INFOCOMM MEDIA DEVELOPMENT AUTHORITY

DIGITAL FOR LIFE
PLAY IT FORWARD

SINGAPORE DIGITAL SOCIETY REPORT 2023

Infocomm Media Development Authority

CONTENT

EXECUTIVE SUMMARY

This inaugural report measures the state of digital society in Singapore across **three dimensions – digital access, essential digital skills for daily living, as well as attitudes towards digital technologies.**

Since the launch of the NEU PC programme in 1999, the Government has gradually introduced initiatives for all Singaporeans to benefit from digital developments. The COVID-19 pandemic accelerated the adoption of digital technologies in many aspects of everyday life, giving rise to an urgent need to support Singaporeans in adapting to a digital future. This report shows that Singapore has made good progress in our transition to a digital society due to the foundations built over the years, coupled with timely interventions in recent times.

Digital access

Singapore has **high levels of connectivity, with 99% of resident households connected to the internet** and 98% of households with school-going children having access to computers. For those who require support for digital connectivity, such as low-income households, the Infocomm Media Development Authority (IMDA) provides subsidised digital access via DigitalAccess@Home, which complements the Ministry of Education (MOE)'s provisions to support students' home-based learning needs.

97% of residents own smartphones, but the proportion among seniors is lower. While smartphone ownership among seniors has increased (89% in 2022 compared to 74% in 2017), IMDA will continue support for lower-income seniors through the Mobile Access for Seniors (MAS) scheme. In addition to supporting seniors with mobile access, the Government will also continue collaborations with the community to encourage seniors to embrace the use of digital technologies, and build their digital skills with the SG Digital Office (SDO)'s Digital Ambassadors.

Essential digital skills for daily living

This report explores five areas of digital skills[1] crucial for daily life. These skills draw on insights gleaned from SDO's engagements with citizens and are aligned with international frameworks. As digital technologies and society evolve, the Ministry of Communications and Information (MCI) and IMDA will continue to review these skills to ensure that they remain relevant and enable citizens to participate and thrive in Singapore's digital future.

With more time spent online, it is important to **ensure that citizens have the necessary knowledge and skills to protect themselves from online risks (e.g., scams, misinformation, harmful online content). The Government will build on existing efforts to:**

a. Highlight the need for all residents to keep their digital devices up to date (e.g., downloading and installing software patches, or upgrades). Today, a significant proportion of residents (37%) do not keep their devices updated and leave themselves exposed to online risks.

b. Help Singaporeans stay safe and alert online by teaching important cybersecurity skills, such as enabling two-factor authentication (2FA) and doing security checks when transacting online.

c. Improve Singaporeans' information literacy. As the Internet has become the primary source of information for many people, we will continue efforts to help Singaporeans be informed and discerning consumers of information via initiatives such as the National Library Board (NLB)'s Source, Understand, Research, Evaluate (S.U.R.E) programme.

d. Provide parents with a better understanding of the harms that their children may be exposed to while online, and equip parents with the knowledge and resources to protect their children from such risks. This is increasingly important as a segment of parents surveyed do not see the need to use online safety tools, despite half of them reporting that their children had encountered harmful online content.

There are encouraging improvements in seniors' digital skills in various areas (e.g., communicating online, searching for information, transacting online). Notably, **more seniors are becoming comfortable with digital transactions**. For instance, the percentage of seniors using online payments has more than doubled from 38% in 2018 to 78% in 2022. Also, more seniors are using the Singpass app in 2022 (67%) compared to 2020 (41%). This reinforces the importance of IMDA's Seniors Go Digital programme, which was launched in 2020 to help seniors embrace the benefits of going digital and equip them with the knowledge and skills to do so.

Attitudes and perceptions towards digital technologies

Most Singaporeans, including seniors, agree that technology has made their lives easier. 65% of Singaporeans are also keen to try out new digital technologies. However, Singaporeans also have concerns about the risks that come with digitalisation, such as the proliferation of misinformation and online scams. While some degree of caution is necessary, the rapid evolution of digital technology means **we must do more to enable citizens to keep pace and feel safe.** Only with the right attitudes and skills will Singaporeans be confident enough to embrace these developments, and thereby reap the benefits of digital transformation.

Need for more collaboration among public, people and private sectors

While Singapore has made progress in enhancing digital access and equipping vulnerable citizens with essential digital skills, the Government welcomes partners from the private and people sectors to join us and collaborate on the following areas:

a. Assisting those who are still unable to obtain digital access (e.g., lower-income households);

b. Equipping all Singaporeans, especially seniors, with essential digital skills needed for daily life;

c. Helping parents better support their children in navigating the online world in a safe, discerning, and responsible manner;

d. Building trust and confidence in the safety and security of digital platforms;

e. Generating excitement towards new digital technologies and their potential; and

f. Adopting a "Digital First", but not "Digital Only" approach to keep essential services accessible to all. This is part of the Government's commitment to develop an inclusive digital society, where everyone can communicate and transact regardless of their digital abilities.

Building a digitally inclusive society will require concerted efforts across the people, private and public sectors. **We welcome wider participation in the national Digital for Life (DfL) movement, for individuals and organisations to play a role in the next bound of nation building by addressing the areas outlined above.** Together, we can enable all Singaporeans to embrace digital for life and empower them to chart their digital future.

OBJECTIVE

This report measures the current state of Singaporeans' access to digital connectivity and devices, their digital skills for daily life, and their attitudes towards digital technologies.

INTRODUCTION

Digitalisation has transformed the way we live, work, and interact with one another, and improved our quality of life. Since the launch of the NEU PC programme which subsidised digital access for low-income families in 1999, the Government has gradually introduced initiatives to enable all Singaporeans to benefit from digital developments.

