For information on
9 May 2016

Legislative Council Panel
on Information Technology and Broadcasting

Facilitating a Digital Economy

Purpose

This paper updates Members on the progress of initiatives to facilitate a digital economy.

Hong Kong's Information and Communications Technology (ICT) Environment

2.   Hong Kong's world-class ICT infrastructure and open environment are conducive to the development of a digital economy.   As of 2013, the ICT sector, with some 17 000 business establishments, generated business receipts and income amounting to HK$1,694 billion, representing 6.6% of our GDP.   Hong Kong has consistently performed well in ICT internationally.   We continue to rank first globally in 2015 on technological infrastructure[1].   We are the safest place in Asia for setting up data centres.   Our average peak Internet connection speed of 105.2 Mbps is the second fastest worldwide[2].   Internet penetration in Hong Kong is high, with household broadband and mobile penetration at 83.8% and 228.5% respectively.

3.   The Government works closely with the ICT industry and the academia to facilitate the development of a vibrant digital economy and reinforce Hong Kong's position as a regional ICT hub.   We provide infrastructural and institutional support with a view to facilitating the development of the ICT industry.   In addition, we forge ahead with nurturing talents and fostering start-ups; and encourage collaboration through various means.   Major initiatives are highlighted in the ensuing paragraphs.

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[1] According to World Competitiveness Year Book by International Institute for Management Development.   Hong Kong has been ranked first in technological infrastructure in the same study for five consecutive years since 2011.

[2] According to the "State of the Internet" report for the 4th Quarter, 2015 published by Akamai.

e-Commerce Development

4.　　e-Commerce is developing rapidly in recent years. Hong Kong's robust ICT infrastructure, sound legal framework, and our strength as a regional logistics hub are conducive to e-commerce development. The Government continues to encourage and facilitate businesses to take advantage of the opportunities of doing business online and engaging in e-commerce.

5.　　To facilitate the development of cross-boundary e-commerce, the Special Administrative Region Government and the Guangzhou Municipal Commission of Commerce signed the Co-operation Agreement on Enhancing Cross-Boundary E-commerce in September 2015. In January 2016, the Government Chief Information Officer also led a delegation of representatives from local e-commerce trade associations to visit the Guangzhou Municipal Commission of Commerce to facilitate exchange and collaboration between trade associations of the two places promote the development of cross-boundary e-commerce.

6.　　As regards promotion, the Office of the Government Chief Information Officer (OGCIO) and the Economic and Information Commission of Guangdong Province jointly organised the "Hong Kong/Guangdong Exchange Forum on Smart City and Cross-boundary e-Commerce" in July 2015 in Hong Kong for the industries of both places to share and exchange experience on the development of smart city and cross-boundary e-commerce, and to explore collaboration opportunities. In April 2016, we joined hands with Alibaba to organise the "2016 Hong Kong E-Commerce Ecosystem Summit & 2nd Hong Kong E-Commerce Award Competition" to explore key elements of e-commerce and recognise the outstanding performance of local SMEs of different sectors and backgrounds in doing business online.

Data Centre Development

7.　　Data centres constitute an essential part of ICT infrastructure in a knowledge-based economy. The Government continues to support the development of data centres, especially high-tier ones, in Hong Kong as the technology backbone to business operations. The Hong Kong Science and Technology Parks Corporation has provided over 19 hectares of land in Industrial Estates for data centre development. The Tseung Kwan O

Industrial Estate now houses a cluster of 11 high-tier data centres. We have also earmarked three sites in Tseung Kwan O (outside the Industrial Estate with each site of about one hectare) for high-tier data centre development. The first site was sold through public tender in 2013. We are now working with relevant government departments to make available the remaining two sites for data centre use within the coming few years.

8. We launched a concessionary scheme in 2012 to encourage the conversion of eligible industrial buildings for data centre use and development of high-tier data centres on industrial lots. As of March 2016, we have received a total of 29 applications, among which 27 are applications for conversion of industrial buildings for data centre use (with 14 approved, 12 being processed and one withdrawn by the applicant) and two for development of data centre on industrial lots (with one approved and the other one withdrawn by the applicant). The concessionary scheme was originally set to expire at the end of March 2016. In view of positive market response, the Government has decided to continue implementation of the scheme. In addition, the Lands Department together with the OGCIO will streamline the procedures for issuing waivers for changing the use of industrial buildings into data centre use, thus expediting approval of applications.

Nurturing Talents and Fostering Start-ups

Nurturing IT Talents in Schools

9. To scout and cultivate IT talents early in their secondary school years, the Government launched the "Enriched IT Programme in Secondary Schools" which will last for eight years from the 2015/16 school year. The Enriched IT Programme comprises two elements, i.e. the Enriched IT Classes and Enriched IT Activities. The estimated expenditure for this programme is $75 million.

