

For Information

Legislative Council Panel on Information Technology and Broadcasting

Progress Report on Innovation and Technology Fund for Better Living and Digital Inclusion

Purpose

This paper briefs Members on the implementation of the Innovation and Technology Fund for Better Living (“FBL”), as well as the latest progress of the Government’s work on digital inclusion (“DI”).

Background

2. The Innovation and Technology Bureau (“ITB”) 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 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, thereby promoting an I&T culture and enhancing our I&T competitiveness. The FBL has been operating smoothly since its establishment, and the FBL Secretariat (“the Secretariat”) conducted a comprehensive review on different aspects of the FBL in mid-2019. The latest implementation progress of the FBL and the enhancement measures that have already been put in place are set out in paragraphs 4 to 12 below.

3. Digital technology is closely related to people’s daily life and brings great convenience to our daily living. In recent years, the Government as well as public and private organisations have been actively promoting smart city development to improve people’s quality of living. The Government has been committed to taking measures to promote DI and encourage various sectors to play an active part in helping those in need (especially the elderly and the underprivileged) get to know and use technology products and services, so that they can fully integrate into the digital society. The various DI measures are set out in paragraphs 14 to 23 below.

Innovation and Technology Fund for Better Living

Progress of Implementation

4. As at June 2020, the Secretariat has received a total of 132 eligible applications, five of which have been withdrawn by the applicants. Of the remaining 127 applications, 124 have been considered by the FBL Assessment Panel¹ (“the Panel”) and 31 were approved, with a total grant of \$103 million. Projects for which fund agreements have been signed between ITB and the successful applicants are at Annex 1. Information about the projects is also available on the FBL website².

5. Depending on the complexity of the projects and completeness of information and documents submitted by the applicants, it took an average of 15 weeks, the shortest being 4 weeks, for the Secretariat to process an application from its receipt to its submission to the Panel for discussion. The time required was mainly for the applicants to make clarifications or provide supplementary information.

6. The approved projects cover various themes, including health, daily living, education, safety, transport, etc. The target beneficiaries include people with special needs (such as children with special educational needs), the elderly, the disabled, young people, students, teachers, rehabilitation workers, etc. Project deliverables are mainly in the form of mobile application, followed by service, product, software, etc. The relevant statistics are at Annex 2.

7. The overall progress of the approved projects is satisfactory. So far, 14 approved projects (i.e. items (1) to (14) in Annex 1) have completed the development and rolled out for use by the target groups. The other 11 projects (i.e. items (15) to (25)) are still under development, and one project (i.e. item (26)) will soon commence in July 2020, and the remaining five projects are pending the signing of fund agreements.

Enhancement Measures

8. Since the launch of the FBL, the Secretariat has been collecting the views of different sectors on the FBL through various means, including the enquiries

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?lang=EN>.

² <https://fbl.itb.gov.hk/Home/AssessmentPanel?lang=EN>

received, briefing sessions, industry events, media/social media coverage, questionnaire surveys conducted with the relevant applicants, etc. Overall speaking, we consider that the FBL has achieved the target of promoting the application of technology to benefit the target groups. To encourage more organisations to submit applications so that more people can be benefited, the Secretariat conducted a comprehensive review in 2019. After consulting the Panel, the Secretariat has introduced various enhancement measures in August 2019, which are set out in paragraphs 9 to 11 below.

Eligibility Criteria

9. Since August 2019, we institutionalised the eligibility of the social service organisations exempted from tax under section 88 of the Inland Revenue Ordinance (Cap. 112) (“social service organisations exempted from tax”) under the FBL. Other eligible organisations include:

- (a) Non-governmental organisations subvented by the Social Welfare Department (“SWD”);
- (b) Public bodies;
- (c) Professional bodies; and
- (d) Trade associations.

So far, 35 applications have been received from social service organisations exempted from tax, accounting for 27% of the 132 eligible applications, and eight of them have been approved for funding.

Monitoring Mechanism

10. The Secretariat will continue to closely monitor the progress of projects under the mechanism, including vetting and evaluating the progress reports and financial reports submitted by organisations by each agreed project milestone, visiting the funded organisations, convening progress meetings, etc. While ensuring effective monitoring, we have also suitably simplified the requirements for submission of reports, with the number of progress reports to be submitted by grantees in the three-year funding period being reduced from eight to six. The requirements on the annual audited report and other monitoring measures remain unchanged.

Other Aspects

11. The Secretariat has also amended certain parts of the application form, application guide and fund agreement so that applicants will have a better understanding of the information submission requirements, the items covered by the project expenditure, the provisions in the fund agreement, etc.