The COVID-19 pandemic accelerated the adoption of digital technologies in many aspects of everyday life, giving rise to an urgent need to support Singaporeans as they adapted to rapid digitalisation. In response, the SG Digital Office (SDO) was established in June 2020 to provide in-person support for vulnerable groups such as seniors, and equip them with the skills to go online safely. The Mobile Access for Seniors (MAS) scheme was also introduced in June 2020 to provide subsidised smartphones and mobile plans, as mobile connectivity became increasingly important.

Singaporeans can now safely and conveniently access digital services at their fingertips with the right tools, skills, and habits. Based on a study by the Ministry for Communications and Information (MCI)[2], most Singaporeans aged 15 and above agree that digital technologies have made their lives easier (84%) and are comfortable using these technologies (73%).

Digital inclusion is at the heart of the Government's digitalisation efforts. This report shows that we have made good progress in our transition towards a digital society, due to the foundations that we have built over the years, coupled with timely interventions in more recent times. However, digitalisation is not an end in itself but a means to improve our lives in an increasingly digital world. Citizens who lack digital skills or access to digital tools may face challenges keeping up with their family and friends, as well as in their workplaces. As such, we strive to keep essential services accessible to all, whether through digital or non-digital means. This underpins our approach for Singapore to be a "Digital First" society, and not a "Digital Only" society.

DEFINITION AND APPROACH TO MEASURE DIGITAL SOCIETY

International benchmarks on the state of digital society typically touch on access to the Internet and devices, and skills to navigate and use the Internet. This report will examine the progress of Singapore's digital society through the following measures:

a. **Digital access** – having access to the internet and digital devices (i.e., smartphones and/or computers which are defined as desktops, laptops or tablets);

b. **Digital skills** – having essential digital skills required for daily life. These skills take reference from international frameworks (e.g., UK's National Standards for Essential Digital Skills, EU's Digital Competence Framework) and learnings from SDO's engagements with seniors; and

c. **Attitudes and perceptions towards digital technologies** – citizens demonstrating willingness and enthusiasm to embrace and use digital technologies.

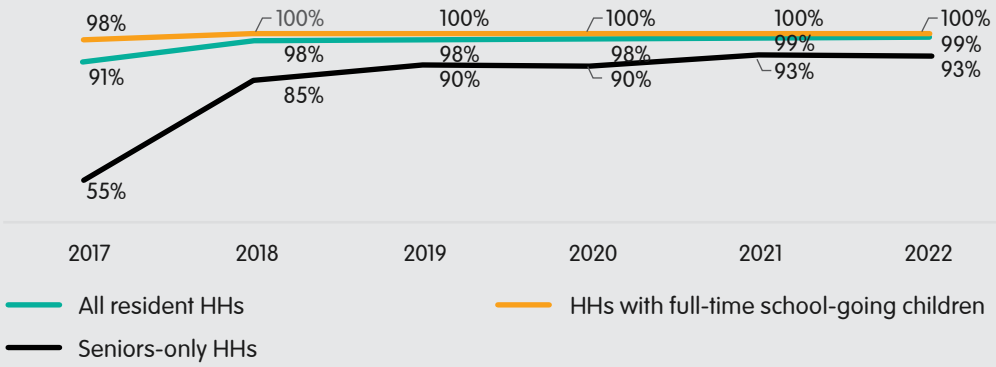
EXAMINING DIGITAL ACCESS

Singapore has made significant progress in ensuring digital access, with almost all resident households having internet access (99%) and 90% having computer access in 2022[3]. Overall smartphone ownership among residents has also reached a new high of 97%[4].

Internet access

Almost all resident households have internet access at home, apart from seniors-only households where digital access has been steadily increasing since 2017. Seniors' perceived lack of need, skills, knowledge, and confidence to use the Internet are the key reasons why a 7-percentage point (pp) gap remains. We will continue to help seniors better understand the positive impact that digitalisation can have on their daily lives and equip them with the necessary skills to participate in our increasingly digital world (refer to Chart 1).

Chart 1: Percentage of resident households with internet access (2017-2022)[5]

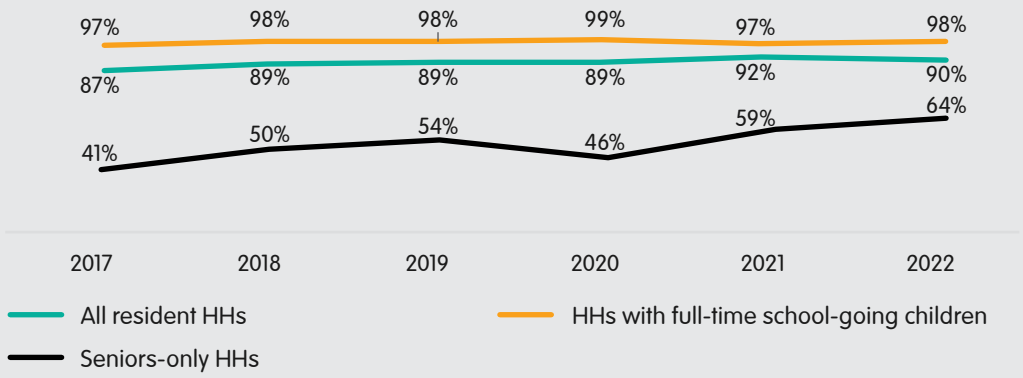


Computer access

While households with school-going children have high levels of computer access (98%), 2% still lack access due to affordability. We will continue to support these lower-income households through the DigitalAccess@Home scheme[6]. This complements efforts by MOE and schools to support students' home-based learning by providing school-prescribed personal learning devices to secondary school students under the National Digital Literacy Programme. In addition, schools loan computers and internet-enabling devices (e.g., Wi-Fi dongles) to students who require them for schoolwork.

