

**For discussion
on 15 June 2021**

**Legislative Council
Panel on Information Technology and Broadcasting**

Progress Report on Digital Inclusion

Purpose

This paper briefs Members on the work progress of the various digital inclusion initiatives implemented by the Government.

Background

2. Digital technology is closely related to people's daily life, in particular during the epidemic in the past year or so. Online shopping, online news reading, use of social media platforms or online conference software etc. have become the lifestyle of many people under the "new normal". Among these, with the growing popularity of digital technology, the usage of the Internet among elderly people has significantly increased in the past decade. According to the Thematic Household Survey of the Census and Statistics Department, the proportion of persons aged 65 or above having used the Internet in the past 12 months increased significantly from around 9% in 2009 to around 62% in 2019. In order to allow the various groups of people in the community to enjoy the benefits of digital technology, the Government has continuously implemented various measures to help those in need (especially the elderly and the underprivileged) in their understanding and use of digital technology products and services to accelerate their integration into the digital society.

Digital Inclusion Measures

ICT Outreach Programme for the Elderly

3. The Office of the Government Chief Information Officer (OGCIO) has launched several rounds of the Information and Communications Technology (ICT) Outreach Programme for the Elderly (Outreach Programme) since 2013-14. Non-profit-making elderly services organisations have been commissioned to visit elderly people across the territory, including those who are living in residential care homes, receiving day care centre and home care

services and the hidden elderly etc., and organise various activities to enable the elderly to experience digital living and encourage them to make greater use of digital technology. In view of the development of the epidemic, the Outreach Programme has been conducted through remote means (such as using telephone and instant messaging software) since end-January 2020. The outreach activities include teaching the elderly to communicate with relatives and friends by using video call software, live streaming of “virtual community tour” activities through social media and using smart robots to teach fitness exercises etc. so that the elderly could continue to participate in the activities amidst the epidemic. During the period from December 2018 to April 2021, the Outreach Programme provided around 29 000 outreach services to more than 7 300 elderly persons (programme summary at [Annex I](#)).

4. A new round of the two-year Outreach Programme was launched in March 2021. Depending on the development of the epidemic, six funded non-profit-making organisations will continue to introduce digital technology to the elderly by remote means through their service network. More interesting technological elements will be incorporated into the programme, such as broadcasting digital technology tutorial video clips through smart robots and making use of drones for conducting virtual community tours for the elderly etc. This is to arouse the elderly’s interest in technology, enable them to experience the benefits brought by digital technology to their daily life and strengthen their connection with the community. It is anticipated that the programme will benefit more than 10 000 elderly persons.

Enriched ICT Training Programme for the Elderly

5. OGCIO launched the Enriched ICT Training Programme for the Elderly (Training Programme) in February 2019, offering over 100 free advanced digital training courses for the elderly with basic knowledge of digital technology. Topics covered include e-government services, cloud tools, cyber security, use of e-wallet and health management etc. Upon completion of these advanced training courses, the elderly participants can even act as teaching assistants to facilitate other elders in understanding and using technology products and services. During the epidemic, the 11 Elder Academies funded to implement the Training Programme have fully shifted to organising online classrooms so that the elderly can continue their learning through the Internet. To tie in with the “new normal” in fighting the epidemic, sessions teaching the elderly online shopping and takeaway ordering, as well as the use of the “LeaveHomeSafe” mobile app and the interactive map dashboard of the “COVID-19 Thematic Website” etc. have been added with a view to encouraging the elderly to develop a habit of recording their whereabouts and searching for epidemic information on the Internet. Besides, the Training

Programme has also added a module to introduce “iAM Smart” and teach the elderly how to access online government and commercial services conveniently through digital identity authentication with their mobile phones. So far around 3 200 elderlies have benefited from the programme, of whom around 1 200 have completed the online training courses (programme summary at [Annex II](#)). OGCIO plans to launch a new round of the Training Programme in end-2021. Apart from maintaining the existing arrangements, the new programme will also arrange more young people to act as course instructors of the Training Programme to promote harmony across generations.