Promotion and Publicity

12. In 2019-20, the Secretariat organised a series of publicity and promotional activities, including promoting the FBL through media interviews, holding briefing sessions to introduce the approved projects and invite applications from eligible organisations, attending various public activities, and meeting with interested organisations or groups to explain details of the FBL. Through these activities, the Secretariat has reached out to a total of about 1 150 organisations. The Secretariat will continue to actively promote and publicise the FBL to stakeholders through different channels.

Digital Inclusion Measures

13. The Office of the Government Chief Information Officer (“OGCIO”) has launched various DI initiatives over the past few years, details of which are set out in the ensuing paragraphs.

ICT Outreach Programme for the Elderly

14. OGCIO has regularised the Information and Communications Technology (“ICT”) Outreach Programme for the Elderly (“the Outreach Programme”) since 2018-19. Six non-profit-making organisations under the Outreach Programme visit institutionalised elders, hidden elders, elders receiving day care centre or home care services through their service network and teach them how to use tablets, smartphones and other technology products, such as smart watches and virtual reality (“VR”) products, with a view to encouraging wider adoption of digital technologies by the elderly in their daily living. The Outreach Programme has made good progress since its rollout, benefiting more than 5 000 elders. The “iAM Smart” one-stop personalised digital government service platform will be launched in the fourth quarter of 2020. The Outreach Programme will also incorporate an introduction to the registration process and uses of “iAM Smart” for the elderly.

Enriched ICT Training Programme for the Elderly

15. OGCIO launched a two-year Enriched ICT Training Programme for the Elderly (“the Training Programme”) in February 2019. 11 funded Elder Academies (“EAs”) offered over 90 advanced ICT training courses for free, covering topics like digital government services, social media, cyber security, wealth management and health management, to further enhance the elderly’s knowledge in adopting digital technology in their daily living. Upon completion of the advanced training courses, the elderly participants may even serve as teaching assistants with young students to help more elders acquire technology knowledge. The programme has benefited nearly 2 000 elderly since its launch.

Web-based Learning Portal for the Elderly

16. OGCIO launched a web-based learning portal named the Elderly IT Learning Portal (“the Portal”) in October 2019 to facilitate the learning of digital technologies by more elderly people. So far, the Portal has launched seven learning modules, covering online shopping, protection of mobile devices, cyber security, smart healthcare, etc. The Portal also provides training in an interactive manner, such as VR videos and interactive quizzes. As at the end of May 2020, the Portal recorded around 12 100 visits and around 750 000 hits. OGCIO will continue to promote this learning portal to the elderly through different channels, such as electronic media, social platforms and elderly services providers. OGCIO will also, together with the EAs participating in the Training Programme, develop and launch in phases around 10 additional learning modules covering the use of e-Government services, cloud-based tools and social media, etc.

17. To minimise the risk of the spread of Coronavirus Disease 2019, the above-mentioned six non-profit-making organisations under the Outreach Programme and the 11 funded EAs have suspended all outreach activities and face-to-face training classes since late January 2020. Instead, they have assisted the elderly in continuing their learning of digital technologies through the Portal by remote means (such as using telephone and instant messaging software) during the epidemic. Some EAs funded under the Training Programme have also organised online classrooms by making use of web conferencing software or in the form of videos, enabling the elderly to enhance their technology knowledge even at home. The funded organisations and EAs will study the feasibility of resuming the outreach activities and face-to-face training classes having regard to the development of the epidemic.

18. OGCIO expects to launch a new round of the Outreach Programme and the Training Programme in 2021 and will enhance the initiatives by making reference to the effectiveness of existing programmes, in particular the experience of the online classrooms, and bringing in more technology elements.

19. According to the Thematic Household Survey conducted by the Census and Statistics Department in 2019, the respective percentages of the elderly who had smartphones and used the Internet were 65.1% and 62.2%, representing an increase of 7.9% and 5.9% respectively over 2018. OGCIO will continue to promote the use of the Internet and electronic services in daily living among the elderly, with a view to raising these two percentages to 70% by 2023.

Web/Mobile App Accessibility Campaign

20. Currently, all government websites (nearly 600) meet the Level AA standard of the Web Content Accessibility Guidelines Version 2.0 promulgated by the World Wide Web Consortium. In addition, 77 (94%) of the 82 government mobile applications (“apps”) conform to the “Baseline Accessibility Criteria for Government Mobile App”. It is expected that the system upgrades of the remaining five apps will be completed by the end of this year in order to conform to the relevant standards.

21. OGCIO regularly conducts accessibility standard audits on the websites and mobile apps of various bureaux and departments (“B/Ds”) to ensure that all government websites and mobile apps conform to the relevant accessibility standards. In addition, OGCIO assists B/Ds in making continuous improvements to facilitate access to online government information and services by persons with disabilities. OGCIO commenced a new round of audits in January 2020 and plans to complete the audits on some 200 government websites and mobile apps by the end of 2021.