Remarkably, seniors-only households' computer access has increased by 23-pp between 2017 to 2022. However, the level remains low due to seniors' perceived lack of need or interest to own or learn to use a computer (refer to Chart 2). Seniors seem to prefer using smartphones to computers, as seen from the high level of smartphone ownership among seniors in the next section. This could be due to the portability, familiarity, and functions of smartphones, which are sufficient for seniors' lifestyle needs.

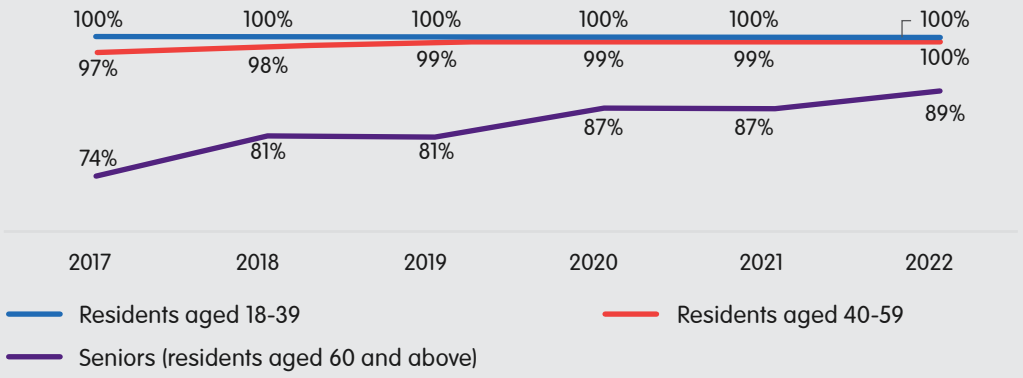
Chart 2: Percentage of resident households with computer access (2017-2022)[7]



Smartphone ownership

Almost all residents aged 18 to 59 own a smartphone. Smartphone ownership has also become more prevalent among seniors (89%). Alongside efforts to train seniors in basic digital skills, the Infocomm Media Development Authority (IMDA)'s MAS scheme supports eligible lower-income seniors with subsidised smartphones and mobile plans[8] (refer to Chart 3).

Chart 3: Percentage of residents with smartphone ownership (2017-2022)[9]



In line with the Government's "Digital First" but not "Digital Only" strategy, essential Government services will remain accessible through non-digital means for those unable to adopt digital channels. ServiceSG Centres across the island serve as physical touchpoints for citizens to access integrated Government services and receive assistance on digital transactions.

EXAMINING ESSENTIAL DIGITAL SKILLS

To clarify the tools and knowledge that Singaporeans need to go digital, IMDA, in consultation with experts, has developed a list of five broad areas of essential digital skills for daily living.

These skills will help Singaporeans do the following:

a. Set up and maintain hardware and software;

b. Seek information online;

c. Communicate online;

d. Transact online with government and other service providers; and

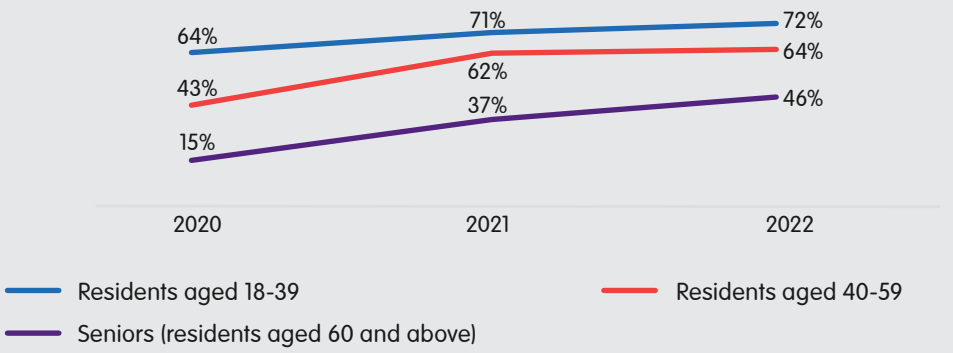
e. Be Safe, Be Smart and Be Kind online by protecting themselves, their devices and information, navigating online risks and harms, and interacting with others in a kind and civil manner when online.

The next section provides a snapshot of the adoption of these essential digital skills, based on existing indicators and data on internet usage. These will be updated in subsequent reports.

Set up and maintain hardware/software[10]

Despite increases over 2020 to 2022, the current proportion of residents setting up and keeping their smartphones up to date is relatively low (especially for those aged 40 and above). We will continue to raise awareness among residents, including seniors, on the importance of keeping their devices up to date, through existing initiatives such as Seniors Go Digital and the SG Cyber Safe Seniors Programme[11] (refer to Chart 4).

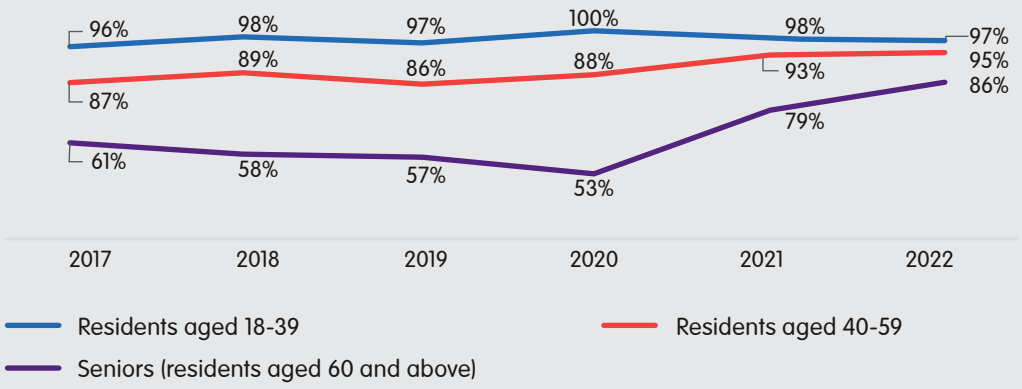
Chart 4: Percentage of residents setting up or keeping their smartphones up to date[12]



Seek information online[13]

More residents across all age groups are using the Internet to find information in 2022 compared to 2017. A significant increase of this behaviour has been observed among seniors since 2020. This could be attributed to their need to access information online during the COVID-19 pandemic, coupled with SDO's efforts to help more seniors go online[14] (refer to Chart 5).