Web-based Learning Portal for the Elderly

6. From October 2019 to April 2021, the “Elderly IT Learning Portal” (the Portal), a web-based learning portal, has launched 18 learning modules, including protection of mobile devices, cyber security and the use of common mobile apps such as the “LeaveHomeSafe”, “iAM Smart” and “HK eMobility”. OGCIO has collected 1 500 customer satisfaction survey questionnaires in the past few months to gauge the views of elderly people on the design of the Portal and its contents. The results revealed that around 90% of respondents were satisfied with the user interface design and the contents of the Portal, while over 60% of respondents were most interested in courses on basic smartphone operation and basic computer knowledge. OGCIO will make reference to the survey results and introduce more modules with solid contents which meet the needs of the elderly. As of April 2021, the Portal recorded around 37 000 visits and around 2.33 million hits.

7. In October 2020, OGCIO invited the Consumer Council, the Hong Kong Monetary Authority, the Hospital Authority and the Office of the Privacy Commissioner for Personal Data, together with partners of the Outreach and Training Programmes to participate in the production of a 20-episode “Elderly Academy – Elderly IT New Vision” programme to teach the elderly knowledge on innovation and technology. Topics covered include general knowledge on online shopping, e-financial services, smart hospital, online privacy and e-Government services etc. OGCIO will continue to promote the use of Internet and electronic services in the elderlies daily life, with a view to raising the percentages of the elderly in using the Internet and electronic services to 70% by 2023.

Web/Mobile App Accessibility Campaign

8. At present, all government websites (about 600) meet the Level AA standard of the Web Content Accessibility Guidelines (WCAG) Version 2.0 promulgated by the World Wide Web Consortium. Nearly half of the

government websites have already met the latest standard of WCAG Version 2.1 or plan to meet this standard when conducting large scale website revamp. In addition, 76 out of the 80 government mobile apps have conformed to the “Baseline Accessibility Criteria for Government Mobile App”. The remaining four apps will also progressively complete system upgrades in order to comply with relevant standards.

9. To ensure that newly developed and enhanced government websites and mobile apps will continuously comply with relevant accessibility standards, OGCIO regularly conducts accessibility standard audits for the websites and mobile apps of various bureaux and departments (B/Ds) and assists B/Ds in making continuous improvements to facilitate access to online government information and services by persons with disabilities. OGCIO is now conducting a new round of audits for some 200 major, frequently used or newly launched government websites and mobile apps, and it is anticipated that the audits will be completed in end-2021.

10. With regard to enterprises as well as public and private organisations, a total of 316 websites and 61 mobile apps were commended in the Web Accessibility Recognition Scheme (WARS) 2020-2021 for adopting accessibility design, of which the number of websites receiving the top tier awards increased by more than 20% as compared with last around. Those commended include non-government websites and mobile apps frequently used by persons with disabilities, covering different sectors closely related to people’s daily living, such as transportation, banking, insurance, tourism, real estate, telecom service providers and shopping malls, etc.

11. OGCIO will continue to promote the adoption of web accessibility design by public and private organisations on multiple fronts, including collaboration with Hong Kong Internet Registration Corporation Limited to co-organise a new round of WARS in end-2021, provision of free assessment and advisory services to all participating organisations, as well as regular briefing sessions for members of different sectors of the community (including tertiary students as well as practitioners of small and medium enterprises), to promote the concepts and technical requirements of web accessibility.