22. With regards to promotion, OGCIO will continue to co-organise the Web Accessibility Recognition Scheme (“WARS”) with the Hong Kong Internet Registration Corporation Limited to encourage wider adoption of web/mobile app accessibility designs by enterprises as well public and private organisations. Free assessment and advisory services will be provided to all participating organisations to help them understand and meet the technical requirements. In the 2018-19 WARS, a total of 299 websites and 71 mobile apps were awarded for adoption of accessibility designs, representing a 25% increase compared to the last round of the scheme. The new round of WARS was open for applications

in December 2019. The assessment is underway and the awards will be presented in the first quarter of 2021.

Provision of Wi-Fi Service for Welfare Service Units

23. With a funding allocation of some \$205 million from the Lotteries Fund, the SWD has launched a four-year pilot scheme to progressively provide Wi-Fi service at around 1 350 service units operated by SWD-subsented organisations from January 2020, with a view to encouraging them to make use of technology products to improve services. The service units covered by the pilot scheme include relevant units of elderly services, rehabilitation services, family and child welfare services, youth services, etc. In addition, starting from July 2019, SWD has also progressively provided Wi-Fi service at around 180 welfare facilities which it operates.

Advice Sought

24. Members are invited to note the content of this paper.

**Innovation and Technology Bureau
Office of the Government Chief Information Officer
June 2020**

**Approved Projects under
Innovation and Technology Fund for Better Living
(as at June 2020)**

	Approved Projects with Funding Agreement Signed¹ (Applicant Organisation)	Objective	Target Beneficiaries	Application of I&T	Grant Approved² (HK\$) (Project Period³)	Project Progress
1.	Development of Intelligent Target Aiming Device for Visually Impaired Archery ('ITAD') (Hong Kong Productivity Council (HKPC))	To encourage and assist the visually impaired persons in participation of sports; and to enhance the competitiveness of Hong Kong athletes with visual impairment	Visually impaired persons and the related service staff	Machine vision, digital image processing	1,166,742 (1/3/2018 – 28/2/2021)	Development completed and the project is at the running stage. The project was awarded the Silver Medal in the 47 th International Exhibition of Inventions Geneva in April 2019. Efforts are being made by HKPC to increase public knowledge of the project deliverables and to promote the device to visually impaired persons through different channels. Experience workshops are also continually organised for the visually impaired. Estimated number of target beneficiaries within the funding period: 600

	Approved Projects with Funding Agreement Signed¹ (Applicant Organisation)	Objective	Target Beneficiaries	Application of I&T	Grant Approved² (HK\$) (Project Period³)	Project Progress
2.	HOPE Chinese Words and Sentences Game Mobile App (Hong Kong Young Women's Christian Association)	To the learning of the four parts of speech in Chinese grammar and their use in a sentence by children with dyslexia; and to enhance their motivation in learning Chinese words and sentence structure through 10 interactive story games and exercises on 420 words	Children with dyslexia	Mobile application	1,242,000 (1/3/2018 – 28/2/2021)	Development completed and the project is at the running stage. The mobile application has been released on the App Store (iOS) and the Google Play Store (Android) since mid-March 2019 for free download. The launching ceremony of the mobile application was held in April 2019. Ongoing efforts are being made to promote the mobile application. Estimated number of downloads within the funding period: 5 000

	Approved Projects with Funding Agreement Signed¹ (Applicant Organisation)	Objective	Target Beneficiaries	Application of I&T	Grant Approved² (HK\$) (Project Period³)	Project Progress
3.	VRRehab Generation (Tung Wah Group of Hospitals (TWGHs))	Through the use of virtual reality (VR) technologies, to strengthen the rehabilitation training and treatment effectiveness for the elderly and people with disabilities so as to enrich their life experience despite their physical constraints; and to promote social inclusion that raises the public awareness in understanding the needs of people with disabilities and sustain the development of VR programmes in rehabilitation services	The elderly and people with disabilities	VR	3,352,770 (1/4/2018 – 31/3/2021)	Development completed and the project is at the running stage. Two rehabilitation programmes on cognitive and physical training and three programmes on reminiscence therapy, emotional and community skills training have been rolled out. The rehabilitation programmes, which were first conducted in the TWGHs Jockey Club Rehabilitation Complex, have been extended to other TWGHs service centres. Estimated number of target beneficiaries within the funding period: 4 000

	Approved Projects with Funding Agreement Signed¹ (Applicant Organisation)	Objective	Target Beneficiaries	Application of I&T	Grant Approved² (HK\$) (Project Period³)	Project Progress
4.	Implementation of robot drama education programme for reducing challenging behaviours of kindergarten children with autism spectrum disorders (ASD) (The Chinese University of Hong Kong (CUHK))	To let the ASD children of kindergartens understand the real-life situations through programmed robot drama, so as to coach them to behave appropriately in daily lives	Children with ASD (aged 3 to 6)	Programmed robots	2,845,696 (1/4/2018 – 31/3/2021)	Development completed and the project was rolled out in April 2019. The CUHK is using the programme to conduct behavioural training for children with ASD. Estimated number of target beneficiaries within the funding period: 900