10. As regards the Enriched IT Classes, we selected eight secondary schools which were outstanding in IT education as partner schools in June 2015 through an open application process. In collaboration with the industry, tertiary institutions and schools, the Government has put in place enriched IT classes (Secondary Two to Secondary Six) in the eight partner schools, in which students who are interested and talented in IT will undertake at least 96 school hours of training every school year under a more structured and advanced IT curriculum. Currently, there are 350 students in the enriched IT classes (298 from Secondary Two and

52 from Secondary Four). We plan to arrange internship for Secondary Six students of enriched IT classes starting from the 2017/18 school year. We will consult the Steering Committee on Enriched IT Programme in Secondary Schools and closely liaise with the industry, so as to encourage more technology companies to offer internship places and other support for the implementation of the programme.

11.   As regards the Enriched IT Activities, we will invite all government-funded secondary schools each year to organise IT activities. In the 2015/16 school year, we received proposals for organising IT activities from 95 secondary schools. After evaluation, we decided to provide funding support to 85 of them to organise IT activities in 2016. The amount of funding is around $4.2 million, with over 24 organisations from the academia and the industry involved in organising these activities. These activities cover a wide range of topics including aerial photography, 3D design, robotics control and mobile application programming, etc. They aim at providing students with different IT learning activities outside their school curriculum, so as to offer more opportunities for them to apply IT knowledge as well as to nurture their creativity through IT or related activities. We estimate that 9 500 students will participate in these activities.

Cyberport's Support for Start-ups

12.   Apart from nurturing ICT talents in schools, the Government also fosters the development of technology start-ups by providing support for aspiring entrepreneurs. In this regard, Cyberport will continue to offer support to start-ups in various areas, such as business incubation, financing, business expansion and office space.   Under the Cyberport Creative Micro Fund, seed funding is provided for the development of innovative ideas into prototypes.   Cyberport also runs an incubation programme providing fledgling start-ups with comprehensive financial, technical and business advisory supports, including rent-free accommodation in Cyberport. To help more mature start-ups secure a firm footing in the market, Cyberport has also launched the Cyberport Accelerator Support Programme to provide financial assistance for its incubatees and alumni to participate in local and overseas accelerator programmes, which offer guidance on overseas expansion and fundraising.

13.   To step up Cyberport's support for start-ups, the Policy Address and the Budget this year also announced that Cyberport would double the quota of its incubation programme, establish new clusters for areas such as financial technology and e-commerce and increase its co-working space by

50%.　Moreover, Cyberport will also allocate $200 million to set up the Cyberport Macro Fund to invest in its ICT start-ups to assist them attract more investment funding.

More Support for Technology Start-ups

14.　　In recent years, the local technology start-up scene is flourishing. There is no lack of successful start-ups that have won renowned local and international awards, or thrive in local and overseas markets.　OGCIO will continue to implement a multi-pronged approach to support the development of technology start-ups in Hong Kong.

15.　　OGCIO launched an interactive and multi-faceted portal, iStart-up@HK, in March 2014.　It provides a comprehensive range of practical information on incubation programmes, co-working space, as well as various loan and funding schemes.　The portal also provides templates of various business and legal documents, including the Incorporation Form from the Companies Registry, and examples of applications for funding and awards.　Moreover, the portal also features a comprehensive event calendar of all major start-up events.　Apart from providing information for start-ups, the portal also serves as an online networking platform for start-ups to promote their companies and products, giving them an additional channel for reaching out to investors and other business partners. As of March 2016, the portal has over 690 registered users, of which around 210 start-ups have uploaded their companies' profiles.　The average number of page visits reached 13 000 per month in the past year.

16.　　We also offer online-to-offline opportunities for technology start-ups to showcase their products at large-scale exhibitions, such as International ICT Expo and Entrepreneur Day organised by the Hong Kong Trade Development Council.　Since the start-up community responded well to these showcasing opportunities, we will continue to explore more online-to-offline events for start-ups.

Collaboration

Collaboration with the Mainland

17.　　We continue to maintain close liaison with the Mainland to promote ICT exchange and collaboration between the two places, and to assist the local industry to open up more business opportunities on the Mainland.

18. Hong Kong has been working closely with Guangdong to drive the development and adoption of cloud computing. Cloud experts of both places jointly formulated standards and practices on cloud computing and published the Hong Kong/Guangdong Practice Guide for Procuring Cloud Services to assist enterprises, especially SMEs, in both Hong Kong and Guangdong to understand the benefits brought about by cloud computing and the points to note on the adoption of cloud computing in business operations. In 2015, the Practice Guide was submitted to the Standardization Administration of the People's Republic of China to seek approval for creation of a project item for reference in formulating related national standards on cloud computing.

