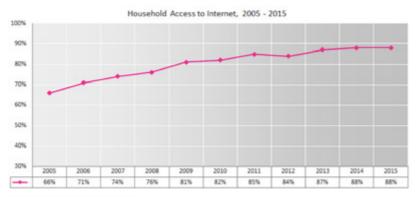
EMPOWERING POSSIBILITIES WITH DIGITAL INCLUSION

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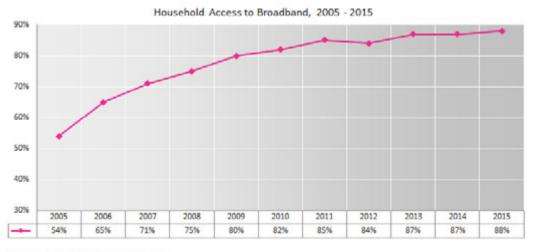
Singapore aims to establish Singapore as a Smart Nation that taps on the potential of infocomm and media (ICM) to bring about economic growth, social cohesion, and better living for the people. To support this, the Infocomm Media 2025 Masterplan was announced by the Ministry of Communications and Information in 2015 to transform Singapore for the better by connecting people through infocomm and media; to enhance the quality of life in Singapore and foster a stronger Singaporean identity. To successfully leverage infocomm and media to achieve these goals, the need to identify and bridge the digital divide in the nation is crucial. Based on figures from the Infocomm Media Development Authority's (IMDA) Annual Surveys on Infocomm Usage in Households and Individuals, there has been a steady rise in the household access to internet and broadband (Fig. 1 & 2). However, 12 per cent of households are still not connected to the internet and 13 per cent of households do not have access to a computer (Fig. 3). IMDA's Digital Inclusion efforts aim to bridge some of



Base: Resident households in Singapore.

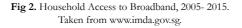
Source: IDA's Annual Surveys on Infocomm Usage in Households and by Individuals.

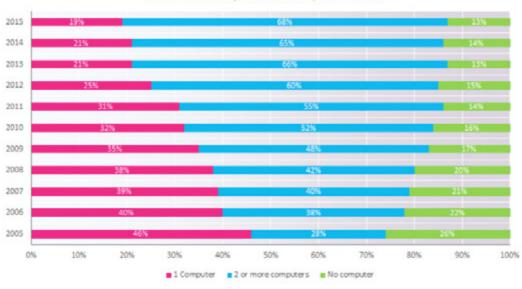
Fig 1. Household Access to Internet, 2005- 2015. Taken from www.imda.gov.sg.



Base: Resident households in Singapore.

Source: IDA's Annual Surveys on Infocomm Usage in Households and by Individuals.





Access to a Computer at Home, 2005 - 2015

Base: Resident households in Singapore.

Source: IDA's Annual Surveys on Infocomm Usage in Households and by Individuals.

Fig 3. Access to Computer at Home, 2005- 2015. Taken from www.imda.gov.sg. these gaps so that more can benefit from the adoption of infocomm media.

Building a Digitally Inclusive Society

A Digital Inclusion strategy has been put in place by IMDA to ensure that no one is left behind and three main target segments have been identified. They are the low-income households, persons with disabilities (PWDs), and seniors. Each Digital Inclusion programme supports one or more of these strategic thrusts:

- enabling greater accessibility to technology and internet connectivity;
- raising awareness on the benefits of technology and the programmes;
- equipping individuals with infocomm media skills; and
- promoting innovation in using technology to enhance lives.

Equipping Low-Income Students and Persons with Disabilities

Equipping the less privileged with computers for access to infocomm media (ICM) is a priority for Singapore as we move towards building a Smart Nation for all. Introduced in 2006, the NEU PC Plus Programme offers students and PWDs from low-income households an opportunity to own a brand new personal computer (PC) bundled with three years of free broadband access and software at an affordable price. It is the only national programme which provides financial assistance towards the ownership of PCs and access to broadband service to full-time students and PWDs from low-income households.

Without government intervention to provide affordable access to infocomm and drive greater ICM adoption, these low-income families are at risk of being left behind. By supporting the students and PWDs in their ICM needs, it will in turn support these families to become participative citizens in a digital society. Over 28,000 individuals have benefitted from the programme since 2006. The eligibility criteria of NEU PC Plus Programme can be found at www.imda.gov.sg/NeuPC.

Equipping Low Income Households

The Home Access Programme aims to increase the percentage of households with home internet access by providing affordable broadband connectivity to low-income households without school-going children. This is aligned with the larger Digital Inclusion initiative to ensure that vulnerable segments like the low-income households will also be able to harness the benefits of infocomm and be digitally connected to the community. The programme will benefit 8,000 households over four years.

The Home Access Bundle comprises a tablet and four years of home broadband connectivity at a subsidised rate of SGD6 per month. The eligibility criteria of Home Access Programme can be found at www.imda.gov.sg/HA.

Creating Access through Wireless@SG

The Wireless@SG programme was launched in 2006 to provide free wireless connectivity in high traffic public places and accelerate the take up of high-speed wireless broadband. By April 2015, the number of active Wireless@SG users had risen to two million users. Total usage hours have increased to 9.3 million hours per month.