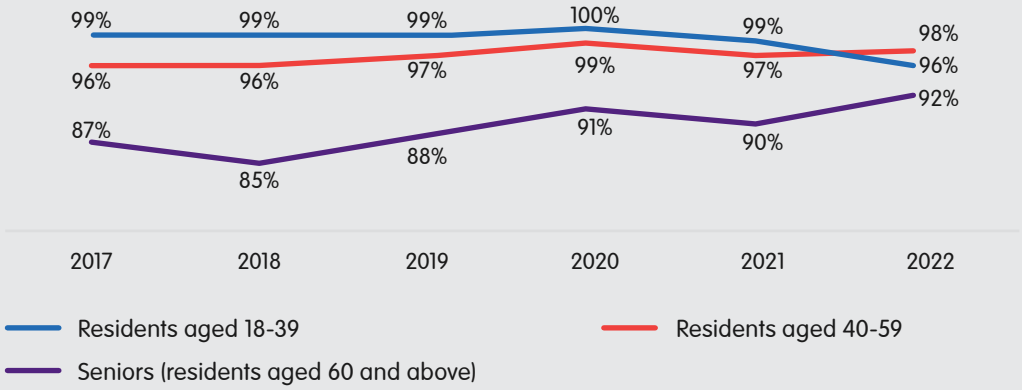
Chart 5: Percentage of residents using the Internet to find information[15]



Communicate online[16]

A vast majority of residents aged 18-59 are communicating online in 2022. More seniors are doing the same (92% in 2022, up from 87% in 2017), suggesting that they have opted to connect with one another online since the COVID-19 pandemic (refer to Chart 6).

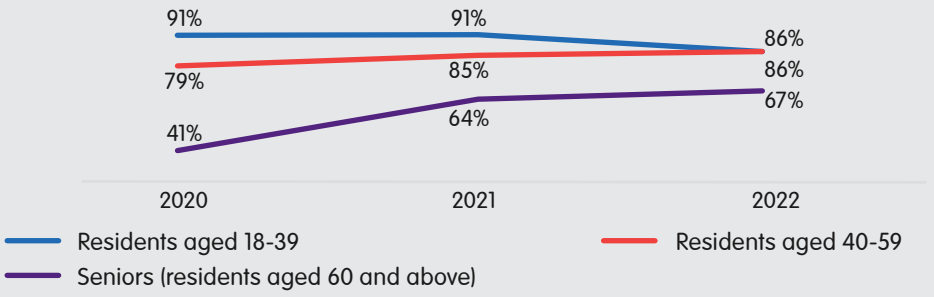
Chart 6: Percentage of residents communicating online[17]



Transact online

Almost 2 in 3 (64%) residents prefer to transact with the Government digitally[18]. Although only 24% of seniors aged 60 and above share the same preference, there has been a 26-pp increase in the use of the Singpass app among seniors between 2020 and 2022. This could be due to more services utilising Singpass login and Myinfo, as well as community and government initiatives to educate seniors on the use of Singpass. The Government will continue to equip more seniors to use Singpass, so that they can benefit from the ease and security that comes with using it on secure websites and platforms (refer to Chart 7).

Chart 7: Percentage of residents using Singpass app[19]



Residents' use of other digital transactions has also increased over the years, particularly for electronic payments. Similar trends are observed for seniors, for both physical and online transactions, though at lower levels than younger residents. We need to instil a greater sense of trust and confidence for seniors to transact digitally, so that they can safely enjoy the advantages of going digital (refer to Charts 8-9).

Chart 8: Percentage of residents using mobile app payments for in-person transactions[20]

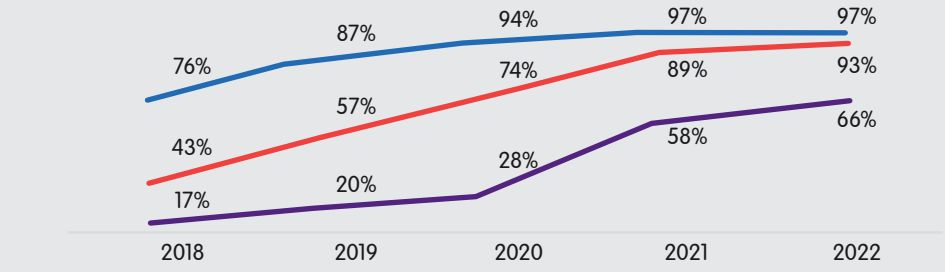
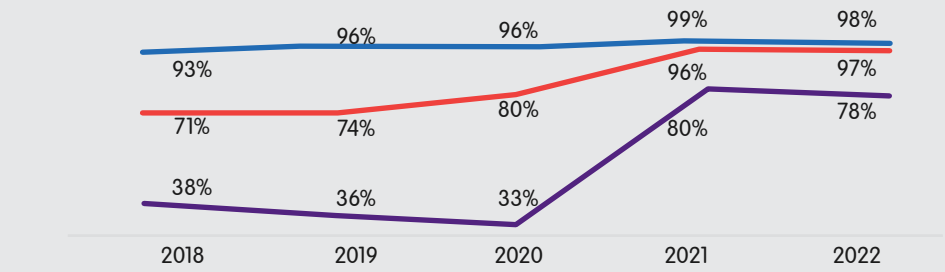


Chart 9: Percentage of residents using e-payment for online transactions[21]



Be Safe, Be Smart and Be Kind online

Be Safe

Trust and safety are critical foundations for a digital society. Citizens need to develop the knowledge and skills to protect themselves against online risks, which are taking new forms and shapes in recent times.