	Approved Projects with Funding Agreement Signed¹ (Applicant Organisation)	Objective	Target Beneficiaries	Application of I&T	Grant Approved² (HK\$) (Project Period³)	Project Progress
5.	Pioneer Integrated Palliative and Hospice Care System (iPAHCs) (The Society for the Promotion of Hospice Care (SPHC))	To enhance the efficiency and quality of service delivered to the terminally-ill patients who stay at home and hospice inpatient setting; to enable patients and carers to perform self-assessment and monitor the vital signs at home; to allow medical and healthcare professionals to make real-time retrieval and updates on the medical records; and to foster the development of the local palliative and hospice care	Terminally-ill patients and their carers	Systematic data management and analysis	4,993,770 (1/4/2018 – 31/3/2021)	Development completed and the project is at the running stage. Launched in May 2019 and implemented in SPHC, the system has been promoted to other residential care homes for the elderly so that more service organisations can have access to the project deliverables. Estimated number of target beneficiaries within the funding period: 1 517 terminally-ill patients 2 882 carers

	Approved Projects with Funding Agreement Signed¹ (Applicant Organisation)	Objective	Target Beneficiaries	Application of I&T	Grant Approved² (HK\$) (Project Period³)	Project Progress
6.	Early Literacy Mobile App (SAHK)	To develop the iOS version and enhance the existing Android version of the app that assist pre-school children to acquire Chinese language skills in reading and writing; and to enhance their motivation in early literacy learning through 24 story videos and 120 interactive games under 6 themes, with new features of augmented reality and dashboard for tracking pre-school children's learning process	Pre-school children with academic ability at K1 level or above (especially those with specific learning difficulties)	Mobile application	792,233 (1/4/2018 – 31/3/2021)	<p>Development completed and the project is at the running stage.</p> <p>The iOS and enhanced Android version have been released on the App Store (iOS) and the Google Play Store (Android) since April 2019 for free download.</p> <p>Starting from May 2019, SAHK has been providing training for its pre-school teachers and therapists in utilising the mobile application to assist pre-school children to acquire Chinese reading and writing skills. The launching ceremony of the mobile application was held in October 2019. Ongoing efforts are being made to promote the mobile application.</p> <p>Estimated number of downloads within the funding period: 3 000</p>

	Approved Projects with Funding Agreement Signed¹ (Applicant Organisation)	Objective	Target Beneficiaries	Application of I&T	Grant Approved² (HK\$) (Project Period³)	Project Progress
7.	Baduanjin (Eight-Section Brocades) Health Programme Game (North Point Kai-Fong Welfare Advancement Association)	Through the mobile application with artificial intelligence (AI), to encourage and assist the elderly in practising Baduanjin exercise, thereby leading a healthy lifestyle	The elderly	AI, real-time human pose estimation algorithm and machine learning mobile application	4,523,930 (1/5/2018 – 30/4/2021)	<p>Development completed and the project is at the running stage.</p> <p>The mobile application was selected as the winner of the Google Play Best of 2019 Awards Hong Kong - Personal Growth Category.</p> <p>The mobile application has been released on the App Store (iOS) and the Google Play Store (Android) since May 2019 for free download.</p> <p>Public knowledge of the use and technological application of the mobile application is being promoted through online advertisements, promotional leaflets and press/media coverage. So far, nine experiential workshops for the Baduanjin mobile application have been organised. The applicant organisation was also invited to introduce the mobile application in Apple's Causeway Bay store on 6 July</p>

	Approved Projects with Funding Agreement Signed¹ (Applicant Organisation)	Objective	Target Beneficiaries	Application of I&T	Grant Approved² (HK\$) (Project Period³)	Project Progress
						<p>2019. The event attracted about 70 participants. The Queen Mary Hospital is using the mobile application in its occupational therapeutic service.</p> <p>Estimated number of downloads within the funding period: 10 000</p>

	Approved Projects with Funding Agreement Signed¹ (Applicant Organisation)	Objective	Target Beneficiaries	Application of I&T	Grant Approved² (HK\$) (Project Period³)	Project Progress
8.	One Click Care ⁴ (Hong Kong Angelman Syndrome Foundation)	To enhance the quality of life of people with disabilities and special needs through encouraging the participation of the commercial sector (e.g. restaurants, cinemas, tourism-related-businesses) in bringing convenience and disseminating useful information; and to promote social inclusion and raise the public awareness on the needs of people with disabilities and special needs and their families	Persons with disabilities and special needs and their families	Mobile application and website platform	1,877,500 (1/6/2018 – 31/5/2020)	Development of the mobile application and website platform completed. Three new components, namely “Caring Cinema Tickets”, “Online Platform for Information, Services and Gifts” and “Online Professionals Q&A” have been rolled out. The development of the new component “Caring Flight Tickets” was also completed, but owing to the epidemic, it was not rolled out as scheduled. Estimated number of downloads and page views within the funding period: 30 000
9.	Mobile Application for Health Management Services in Community	To assist the elderly in health management by simplifying the data entry process	The elderly	Mobile application	3,870,000 (1/9/2018 – 31/8/2021)	Development completed and the project is at the running stage. OUHK has developed the mobile applications, namely