Projects of the Social Innovation and Entrepreneurship Development Fund Involving Promotion of Digital Inclusion

12. Launched in 2013, the Social Innovation and Entrepreneurship Development Fund (SIE Fund) seeks to drive social impact in alleviating poverty and social exclusion as well as fostering the well-being and cohesion of the society by promoting social innovation and nurturing social

entrepreneurship. As at end-April 2021, a total of 299 projects have been funded under the SIE Fund and about 100 of these projects involve promotion of digital inclusion or use of digital technologies for enhancement of services. Different types of digital technologies are involved in the projects, including, for example, development of a software to help persons with severe disabilities use computers, development of an application programme for early identification of symptoms of dyslexia among children, organisation of training courses on virtual reality sketching and 3D printing for the elderly, etc. Beneficiaries of the projects include elderly, children/youth, people of diverse race, people with disabilities, low-income families etc. Examples of the projects are set out at **Annex III**.

13. With the outbreak of the novel coronavirus epidemic, there is increased reliance on the use of digital products to receive information and maintain close connection with the society. The elderly, who generally have lower digital literacy, have therefore become more isolated and vulnerable under the epidemic. On the other hand, some young people, who are in general well versed in digital technologies, have become unemployed or underemployed under the epidemic. In view of the situation, the SIE Fund issued an open invitation in April 2021 to invite funding proposals from interested organisations or parties for enhancing the capability and interest of the elderly in learning and adopting digital technologies with the participation of the youth. The aim is to unleash talents of the youth to meet the digital needs of the elderly and at the same time promote inter-generational harmony and social cohesion. By the closing of the invitation period in end-May 2021, 15 proposals have been received. Assessment of the proposals is underway. Funded projects are expected to be launched in the third quarter of 2021.

14. Besides, the SIE Fund has appointed an intermediary in December 2020 to design, develop and operate an inclusive Gerontechnology Platform to link up different stakeholders on the supply and demand sides and enhance synergy by way of engagement, cross-sector partnership and collaboration. The goal is to foster the development and application of gerontechnology, including the application and promotion of gerontechnology products developed by digital technologies (e.g. smart phones for the elderly, smart health monitoring equipment, companion robots, remote home care and nursing systems etc.), as a means to enhancing the well-being, quality of life, independence and self-reliance of the elderly as well as providing support to their families, caregivers, healthcare staff and institutions, particularly under the new normal. The project has commenced in January 2021 and will last for three years.

The Innovation and Technology Fund for Better Living (FBL)

15. The Innovation and Technology Bureau launched the \$500 million FBL on 31 May 2017 to fund the use of innovation and technology (I&T) by various sectors of the community in developing projects that bring more convenience, comfort and safety to people's daily living, or address the needs of specific community groups. It seeks to transform innovative ideas into deliverables that can benefit the society through encouraging the adoption of an experiential and realisation approach combined with I&T application. FBL not only promotes I&T culture and digital inclusion, but also enhances Hong Kong's competitiveness in I&T areas in the long run.

16. As at the end-April 2021, the FBL Assessment Panel¹ (the Panel) has approved 35 applications, with a total grant of \$118 million. The FBL funding scope is wide and diverse, covering health, daily living, education etc. The beneficiaries include people with special needs (e.g. children with special educational needs, the elderly, the intellectually or physically disabled etc.). Target project deliverables are mainly in the form of mobile applications, followed by services, products and software etc. By making use of I&T, it will bring convenience to target beneficiaries or address the needs of special community groups. This will also allow them to better understand and make use of digital technology products and services, thereby assisting the promotion of digital inclusion. For example, one of the projects develops an innovative sign language communication system to promote social inclusion, assisting the general public who have not learnt sign language to communicate with hearing-impaired persons in daily life. Another project develops an artificial intelligence chatbot which provides a one-stop platform to answer technical questions on the use of computer and Internet from the general public. Information of projects for which fund agreements have been signed are uploaded to the FBL website² for public reference.

17. The Finance Committee (FC) of the Legislative Council approved on 4 June this year to transfer \$425 million of the FBL to the Innovation and Technology (block vote) to merge FBL with the Innovation and Technology Fund so as to enhance the flexibility in utilising the funds. For details, please refer to the FC paper (No. FCR(2021-22)22).