Residents, especially seniors, are becoming more aware of and concerned about falling victim to scams (refer to Table 1). Seniors report lower confidence than the general population in identifying scams, especially for those perpetrated via messaging platforms. Ironically, this may be the reason for their heightened vigilance and reduced likelihood[22] to fall prey to scams (refer to Table 2). However, such concerns may also deter seniors from going online and enjoying the benefits of digital technologies.

Table 1: Percentage of residents who are at least somewhat concerned about becoming a victim of scams[23]

Age group	% of residents
General population (aged 15 and above)	96%
Seniors (residents aged 60 and above)	99%

Table 2: Percentage of residents who are at least moderately confident about identifying scams on messaging platforms[24]

Age group	% of residents
General population (aged 15 and above)	52%
Seniors (residents aged 60 and above)	44%

A Whole-of-Government, Whole-of-Society approach to combat scams

The Singapore Government is resolutely committed to fighting scams and adopts a multi-pronged, whole-of-society approach to do so.

a. Prevent and Block

First, to prevent and block scammers from approaching victims, we work with the telcos, online platforms and banks to secure their channels. For instance, we have worked with the telcos to introduce the SMS Sender ID Registry (SSIR). Since January 2023, organisations that wish to use Sender IDs to send SMSes must now register with the SSIR. SMSes that are sent from non-registered Sender IDs will be reflected as "Likely-SCAM", to raise vigilance among members of the public. This has shown some effectiveness. In a survey by MCI, 4 in 5 respondents agreed that this has made them more cautious about the authenticity of the SMSes they receive[25]. When respondents were shown a scam SMS with the "Likely-SCAM" header, 92% indicated that they would choose to delete or ignore it[26].

b. Detect and Report

Second, we continue to enhance our reporting channels, to make it easier for the public to report scams. The ScamShield mobile app, for example, allows the public to report scam calls and SMSes quickly and conveniently, while helping to block calls from blacklisted numbers and filtering suspected scam messages. We will also continue to work with industry partners to strengthen our fraud surveillance mechanisms. In recent months, we have seen a growing number of malware-enabled scam cases, which led to considerable losses for some victims. We will continue working with the Monetary Authority of Singapore and banks to further strengthen anti-malware controls, fraud surveillance, and detection capabilities.

c. Enforce and Recover

Third, the Singapore Government works with the banks and foreign counterparts to swiftly contain scams, freeze scam-tainted accounts, and recover funds. We also want to disrupt the operations of scam syndicates targeting Singaporeans. We have thus strengthened our legislation[27] to promote responsible behaviour in the use of payment accounts and Singpass credentials.

d. Public Education

Finally, a vigilant and scam-smart nation is an important pillar in our collective fight against scams. We will continue to enable individuals and businesses to act against scams, by providing timely information on trending scam variants and promoting good cyber hygiene habits.

It is encouraging that among seniors in particular, notable improvements can be seen in the adoption of 2FA and other security checks (refer to Charts 10-11). Nonetheless, we must continue to foster an even stronger adoption of scam prevention actions and cyber hygiene practices across all of society.

Chart 10: Percentage of residents enabling 2FA for online transactions[28]

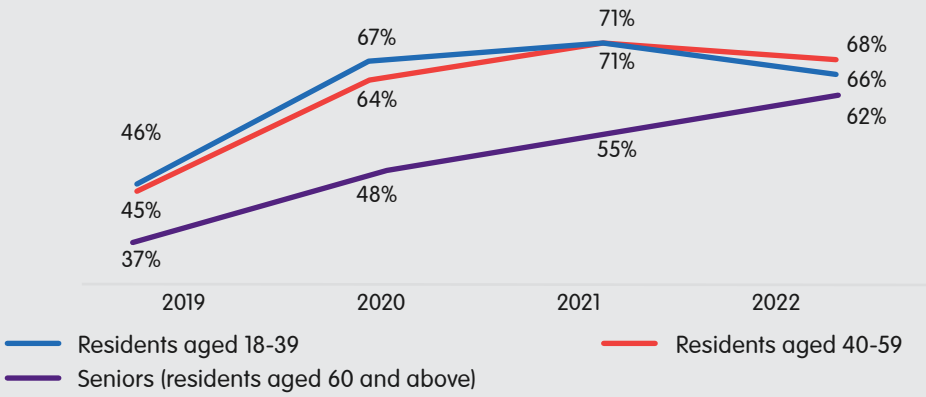
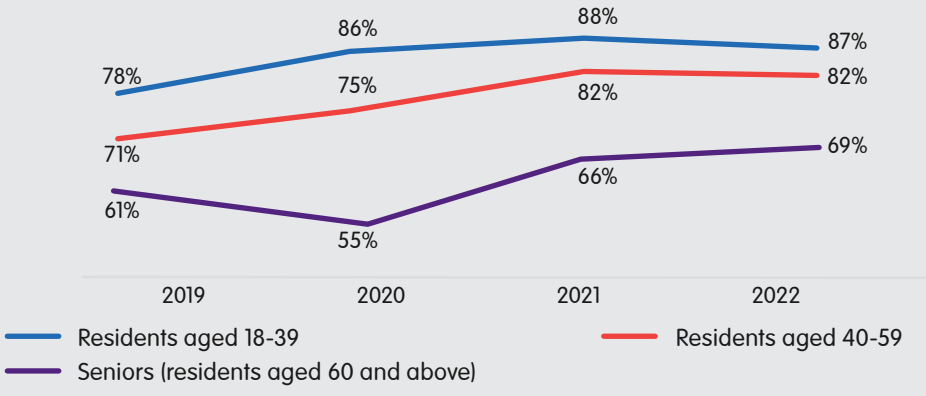