	Approved Projects with Funding Agreement Signed ¹ (Applicant Organisation)	Objective	Target Beneficiaries	Application of I&T	Grant Approved ² (HK\$) (Project Period ³)	Project Progress
	(The Open University of Hong Kong (OUHK))	through taking photos of the medication labels and medical appointment slips, providing reminder functions on medical appointment and medicine taking, and establishing a database on common medicine				<p>“eCare - 護您依時” and “eCare - 護您依時 照顧者版”, which have been released on the App Store (iOS) and the Google Play Store (Android) since the fourth quarter of 2019 for free download.</p> <p>A launching ceremony was held in October 2019 to promote the mobile application to the target beneficiaries and the general public. The project was also covered and featured in press and media reports.</p> <p>Owing to the epidemic, OUHK is formulating a new promotion plan to deliver the project deliverables to the target beneficiaries.</p> <p>Estimated number of downloads within the funding period: 20 000</p>

	Approved Projects with Funding Agreement Signed¹ (Applicant Organisation)	Objective	Target Beneficiaries	Application of I&T	Grant Approved² (HK\$) (Project Period³)	Project Progress
10.	Music textbook with augmented reality effect for special primary school students in junior grades (The Incorporated Management Committee of Rhenish Church Grace School)	By adopting a multiple-sensory teaching method and visualising the abstract music theories, to strengthen the memories and understanding of students with special educational needs. The interesting 3D graphics help enhance their learning effectiveness and self-directed music learning abilities	Junior primary school students with special educational needs, as well as their music teachers and parents	Mobile application and music textbook with augmented reality	1,286,909 (1/9/2018 – 31/8/2021)	Development completed and the project is at the running stage. Primary 1 to 3 students of Rhenish Church Grace School have started using the music textbooks with augmented reality and their mobile applications to learn music since November 2019. The project is currently being promoted to other special schools. The project was covered and featured in press and media reports in November 2019. Estimated number of target beneficiaries within the funding period: 5 700

	Approved Projects with Funding Agreement Signed¹ (Applicant Organisation)	Objective	Target Beneficiaries	Application of I&T	Grant Approved² (HK\$) (Project Period³)	Project Progress
11.	Smart Community SPACE21 (The Hong Kong Federation of Youth Groups)	To provide a platform for disseminating information on available community spaces with booking function for the youth and the public, so as to increase the utilisation of community spaces and raise the sense of belonging to the community of the youth	Youth and the general public	Integrated mobile application, website, administrative system and smart online booking system	4,726,530 (1/9/2018 – 31/8/2021)	Development completed and the project is at the running stage. The mobile application has been released on the App Store (iOS) and the Google Play Store (Android) since early February 2020 for free download. The website has been launched simultaneously. Target to have 120 community space providers and 1 200 bookings within the funding period.
12.	Patient Rehabilitation Mobile Apps Platform via Mobile Technology (Hospital Authority (HA))	To provide easy access to rehabilitation services through “tele-rehabilitation” that enhances the patients’ self-management and the carers’ efficiency, so as to facilitate the patients’ functional	Patients with stroke, mild cognitive impairment and functional disabilities, and their carers	Platform of mobile application	4,000,000 (1/10/2018 – 30/9/2021)	Development partially completed and the project is at the running stage. Two modules, namely “Daily Activities Training” and “Motor Training” were launched in all HA hospitals in October 2019. Briefings on the use of the Platform have been arranged for the

	Approved Projects with Funding Agreement Signed ¹ (Applicant Organisation)	Objective	Target Beneficiaries	Application of I&T	Grant Approved ² (HK\$) (Project Period ³)	Project Progress
		recovery to avoid long term disability				<p>healthcare professionals in 30 hospitals.</p> <p>“Daily Activities Training” includes exercises for the shoulders, knees, elbows, etc., while “Motor Training” involves the movement training of the esophagus, tongue and lips.</p> <p>The remaining module - “Cognitive Training” is currently under development. The objective of this module is to train patients’ memory and ability to handle daily matters through playing games. The module will be launched in October 2020.</p> <p>Estimated number of downloads within the funding period: 10 000</p>

