jessica Tan and Ms Janet Ang and many others in this House to get this message out, and encourage more women to consider a career in tech.

Promoting digital literacy and lifelong learning



40. More broadly, we want all Singaporeans to be able to participate meaningfully and safely in online engagements. That is why we established the SG Digital Office in June last year, and launched the Hawkers and Seniors Go Digital programmes. So far, about 10,000 hawkers of a base of around 18,000 or so, and stallholders have adopted e-payment solutions. The volume and value of transactions has grown fourfold from June 2020 to today.
41. Ms Cheng Li Hui and Ms Sylvia Lim enquired about the impact of the Seniors Go Digital programme. The SG Digital Office has trained about 69,000 seniors in digital skills as well as measures to safeguard themselves against risks on the internet. I want to emphasise, and in response to Ms Sylvia Lim's point, it is not just about numbers. Numbers are important, because we do want scale. But more importantly, we want skill. We want to imbue our seniors with the confidence and the comfort to navigate technology, and use it to derive benefits that will enhance their lives.
42. As members and others would appreciate, this is not an easy task, but one that we are fully committed to. And it is a journey with rich rewards, but we have to make the effort, and we would welcome any suggestions that members or others may have to further strengthen the message, and its impact on our community of seniors.
43. SMS Sim Ann will elaborate more on the work done by ESG, IMDA and other government agencies, with respect to the work we are doing in the heartlands.
44. Our seniors and hawkers are excellent role models. They demonstrate that young or old, big or small, whatever our background, with the right mindset and can-do spirit, we can all make the digital transition.
45. Our libraries play a critical role in nurturing that spirit of exploration and learning among all Singaporeans. Ms Hany Soh and Mr Eric Chua asked how our libraries are staying relevant in a world that is digital. For some time now, but especially in the last year, NLB has expanded its digital resources and collections, introduced digital storytelling for children, and conducted online programmes for all ages, including seniors. NLB produced learning packages on subjects like pandemics, provided home access to digital newspapers, and conducted a series of webinars on topics ranging from cybersecurity to health and wellness. As a result, since April last year, there has been a 145% increase in e-database usage and a 32% increase in digital loans.
46. For the longer term, NLB will continue to explore new ways to provide reading and lifelong learning opportunities for all Singaporeans, and nurture an informed citizenry. Informed by public feedback and its own experience, NLB has developed the Libraries & Archives Blueprint 2021-2025 (LAB25) to reimagine the service models of libraries and archives of the future. What we have today is a precious resource that has adapted and innovated in response to consumer needs. And now



we are thinking ahead to the next phase, and how our libraries can continue to evolve with the needs and times.

47. SMS Sim Ann will provide more details.

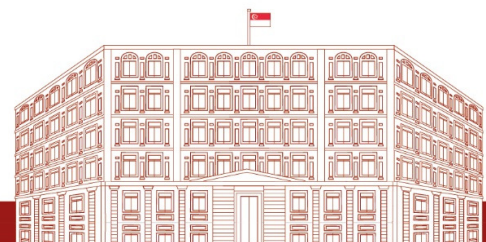
Building Trust and Partnerships

Securing our digital spaces, and building trust in our communities

48. Like NLB, as more engagements shift to the digital space, individuals and businesses will be exposed to more risks and online harms. It is incumbent that our digital spaces are kept safe and secure, with members of online communities protected from malicious actors and other harms.
49. Mr Christopher de Souza, Ms Jessica Tan and Mr Alex Yam asked how we are safeguarding our critical systems against sophisticated threats, and disruptions to operations. The security of digital systems is critical as it is the foundation of our digital economy. Hence, we will do our utmost to lay a strong digital foundation – a communications infrastructure that is secure and resilient, and legislation that is robust and fit-for-purpose.
50. We will also continue to safeguard our digital space to protect our people from the harms inflicted by malicious threat actors. Members would recall the SolarWinds cyber-attack uncovered in December last year, which affected about 18,000 organisations including US government agencies and Fortune 500 companies. Such incidents serve to remind us that cyber threats are real, transborder and constantly evolving. To derive the benefits of digitalisation, we must be ever vigilant against cyber risks, and we need continuous and sustained efforts to strengthen our cybersecurity posture. SMS Janil will elaborate further.
51. To build trust in online spaces, we must also ensure safeguards against harmful online content that may harm individuals and divide society. Our regulation and public education efforts have helped Singaporeans deal with potential dangers online such as misinformation. But the threat is constantly changing. MCI and MHA are therefore studying how to enhance our regulations to deal with serious online harms and their real-world effects on society. We will share our findings and recommendations in due course.