¹ The Panel comprises representatives from the technology sector, academia, social welfare sector, education sector and government departments. The membership list is available at <https://fbl.itb.gov.hk/Home/AssessmentPanel>

² <https://fbl.itb.gov.hk/ApprovedProject/ListApprovedProject>

Advice Sought

18. Members are invited to note the content of this paper and give advice.

**Innovation and Technology Bureau
Office of the Government Chief Information Officer
Efficiency Office
Innovation and Technology Commission
June 2021**

Annex I

Summary of ICT Outreach Programme for the Elderly (Up to April 2021)

Implementation organisation	<ul style="list-style-type: none">• Caritas Hong Kong - Services for the Elderly• Hong Kong Chinese Women's Club• Hong Kong Lutheran Social Service• The Neighbourhood Advice-Action Council• Po Leung Kuk• Yan Chai Hospital Social Services Department
Implementation period	December 2018 – July 2021
Geographical coverage	All 18 districts across the territory
Number of elderly units visited	Some 100 residential care homes for the elderly and day care centres
Number of the elders aged 65 or above receiving services (four times or above)	A total of around 7 380 elders (including 1 220 elderly with dementia) <ul style="list-style-type: none">• Around 2 660 institutionalised elders• Around 1 250 elders receiving day care centre services• Around 1 290 elders receiving home care services• Around 2 180 hidden elders
Programme content	<p>Activities conducted remotely</p> <ul style="list-style-type: none">• Live streaming of “Virtual Community Tour” on social media• Use of smart robot to teach fitness exercises• Watch tutorial videos on the “Elderly IT Learning Portal”• Demonstrate rehabilitation treatment with virtual reality products• Teach the use of mobile devices and video call software• Monitor health conditions with smart bracelets and Bluetooth health check devices <p>Free lending services</p> <ul style="list-style-type: none">• Tablets, smartphones or mobile Internet devices

Programme content (Cont'd)	Activities conducted during non-epidemic period <ul style="list-style-type: none">• Train physical coordination using interactive floor projection system• Encourage interaction of the elderly with the aid of touch-controlled multiplayer training system• Use of robots to teach fitness exercises and provide online health platform• Provide virtual tour experience and various health and training applications• Organise ICT experience sessions for the elderly to learn and use digital products• Use of virtual reality games to provide reminiscence therapy to the elderly• Invite young people to design exercise programs of smart robots for the elderly
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Annex II

Summary of Enriched ICT Training Programme for the Elderly (Up to April 2021)

Implementation organisation	<u>Hong Kong Island</u> <ul style="list-style-type: none">• HKSKH Eastern District Elder Academy• Hong Kong Island Elder Academies Cluster <u>Kowloon</u> <ul style="list-style-type: none">• Institute of Active Ageing, the Hong Kong Polytechnic University• Kowloon West Elder Academies Cluster• LST YKH & Buddhist HWCP Innovation Elder Academy	<u>New Territories</u> <ul style="list-style-type: none">• Elder Academy of the Open University of Hong Kong• Kiangsu-Chekiang (Shatin) Elder Academy• New Territories West Elder Academies Cluster• Pak Kau Caritas Elder Academy• Pui Shing Elder Academy• TM Hope Elder Academy
Implementation period	February 2019 – August 2021	
Number of elderly beneficiaries aged 60 or above	A total of around 3 200 <ul style="list-style-type: none">• Face-to-face courses: around 2 000• Online classrooms: around 1 200	
Number of elderly volunteers/teaching assistants	Around 200	
Number of courses organised	Around 100	
Number of classes organised	Around 320	