	Approved Projects with Funding Agreement Signed¹ (Applicant Organisation)	Objective	Target Beneficiaries	Application of I&T	Grant Approved² (HK\$) (Project Period³)	Project Progress
13.	Self-managing Healthy Eating & Active Lifestyle for Impeding 3-Highs (high blood glucose, high blood pressure and high cholesterol) Mobile Application (SHEALF3 APP) (Asia Diabetes Foundation Limited (ADF))	To develop an AI software which uses the photo-taking function of mobile device to help users understand the nutritional contents of common foods and beverages; and provide information on healthy weight, prevention of 3 highs, nutrition and energy balance, etc., so as to raise the public awareness on healthy diet and regular exercise, thereby promoting a healthy lifestyle	The general public	AI, augmented reality and mobile application	4,247,006 (1/10/2018 – 30/9/2021)	Initial development completed and the project is at the running stage. The mobile application has been released on the App Store (iOS) and the Google Play Store (Android) since February 2020. ADF will collect user feedback on an on-going basis, with a view to enhancing the functions of the mobile application. Estimated number of downloads within the funding period: 30 000

	Approved Projects with Funding Agreement Signed¹ (Applicant Organisation)	Objective	Target Beneficiaries	Application of I&T	Grant Approved² (HK\$) (Project Period³)	Project Progress
14.	Development of an online cognitive behavioural intervention programme to reduce depressive symptoms for adults with depression (Hong Kong Baptist University (HKBU))	With the application of innovative technologies, to develop an online cognitive behavioural intervention programme culturally and linguistically appropriate to Hong Kong, with a view to helping local adults who suffer from mild to moderate depressive disorder reduce their depressive symptoms and improve their mental health	Local adults who suffer from mild to moderate depressive symptoms and local mental health professionals	Mobile application and website platform	4,198,105 (1/1/2019 – 31/12/2021)	<p>Development completed and the project is at the running stage.</p> <p>The mobile application and the website platform were officially launched on 27 April 2020 and a press conference was held on the same day. The project received widespread coverage and was featured in press and media reports.</p> <p>The platform includes: five demonstration cases and an eight-module guided self-help online intervention platform, with two face-to-face and two telephone follow-up sessions.</p> <p>HKBU is promoting the programme and recruiting target groups on an on-going basis.</p> <p>Estimated number of target beneficiaries within the funding period: 600</p>

	Approved Projects with Funding Agreement Signed¹ (Applicant Organisation)	Objective	Target Beneficiaries	Application of I&T	Grant Approved² (HK\$) (Project Period³)	Project Progress
15.	Development of a smart portable corneal topographer for characterising corneal shape in young children (The Hong Kong Polytechnic University(PolyU))	To quantify the development of corneal shape in children; to overcome the major limitations of the existing instruments; and to establish a data bank for medical reference and design ophthalmic optics products/treatments to control abnormal refractive error development in young Asian population	Children	AI and imaging system	3,600,000 (1/1/2019 – 31/12/2021)	<p>The project is under development.</p> <p>PolyU has completed the following: design of the optical and 3D mechanical structure of corneal topographer; testing of the high-speed precision stage and electronic components; assembly of optical and mechanical components and programming of algorithms for key modules of the system; programming of algorithms of the data bank and testing of the whole system. The duplication of the system and recruitment of children participants are in progress.</p> <p>The project was covered and featured in press and media reports in September 2019.</p> <p>Owing to the epidemic, the launch of the project will be postponed until the third quarter of 2020.</p>

	Approved Projects with Funding Agreement Signed¹ (Applicant Organisation)	Objective	Target Beneficiaries	Application of I&T	Grant Approved² (HK\$) (Project Period³)	Project Progress
						Estimated number of target beneficiaries within the funding period: 990
16.	<p>Plaque cleaning apparatus using dental 3-D printing technique by micro-mist injection for elderly and disabled</p> <p>(The University of Hong Kong (HKU))</p>	<p>To develop a safe and simple device to help the elderly and people with disabilities or dysphagia clean their oral cavity. The use of micro-scale mist mitigates the risk of aspiration of the users and improves their oral hygiene, so as to promote social interaction, raise self-esteem, and improve physical and psychological health</p>	<p>The elderly and people with disabilities</p>	<p>3D printing and micro-scale mist</p>	<p>3,162,400 (1/1/2019 – 31/12/2021)</p>	<p>The project is under development. HKU has completed the generation of the 3D apparatus models for testing the effectiveness and safety, and developed initial prototypes of mouth piece device with micro-scale mist injection function. Ongoing optimisation of the prototype is in progress. Manufacturing of the finished product is expected to commence in the beginning of the third quarter of 2020 and the conduct of clinical tests are scheduled for the third quarter.</p> <p>Estimated number of target beneficiaries within the funding period: 500</p>