Chart 11: Percentage of residents conducting security checks when making online transactions[29]



In addition to the prevalence of scams, a survey by MCI[30] found that:

a. About two-thirds of Singapore users had encountered harmful online content of some kind, with the most common types of content being cyberbullying (29%) and sexual content (28%).

b. While the prevalence of harmful online content was high, half (49%) of respondents had done nothing about such content. Only one-quarter reported the content to the online platforms. Top reasons cited by respondents for not reporting such content were that it did not occur to them to do so, or that they were unconcerned about the content.

c. Among users who did report the harmful online content to the platforms, more than three-quarters indicated that they faced issues with the reporting process.

These findings underscore the need for social media services to provide reporting tools which are accessible and easy to use, and to act on user reports in a timely manner. In addition, Singapore users should be empowered to report harmful online content that they encounter and reduce its prevalence. The Code of Practice for Online Safety, which was introduced by IMDA in July 2023, requires designated social media services to put in place such measures to curb the spread of harmful content on their services, forge a safer online ecosystem, and protect vulnerable users such as children.

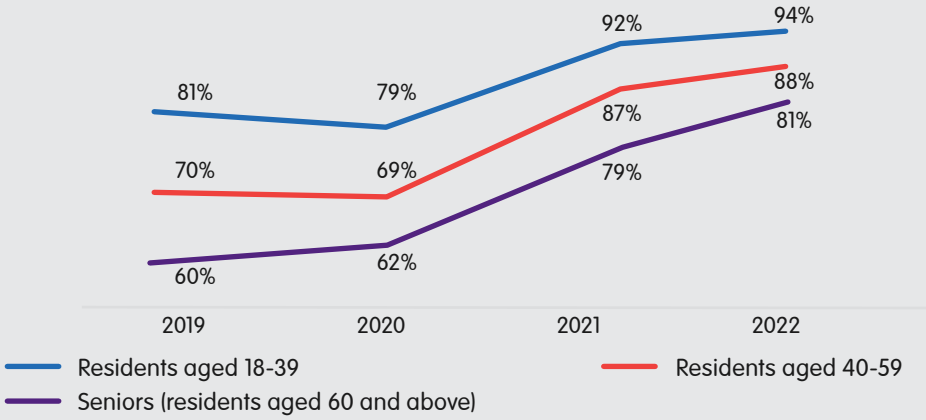
The same MCI survey found that most parents have a basic awareness of online child safety tools, with 3 in 4 having used at least one tool. Among parents who did not use such tools, reasons cited include children having limited internet access, and the view that their children could manage online risks on their own and thus did not require any intervention. At the same time, half of parents reported that their children encountered harmful online content.

Another parent-child poll conducted in 2022 by TOUCH Community Services and the Media Literacy Council (MLC) found that some parents lacked awareness of their children's online activities and struggled to engage children on their digital habits[31]. These findings affirm the importance of equipping parents with the knowledge and skills to guide their children's digital journey and keep them safe online.

Be Smart

As more residents seek information online, the ability to be critical and discerning consumers of information is increasingly crucial. More residents across all age groups have verified the authenticity of information in online news stories/articles in 2022 than 2019, with a 21-pp increase observed among seniors. This is heartening and we encourage individuals to continue to be responsible, well-informed and discerning consumers of information (refer to Chart 12).

Chart 12: Percentage of residents checking if information in news stories/ online articles is true[32]



Be Kind

As more people choose to communicate with one another online, we must remind ourselves to be kind in the digital space, in addition to the physical world. Close to 80% of residents aged 18 to 59 think about the impact of their online posts. In contrast, fewer seniors do so (refer to Table 3).

Table 3: Percentage of residents thinking of consequences when posting something online

Age group	% of residents
Residents aged 18-39	79% (▲1pp from 2021)
Residents aged 40-59	77% (No change from 2021)
Seniors (residents aged 60 and above)	62% (▼1pp from 2021)

The Government will continue to nurture astute, responsible, and empathetic digital users across all age groups, who prioritise not only their own, but also the safety and well-being of others in the digital space:

a. For all individuals

The National Library Board (NLB)'s Source, Understand, Research, Evaluate (S.U.R.E) programme equips individuals with information literacy skills to be responsible producers and consumers of online content. The Government also partners the Media Literacy Council (MLC) as part of the Digital for Life (DfL) movement, to help Singaporeans be responsible and empathetic online users, with the MLC providing thought leadership and resources.

b. School-going children

The Ministry of Education (MOE) has strengthened cyber wellness education in the refreshed Character and Citizenship Education (CCE) curriculum, to equip students with the necessary knowledge, skills and dispositions to thrive in an interconnected, diverse and rapidly changing world. Through the lessons, students are nurtured to be safe, respectful and responsible users of the online space. They are also taught the importance of respect and empathy, how they can protect themselves and others online, and to seek help when necessary.

c. Parents

The challenges of parenting in a digital age deserve greater attention. MCI is working closely with MOE and the Ministry of Social and Family Development (MSF) on initiatives to better support parents in guiding children's digital journey. These include the Parents' Toolbox[33] and a positive use guide on technology and social media[34].