To support the expected growth in demand for free public Wi-Fi services, IMDA, with the support of Wireless@SG operators and venue owners, will roll out more hotspots progressively, including MRT platforms and other public places.

Digital TV Assistance Scheme

Going digital is not restricted to internet connectivity. Singapore's Digital TV (DTV) journey started in 2012 when it was announced that the nation's free-to-air TV channels will go fully digital using the DVB-T2 (Digital Video Broadcasting – Second Generation Terrestrial) broadcasting standard. This is in tandem with the global trend to migrate to DTV to enhance television (TV) viewing experience for consumers and to free up limited frequencies for new services. Compared to conventional analogue TV, DTV allows for better quality pictures and sound, multi-language subtitles, and electronic programme guides.

The DTV Assistance Scheme was launched in September 2014 to help lowincome households make the switch to DTV. The Assistance Scheme package, which was offered in tandem with the roll-out of the DTV network, comprises a free DTV set-top box, an indoor antenna, and installation. IMDA worked with various government agencies, such as the Housing and Development Board, Ministry of Social and Family Development, Ministry of Health, People's Association, and self-help groups to proactively identify eligible households and make it easy for them to receive the DTV Assistance Scheme package.

More information on DTV is available on www.imda.gov.sg/DigitalTV.

Empowering Person with Disabilities

With appropriate Information Technologies and Assistive Technologies (IT/AT), persons with disabilities (PWDs) will have abilities to perform activities of daily living independently and be included in mainstream society. Employability of PWDs who have undergone IT/AT training can also be enhanced. It is with these objectives that the Enable IT programme is introduced.

The Enable IT programme helps Voluntary Welfare Organisations build up their IT/AT capabilities via customised curriculum so that staff working in the sector can acquire the right know-how and expertise to advise their PWD clients on the use of IT/AT. Enable IT also supports IT/AT training facilities and programmes to equip PWDs with relevant infocomm skills for greater employability.

To raise awareness and promote the benefits of IT/AT, IMDA funded a showcase at Enabling Village, an inclusive community space with a special focus on training and employment of PWDs, that includes mockups such as simulated residential and work environments, allowing PWDs to try out IT/AT products and services to determine suitability for their use. The inaugural Enable & Empower Connect (E2Connect) Forum held in July 2016 was an effective platform to educate the public and showcase the benefits of IT/AT tools.

The programme aims to reach out to 30,000 people through awareness and education initiatives, 4,500 beneficiaries from IT and AT training, as well as the employment of at least 300 beneficiaries.

More information on Enable IT is available at www.imda.gov.sg/EnableIT.

Equipping Seniors with Skills

During the launch of the Smart Nation vision in November 2014, Prime Minister Lee Hsien Loong emphasised the importance of using technology in an inclusive way to benefit all population segments, including those not familiar with IT, in particular the seniors.

Over the years, we saw a steady increase in the percentage of seniors using the internet. According to the Infocomm Usage by Household and Individuals Survey conducted in 2006, only 32 per cent of seniors aged 50 and above were users of the internet. The same survey done in 2014 indicated that the percentage of internet users aged 50 and above had increased to 51 per cent. More significant was the rise in connectivity to internet wirelessly using portable infocomm equipment, especially by seniors aged 50 to 59 (39 per cent increase from 2010) and to a lesser extent, seniors above 60 years old (26 per cent increase from 2010). In spite of the increasing adoption, two out of three seniors (69 per cent) above 60 are still not users of the internet.

To equip seniors with the skills to navigate the internet, 30 training centres supported under the Silver Infocomm Junctions (SIJ) have been set up by IMDA to offer IT training to seniors using customised Silver Infocomm curriculum.

To further raise awareness on the learning opportunities available for seniors, the Silver IT Fest, comprising a series of roadshows, workshops and tutorials, is organised annually to encourage seniors to take their first step in IT learning.

Supporting IMDA's programmes targeted at seniors are the Friends of Silver Infocomm (FSI) volunteers who are passionate in helping seniors hop onto the digital bandwagon. To date, over 400 adult and student volunteers have come forward to support the Silver Infocomm Initiative outreach efforts and 20 organisations from both the private and public sectors have joined as Corporate FSI.

IMDA also appoints new Silver Infocomm Wellness Ambassadors (SIWAs) annually to recognise seniors who lead active digital lifestyles and who inspire and

References

encourage their peers to embrace infocomm in their lives. As at December 2016, there are 132 SIWAs advocating IT adoption and inspiring other seniors.

More information on Silver Infocomm Initiative is available at www.imda.gov.sg/SII.

Promoting Innovation

The Social Innovation Grant offered by IMDA is intended to encourage the Voluntary Welfare Organisations in the social service sector to adopt innovative IT solutions which aid in the management of the well-being of their clients the rendering of their services to their clients.

More information on the Social Innovation Grant is available at www.imda.gov.sg/SI.

Summary

To build a digitally inclusive society, IMDA adopts a practical and holistic approach, in close collaboration with other government agencies, industries, and communities including individual volunteers. While technology has opened up new opportunities and privileges for many, it has also created unlevel playing fields for some and those who have been excluded are at a disadvantage. It is therefore important that IMDA focuses on closing the gap by providing access to technology, promoting adoption, building capabilities, and helping in the innovative application of technology through its various Digital Inclusion programmes.

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