	Approved Projects with Funding Agreement Signed¹ (Applicant Organisation)	Objective	Target Beneficiaries	Application of I&T	Grant Approved² (HK\$) (Project Period³)	Project Progress
17.	Intelligent care system for singleton elderly (Haven of Hope Christian Service (HOHCS))	To build and train a machine learning model from the data collected by sensors in order to learn the behavioural pattern of singleton elderly. The said technologies, coupled with the support services of call centre, enable speedy and effective response to the risks or abnormal behaviours of singleton elderly for improving the elderly's quality of life, and achieving ageing in place and sustainable smart elderly care services	Singleton elderly	Intelligent sensor, internet of things, big data analysis, AI algorithm and machine learning	4,938,000 (1/5/2019 – 30/4/2022)	The project is under development. HOHCS has completed the system architecture, planning, requirements and design of the system; system set-up, installation and user acceptance test; and the engagement of call centre to provide the related services. The system integration, installation in the elders' home and its trial run are in progress. Owing to the epidemic, the roll-out of the project will be postponed until the third quarter of 2020. Estimated number of target beneficiaries within the funding period: 400

	Approved Projects with Funding Agreement Signed¹ (Applicant Organisation)	Objective	Target Beneficiaries	Application of I&T	Grant Approved² (HK\$) (Project Period³)	Project Progress
18.	AI for Swimmer Safety and Performance Analysis (Smart Swim) (The University of Hong Kong (HKU))	To enhance the safety of swimming pools and the analysis of swimmers' performance through the use of technologies; foster the AI research development for human posture analysis; and implement the system in the swimming pools of two pilot schools with an aim of extending the application to other schools and public pools for benefitting more people	Swimmers and athletes	AI, computer vision, human posture estimation algorithm and deep learning	3,904,608 (1/6/2019 –31/5/2022)	<p>The project is under development. HKU has completed the algorithm testing and preliminary software development for drowning detection; the collection of swimming posture data and AI software development; and the building of the big data database and construction of the deep learning model. The installation of the system in the schools' swimming pool is in progress. Owing to the epidemic, the roll-out of the project will be postponed until the third quarter of 2020.</p> <p>The project was covered and featured in press and media reports in September 2019.</p> <p>Estimated number of target beneficiaries within the funding period: 5 000</p>

	Approved Projects with Funding Agreement Signed¹ (Applicant Organisation)	Objective	Target Beneficiaries	Application of I&T	Grant Approved² (HK\$) (Project Period³)	Project Progress
19.	<p>“Ear Connect” - An innovative sign language communication system to promote social inclusion</p> <p>(The Lutheran Church - Hong Kong Synod (LCHKS))</p>	<p>To facilitate the communication between the public and the hearing-impaired persons in daily life and important situations; promote the use of sign languages; and achieve social inclusion. To develop a sign language communication system with videos of commonly-used sentences in daily life and a sign language e-Learning programme</p>	<p>Hearing-impaired persons and the general public</p>	<p>Mobile application, website, semantic analysis and machine learning</p>	<p>3,990,245</p> <p>(1/9/2019 – 31/8/2022)</p>	<p>The project is under development and will be rolled out in September 2020.</p> <p>LCHKS has completed the project planning, programming design and compilation of commonly-used sentences in daily life. The programme development and recording of the sign language videos are in progress.</p> <p>Estimated number of target beneficiaries within the funding period: 3 500</p>

	Approved Projects with Funding Agreement Signed¹ (Applicant Organisation)	Objective	Target Beneficiaries	Application of I&T	Grant Approved² (HK\$) (Project Period³)	Project Progress
20.	Share Law (Hong Kong Arbitration Society (HKAS))	To provide an interactive platform on free legal information for the public and to re-define the means of public access to legal information with the help of technology	The general public	AI, natural language processing and chatbot	3,676,050 (1/12/2019 – 30/11/2022)	The project is under development and will be rolled out in December 2020. HKAS has finished compiling part of the Q&As covering 12 legal areas. The remaining Q&As are being drafted and the development of the legal information chatbot desktop version is in progress. Estimated number of downloads within the funding period: 40 000

	Approved Projects with Funding Agreement Signed¹ (Applicant Organisation)	Objective	Target Beneficiaries	Application of I&T	Grant Approved² (HK\$) (Project Period³)	Project Progress
21.	Interactive Chatbot for Online Quick Fix (The Boys' & Girls' Clubs Association of Hong Kong (BGCA))	To develop an AI chatbot to answer technical questions on the use of the computer and the internet from the general public. The service team will provide telephone enquiry service or on-site technical support service to the low-income families as necessary	The general public and low-income families	Chatbot, big data analysis, AI algorithm and machine learning	4,999,129 (1/11/2019 – 31/10/2022)	The project is under development and will be rolled out in November 2020. BGCA has prepared the question bank for AI training. The related system requirements are being elicited. Estimated number of downloads within the funding period: 9 000 The target is to provide 68 000 counts of enquiry and support service within the funding period.