Besides public education, the Government has enacted legislative safeguards against online harms, including the Protection from Harassment Act (POHA) in 2014[35], the Protection from Online Falsehoods and Manipulation Act (POFMA) in 2019, amendments to the Broadcasting Act (BA) in 2022[36], and the Online Criminal Harms Act (OCHA) in 2023[37]. The Code of Practice for Online Safety that came into effect in 2023 also requires six designated social media services[38] to have systems or processes in place to mitigate Singapore users' exposure to harmful content online[39].

EXAMINING ATTITUDES TOWARDS DIGITAL TECHNOLOGIES

Around 2 in 3 residents (66%), and a similar proportion among seniors (63%), agree that Singapore's move towards a digital future will benefit every Singaporean[40]. A majority of Singaporeans further agree that digital technologies have made their lives easier. This has given rise to a general receptiveness to try out new technologies. Even among seniors, 45% are willing to try new digital technologies (refer to Table 4).

Table 4: Percentage of Singaporeans who have positive sentiments towards digital technologies[41]

	Agree that digital technologies have made their lives easier	Generally keen to try out new digital technologies
Age group	**% of Singaporeans**	
General population (aged 15 and above)	84%	65%
Seniors (aged 60 and above)	66%	45%

While Singaporeans are willing to try new technologies, they may lack the know-how to use them. For instance, in a study by IMDA, only 55% of all residents aged 18 and above and 24% of seniors know how to use devices or applications with emerging digital technologies such as voice recognition, virtual reality and augmented reality (refer to Table 5). In general, Singaporeans have also become more wary about the risks that come with the use of technology. While digital adoption has increased steadily over the years, this trend may slow as about half of Singaporeans now express willingness to accept the risks associated with technology use. This willingness is lower among seniors (refer to Table 6).

Table 5: Percentage of residents who know how to use devices or applications with emerging digital technologies[42]

Age group	% of Residents
General population (aged 18 and above)	55% (▲1pp from 2021)
Residents aged 18-39	78% (▲2pp from 2021)
Residents aged 40-59	56% (▼2pp from 2021)
Seniors (residents aged 60 and above)	24% (▲4pp from 2021)

Table 6: Percentage of Singaporeans who are willing to accept the risks that come with the use of technology[43]

Age group	% of Singaporeans
General population (aged 15 and above)	51% (▼15pp from 2021)
Seniors (aged 60 and above)	33% (▼5pp from 2021)

The Government will continue to work with partners and strengthen our efforts to empower citizens to embrace emerging digital technologies and manage the risks that may come with technology use. For example, the annual DfL Festival invites partners to showcase technologies such as artificial intelligence and immersive media, so that the public can explore and learn about these technologies. NLB's pilot "ExperienceIT" initiative also aims to build individuals' confidence and motivation to learn and explore emerging technologies, by providing opportunities to interact with them in less intimidating ways.

CONCLUSION

Digitalisation has brought many benefits to our daily lives and is here to stay. As digital technologies continue to evolve, the Government is committed to empowering all Singaporeans to thrive in Singapore's digital future. Notably, in the past three years, we have made progress in helping seniors go online, and levelled up their digital proficiency and confidence.

However, digitalisation is not without its risks, and there is room to strengthen Singaporeans' adoption of safety and security practices, and work with relevant industry stakeholders to make the online space safer. We want to enhance Singaporeans' competence and vigilance, so that they can better manage risks such as misinformation and scams. We must also continue to nurture Singaporeans' desire to explore and deepen their knowledge and skills, so that they can seize opportunities in the digital age with trust and confidence.

To help Singaporeans gain the necessary tools, skills, and habits for a digital future, we need to galvanise our entire society. Through the DfL national movement launched in 2021, over 140 partners from the public, people and private (3P) sectors have spearheaded 142 projects to help over 270,000 Singaporeans. With more partners coming forward and working on causes to advance digital inclusion, we will move closer to Singapore's vision of a digitally inclusive society, where all Singaporeans can pursue their aspirations in Singapore's digital future safely, confidently and responsibly.

REFERENCES

1. The five areas are: Set up and maintain hardware and software; Seek information online; Communicate online; Transact online with government and other service providers; and Be Safe, Be Smart and Be Kind online.

2. Source: MCI's Digital Readiness Survey (2022).

3. Source: IMDA's Annual Survey on Infocomm Usage in Households. Resident households refer to households with at least one Singapore Citizen or Permanent Resident.

4. Source: IMDA's Annual Survey on Infocomm Usage by Individuals. Residents refer to Singapore Citizens or Permanent Residents. The data is based on those aged 18 and above.

5. Source: IMDA's Annual Survey on Infocomm Usage in Households.

6. Since April 2023, the DigitalAccess@Home scheme provides subsidised Internet access, and/or digital devices (laptops or tablets) to eligible lower-income households. It is expected to support 60,000 households over the next four years.

7. Source: IMDA's Annual Survey on Infocomm Usage in Households.

8. Singapore Citizens aged 60 and above who are recipients of the Ministry of Social and Family Development's (MSF) Comcare Assistance or HDB's Public Rental Scheme (PRS) are eligible for the Mobile Access for Seniors (MAS) scheme, which supports the Seniors Go Digital Programme. To date, the scheme has helped more than 9,000 lower-income seniors. As part of the sign-up, eligible seniors are to attend at least one training session at any SG Digital community hub run by SG Digital Office (SDO) before they can collect their mobile redemption voucher.