<p>Main content of courses</p>	<p><u>E-government and Smart Healthcare</u></p> <ul style="list-style-type: none"> • Leisure Link, My Library, GovHK • TouchMed, HA Go • Smart bracelet, Bluetooth health check device, “iAM Smart”, “LeaveHomeSafe”* • “GovHK Notifications” mobile app <p><u>E-services related to Smart Living</u></p> <ul style="list-style-type: none"> • Instant messaging software, social media • Mobile payment, traffic and transport mobile apps, online shopping*, takeaway food ordering mobile apps* • Mobile phone shooting, photo and video editing <p><u>Digital Technology Appreciation</u></p> <ul style="list-style-type: none"> • Cyber security, big data • Smart home, gerontechnology • Cloud storage, simple robot programming • Artificial Intelligence, Internet of Things <p>*New content related to the epidemic</p>
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Annex III

Examples of Funded Projects Involving Promotion of Digital Inclusion under the Social Innovation and Entrepreneurship Development Fund

Project Name (Grantee)	Project Summary	Project Duration (Status³)	Approved Funding Amount (HK\$)	Major Beneficiaries
Smart Age Innovation Adventure (The Salvation Army)	Offering training courses to elderly and retirees on digital technologies covering subjects such as creative thinking, virtual reality sketching and 3D printing. The project aims to encourage them to harness their life experience and come up with creative ideas to solve daily problems.	1 year (Completed)	198,122	Elderly
CP2Joy System (Individual)	Developing a software making use of joystick and voice recognition technology to help people with severe disabilities use computers with ease.	10 months (Completed)	100,000	People with Disabilities
FOOD-CO 1.0 (St. James' Settlement)	Launching the first all-dimensional food support collaborative platform "FOOD-CO" in Hong Kong to connect food support service operators and food donating corporates and individuals with the use of information technology and data analysis. The platform facilitates information sharing, coordination and matching of the demand and supply of surplus food between food support service operators and food donors and thereby enhances the efficiency and effectiveness of food donation and sharing. People in need can look up the food support service points in their neighbourhood from the online food sharing map under FOOD-CO.	3 years (Completed)	10,572,676	Low Income Families

³ Status as at end-April 2021

Project Name (Grantee)	Project Summary	Project Duration (Status³)	Approved Funding Amount (HK\$)	Major Beneficiaries
Opportunity Bank – Pathway Portal for Ethnic Minorities in Hong Kong (The Zubin Mahtani Gidumal Foundation Ltd)	Developing and launching a centralised information digital platform to provide people of diverse race in Hong Kong with information meeting their needs. With the platform, people of diverse race can have access to their required resources and opportunities with greater convenience and efficiency.	3 years (Receiving support)	1,630,040	People of Diverse Race
DLTD (Gabi Education Ltd)	Designing and developing an application programme to assist in early identification of the symptoms of dyslexia among primary school students such that proper training can be provided to the students to alleviate the long-term effect of dyslexia.	9 months (Receiving support)	200,000	Children/ Youth
G6PDia (G6PDia Ltd)	Providing a one-stop online platform to support parents of the kids suffering from glucose-6-phosphate dehydrogenase (G6PD) deficiency. An online database with products or food items suitable for the kids will be built. Parents can also exchange relevant knowledge and share experience with a view to building a safe and healthy living environment for their kids.	9 months (Receiving support)	200,000	Children/ Youth
KOElderly (Individual)	Setting up a platform of elderly Key Opinion Leaders (KOLs) and provide the elderly with equipment and technical trainings on shooting and production of YouTube videos so as to help them make use of digital technologies to develop their interests. Besides, cross-generational online community will be set up on various social media platforms to enable the elderly to make use of information and	1 year (Receiving support)	100,000	Elderly

Project Name (Grantee)	Project Summary	Project Duration (Status ³)	Approved Funding Amount (HK\$)	Major Beneficiaries
	communications technology to return to social life as well as engage and communicate with young people.			
Askpire (Individual)	Making use of a mobile application to provide a platform to connect the youth and successful people, so as to enable the youth to learn and gain inspiration from the experience of the successful people in life planning and tackling difficulties.	1 year (Receiving support)	50,000	Children/ Youth