	Approved Projects with Funding Agreement Signed¹ (Applicant Organisation)	Objective	Target Beneficiaries	Application of I&T	Grant Approved² (HK\$) (Project Period³)	Project Progress
22.	VR and AI-based Mobile App in Enhancing Independence of Daily Living in Older Adults and People with Early Dementia (The Hong Kong Polytechnic University (PolyU))	To develop a VR and AI-based mobile application with virtual training scenes to facilitate the provision of appropriate cognitive and daily living training for older adults and people with early dementia with a view to enhancing the self-care ability of users and alleviating caregivers' psychological stress	Older adults and people with early dementia	VR and AI	1,912,473 (1/1/2020 – 31/12/2022)	The project is under development and will be rolled out in January 2021. PolyU has formed an advisory panel of experts for the project. User requirement elicitation and design of the app are underway. Estimated number of target beneficiaries within the funding period: 3 000

	Approved Projects with Funding Agreement Signed¹ (Applicant Organisation)	Objective	Target Beneficiaries	Application of I&T	Grant Approved² (HK\$) (Project Period³)	Project Progress
23.	VR motor-cognitive training for older people with cognitive frailty (The Hong Kong Polytechnic University (PolyU))	To provide a system of simultaneous motor-cognitive training for the elderly with cognitive frailty so as to improve their physical functioning and mobility as well as reduce their risk of dementia	Elderly with cognitive frailty	VR and motor-cognitive training	2,618,125 (1/1/2020 – 31/12/2022)	The project is under development and will be rolled out in January 2021. PolyU has finished the design of the system prototype. However, owing to the epidemic, the project team is unable to conduct on-site proof in centres for the elderly for the moment. Estimated number of target beneficiaries within the funding period: 650
24.	A Multi-modal Speaking App that introduces primary school pupils to the world of English poetry and intonation (Hong Kong Baptist University (HKBU))	To provide a training platform on English poetry reading for primary school students with a view to raising the English standard of Hong Kong students and promoting poetry reading	Primary school students	Digital signal processing and AI	2,699,280 (1/12/2019 – 30/11/2022)	The project is under development and will be rolled out in December 2020. HKBU has completed the user requirement elicitation, design of the application and cloud system setup. The project team is currently building a poetry database. Estimated number of downloads within the funding period: 4 000

	Approved Projects with Funding Agreement Signed¹ (Applicant Organisation)	Objective	Target Beneficiaries	Application of I&T	Grant Approved² (HK\$) (Project Period³)	Project Progress
25.	Development of Self-Service Postal Kiosk (Logistics and Supply Chain MultiTech R&D Centre)	To enhance postal services by providing convenient and customer-friendly round-the-clock self-service posting facilities so as to facilitate the public in the posting of items, enquiry of postage rates and purchase of postage labels	The general public	Intelligent sensor and computer vision	5,000,000 (1/6/2020 – 31/5/2023)	The project is under development and will be rolled out in June 2021. Estimated number of service transactions: 510 000
26.	Creative Coding for Change (Project C) (Youth Global Network)	To develop a new and refined Tutorial System Module, which is an education software tool for enhancing teachers' efficacy and coaching students in learning the skills of computational thinking and coding for mobile application development	Secondary school teachers and students	Data analytics and machine learning	3,885,636 (1/7/2020 – 30/6/2023)	Deliverables of the project will be rolled out in July 2021. Estimated number of participating secondary schools within the funding period: 20

Note 1: Among the 31 approved projects, five are pending the signing of funding agreements and are therefore not set out in the table.

Note 2: Project expenditure eligible for funding under the FBL includes project development, manpower, publicity costs at a reasonable level, and administration overheads (if applicable). The FBL grant will be disbursed according to the fulfilment of the project milestones. The organisation is required to submit its annual audited report to the Secretariat for scrutiny.

Note 3: Approved projects will be funded for a maximum of three years, including a one-year development period and two-year running period.

Note 4: The funding period of the project is two years, including the maintenance of the “One Click Care” mobile application and website platform, four new components and promotion of the platform.

Categorisation of the Approved FBL Projects
(as at June 2020)**Project Themes:**

Project Theme	No. of Approved Projects^(note)
Health	18
Daily Living	15
Education	13
Safety	4
Transport	2
Others (e.g. legal information and social inclusion)	5

Target Beneficiaries:

Target Beneficiaries	No. of Approved Projects^(note)
People with specific needs	13
The general public	13
Elderly	10
Disabled	9
Youth	3
Others (e.g. students, teachers and rehabilitation workers)	8

Project Deliverables:

Project Deliverables	No. of Approved Projects^(note)
Mobile Application	19
Service	15
Product	11
Software	10
Others (e.g. web pages, AI chatbots, databases, etc.)	9

Note: Each application may cover more than one category.