9. Source: IMDA's Annual Survey on Infocomm Usage by Individuals.

10. This includes downloading and installing software, patches, upgrades, new apps or apps updates on devices.

11. Under the Cyber Security Agency of Singapore (CSA)'s SG Cyber Safe Seniors programme, seniors are taught how to secure their phones such as updating their software promptly by setting automatic updates. Similarly, under the Seniors Go Digital programme, seniors are taught tips to activate the automatic update feature.

12. Source: IMDA's Annual Survey on Infocomm Usage by Individuals.

13. This includes general web browsing, or seeking specific information (e.g., goods and services, health).

14. Under SDO's Seniors Go Digital programme, Digital Ambassadors equip seniors with basic digital skills to use smartphones. To date, SDO has trained about 240,000 seniors.

15. Source: IMDA's Annual Survey on Infocomm Usage by Individuals. The data is based on internet users aged 18 and above.

16. This refers to the use of emails, voice calls, video calls, instant texting, or voice messaging over the internet.

17. Source: IMDA's Annual Survey on Infocomm Usage by Individuals. The data is based on internet users aged 18 and above.

18. Source: MCI's and SNDGO's Smart Nation Policy Perception Survey (2023).

19. Source: IMDA's Annual Survey on Infocomm Usage by Individuals. The data is based on internet users aged 18 and above.

20. Source: IMDA's Annual Survey on Infocomm Usage by Individuals. This includes making payments by inter-bank fund transfers (e.g., PayNow, DBS PayLah!), scanning QR codes (e.g., SGQR) and via Tap & Pay (e.g., Android Pay, Apple Pay), when making purchases in-person. This excludes physical card payments on point-of-sale terminals and NETs payment. The data is based on internet users aged 18 and above.

21. Source: IMDA's Annual Survey on Infocomm Usage by Individuals. This includes payments by credit/debit cards, bank debit (e.g., eNETS), inter-bank fund transfers (e.g., Paynow, DBS Paylah!), mobile payment application (e.g., GrabPay), and other online payment services (e.g., GIRO, PayPal) for online transactions. This excludes (i) online transactions where payment were completed separately [e.g., via AXN (purchase of airline tickets) or in person (cash on delivery)] and (ii) people who did not conduct online transactions. The data is based on internet users aged 18 and above.

22. According to the Singapore Police Force's Mid-Year Scams and Cybercrime Statistics (2023), young adults aged 20 to 39 made up about 51% of the total number of scam victims, while seniors aged 60 and above made up about 12% of the total number of scam victims.

23. Source: MCI's Poll on Public Sentiments Towards Scams (2023).

24. Source: MCI's Poll on Public Sentiments Towards Scams (2023).

25. Source: MCI's Online Study on SSIR Likely-SCAM Label (2023).

26. Source: MCI's Online Study on SSIR Likely-SCAM Label (2023).

27. The amendments to the Corruption, Drug Trafficking and Other Serious Crimes (Confiscation of Benefits) Act and Computer Misuse Act in May 2023 promote public vigilance and responsible behaviour in the use of payment and Singpass accounts. The amendments also seek to disrupt the operations of criminal syndicates preying on Singaporeans and will empower the Police to better act against money mules, and those who abuse Singpass to perpetrate scams and other crimes.

28. Source: IMDA's Annual Survey on Infocomm Usage by Individuals. The data is based on internet users aged 18 and above who performed online transactions.

29. Source: IMDA's Annual Survey on Infocomm Usage by Individuals. This includes checking if the site looks secure (e.g., padlock symbol on the web browser or it uses 'https' for the URL), if there is a link to another reputable payment service, or if the device is connected to a secured network/Wi-Fi. The data is based on internet users aged 18 and above who performed online transactions.

30. Source: MCI's Online Safety Poll (2023). The survey sought to understand the prevalence and experience of harmful online content for Singaporeans, and was conducted in May 2023 with 2,106 Singaporeans aged 15 and above.

31. A survey by TOUCH and MLC with 300 parent-child dyads found that about 4 in 10 parents have faced difficulties getting their children to share their online activities.

32. Source: IMDA's Annual Survey on Infocomm Usage by Individuals. The data is based on internet users aged 18 and above.

33. The Parents' Toolbox will include a component to enable parents to support their children's digital journey. It will suggest strategies that include key conversations they can have with their children on topics such as understanding the digital landscape, empowering their children to create a safe cyber space, and keeping their children safe online.

34. The guide will be developed as a research-based, authoritative source articulating how technology and social media can be harnessed positively, its negative impact and recommendations to mitigate its negative impact and promote positive and healthy use.

35. Protection from Harassment Act (POHA) protects individuals against online harassments such as cyberbullying.

36. The Broadcasting Act (BA) was amended in November 2022 and came into effect in February 2023 to allow the Government to deal effectively with egregious and harmful online content accessible to Singapore users.

37. Online Criminal Harms Act (OCHA) empowers the Government to remove criminal content online.

38. The six designated social media services are: Facebook, HardwareZone, Instagram, TikTok, X (formerly known as Twitter), and YouTube.

39. These include implementing effective content moderation and community guidelines, having efficient and easy-to-use user reporting mechanisms and submitting publicly available annual online safety reports.

40. Source: MCI's and SNDGO's Smart Nation Policy Perception Survey (2023).

41. Source: MCI Digital Readiness Survey (2022).

42. Source: IMDA's Annual Survey on Infocomm Usage by Individuals.

43. Source: MCI Digital Readiness Survey (2022).

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This report is prepared by the Infocomm Media Development Authority (IMDA), with input from the Ministry of Communications and Information (MCI), Cyber Security Agency of Singapore (CSA), National Library Board (NLB), Smart Nation and Digital Government Office (SNDGO), Ministry of Education (MOE) and Public Service Division-ServiceSG (PSD-ServiceSG).

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