Transforming Government Comms

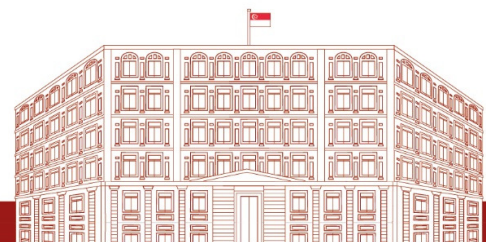
52. Ultimately, the first line of defence in our fight against misinformation is a well-informed citizenry who receive accurate communications, from reliable sources, in a timely manner.



53. Mr Seah Kian Peng , Mr Sitoh Yih Pin , Mr Liang Eng Hwa , and Mr Don Wee asked how the Ministry ensures that groups with different needs can access reliable information. This has been our foremost communications challenge in battling COVID-19.
54. Our focus was to broaden and deepen the reach of Government communications by leveraging both traditional and newer digital platforms. This was to ensure that all segments of our population were informed of key developments of the pandemic, why certain measures were necessary and how they could play their part to protect the health and safety of all Singaporeans.
55. The mainstream media played an important role in this national effort. In addition, Gov.sg was expanded to 10 platforms, including Telegram, Instagram, and TikTok, and we now have more than 2.5 million subscribers across these platforms. The Gov.SG WhatsApp channel grew exponentially, from 7,000 subscribers in January 2020, to 1.2 million today. We also worked with the People's Association and Silver Generation Office for face-to-face outreach to those who may not have access to or use digital media.
56. These communications efforts have been well received. Polls conducted by REACH indicate that more than 8 in 10 are satisfied with the information provided by the Government on COVID-19.
57. For the next phase of our fight against the pandemic, we have launched the VacciNationSG campaign to raise awareness of the vaccination programme, address misconceptions, debunk misinformation, and mobilise action.
58. SMS Sim will elaborate more our efforts, including the use of multiple languages and channels, to make information accessible to all segments of our society.

Forging Partnerships

59. Partnership - with industry, the community and fellow Singaporeans – has been the anchor of our efforts to overcome the challenges posed by the pandemic, but also to emerge stronger. Industry partners have stepped up with initiatives to re-structure our economy and create new opportunities. Under the TeSA initiative, companies such as Google, Microsoft, IBM, Singtel, Sea and Grab, have committed to create more than 5,000 jobs and skills opportunities in tech and ICT.
60. Our community partners and citizens also organised themselves to support fellow Singaporeans in need. Engineering Good, a non-profit organisation, collected laptops from the community to help less privileged students access home-based learning resources during the circuit breaker period.



61. As we venture into the digital future, such partnerships with our stakeholders will be even more important to ensure that new and more complex challenges do not deter us from fully seizing digital opportunities.
62. Dr Shahira Abdullah and Mr Shawn Huang asked how we can partner with stakeholders to drive ground-up initiatives to foster a digitally inclusive society. Such sentiments were also expressed during the Emerging Stronger Conversations where the impact of digitalisation, and how we can harness technology for better social outcomes was one of the most discussed topics.
63. Last month, to that end, President Halimah Yacob launched the Digital for Life Movement, in conjunction with the President's Challenge 2021. Through this national movement, we want to encourage and support ground-up efforts to co-create solutions that enable all Singaporeans to benefit from digital technologies. The Movement is part of a wider national effort to bring together the people, private, and public sectors to foster digital skills, digital wellness and digital access among all Singaporeans.
64. We have also established the Digital for Life Fund, which will support projects contributing to the goals of the Digital for Life Movement. The target is to grow the Fund to \$10 million over the next three years, and all cash donations will be matched dollar-for-dollar by the Government. We invite all who wish to make a difference to the digital growth and wellness of fellow Singaporeans to join us in this journey.
65. SMS Sim will elaborate further.

Conclusion

66. Mr Speaker, I would like to conclude by emphasising the Government's resolute commitment to build a safe, inclusive and thriving digital future for all Singaporeans. My Ministry will lay strong foundations for that digital future by investing in infrastructure, driving research and digital innovation, equipping businesses with digital tools, and supporting Singaporeans to learn, upskill, and stay informed.
67. As we work in partnership with our community and business stakeholders, I have full confidence that we are well-placed to build a shared digital future with a place for every Singaporean. Thank you.