19. In January 2016, OGCIO and the Economic and Information Commission of Guangdong Province established the Hong Kong/Guangdong ICT Expert Committee to promote technology development and application of cloud computing, big data, Internet of Things (IoT) and smart city, formulate standards and guidelines in such technical areas applicable to both places, and facilitate the industries of both places to participate in the formulation of ICT standards in international organisations.

20. To assist the local ICT industry to access the burgeoning Mainland market, we took part together with the industry in large-scale exhibitions, conferences and forums in the Mainland. Between 2010 and 2015, OGCIO participated in the International Soft China held in Beijing for six consecutive years. A Hong Kong Pavilion was set up in the event to showcase quality ICT products and services of Hong Kong to facilitate the local industry to explore business opportunities. In May this year, we will participate in the International Soft China with the industry again. In September 2015, the then Advisor to the Chief Executive on Innovation and Technology led a delegation of leaders from the innovation and technology industry to visit Beijing to exchange with Mainland ICT enterprises, explore business opportunities, and promote collaboration between the industries of the two places.

National 13-5 Plan

21. The "Outline of the 13th Five-Year Plan for the National Economic and Social Development of the People's Republic of China" was promulgated officially in March 2016, with a chapter dedicated to Hong Kong and Macao (the Dedicated Chapter). The Dedicated Chapter

supports Hong Kong in participating in the country's two-way opening up and in the Belt and Road Initiative, and encourages Mainland and Hong Kong enterprises to leverage on their respective advantages to cooperate to go global through various means. In this regard, Hong Kong offers a convenient channel for Mainland enterprises to expand their business into markets along the Belt and Road. As an international trade and financial centre and global logistics hub with a robust ICT infrastructure,sound legal system and free flow of information, Hong Kong provides a favourable environment as a bridge for Mainland enterprises to reach out to the international market. We strive to attract Mainland enterprises engaged in Internet economy to set up a base in Hong Kong for their international operations and technology research and development, so as to expand their business into regions along the Belt and Road by capitalising on the role of Hong Kong as a "super connector".

Collaboration with the Industry

22. To match SMEs' requirements of ICT solutions with service offerings of local ICT companies, OGCIO organised a series of events under the brand name of 「中小企和 IT 人有個約會」, which features short one-on-one exchange sessions between small-scale IT companies and SMEs to discuss how ICT solutions can address SMEs' business needs. These sessions provided opportunities for local ICT companies to seek business collaboration with potential clients. Six sessions were organised for the travel sector, catering sector, manufacturing and logistics sectors, jewellery sector, retail sector and general SMEs respectively from 2014 to April 2016, with a total attendance of 317 participants from 100 SMEs and 118 ICT companies. Participants found these exchange sessions useful.

23. Besides, the industry, academia and the Government joined hands to hold the 10th edition of the "Hong Kong ICT Awards" this year which aims at recognising and promoting outstanding ICT inventions and applications, thereby encouraging constant pursuit of innovation and excellence among Hong Kong's ICT industry and enterprises. This year saw a record total of 1 172 entries competing in eight award categories. To foster the development of financial technology (FinTech) such as payment solutions or clearing and settlement systems, a new Best FinTech Award was introduced this year to promote new modes of business operations in the financial sector, thus facilitating the development of Hong Kong as an innovative FinTech centre.

Collaboration with Technology Partners

24.   To showcase Hong Kong's development and achievements as a leading ICT hub in the region, OGCIO collaborated with technology partners (including Cyberport, Science Park and Hong Kong Trade Development Council) and the ICT industry in staging Hong Kong's fourth International IT Fest (IT Fest) in April 2016.   With 43 events including a number of renowned international ICT events as well as events for SMEs, start-ups and students, the IT Fest has demonstrated Hong Kong's rapid development in different ICT domains.   The event registered a total participation of more than 40 000.

25.   One of the signature anchors of this year's IT Fest is the inaugural "Internet Economy Summit" held on 13 April.   The Summit explored future development directions and strategies for Internet economy.   The Summit featured various topics including impact of global innovation and technology trends on business strategy, opportunities arising from big data and IoT, Internet+, insights into Internet-driven economic growth, etc. Through exchange among industry experts and business leaders from the Mainland and across the world, the Summit helped various industries better understand major development trends of the Internet economy as well as the importance of innovative technology on boosting competitiveness. Further development of the Internet economy will also drive the growth of related high-end technology industries, providing employment opportunities for the young generation of talents.   The Summit this year was well received and attracted nearly 1 000 participants.   We plan to organize the Summit as an annual international signature event.

26.   Moreover, we collaborated with five local trade chambers and associations in organising the "Chambers Forum 2016" to explore how technologies create values for industries and commerce, promote re-industrialisation and provide fresh impetus to funding, enhancing production, reaching out to customers, etc.

Way Forward

27.   The Government will continue its efforts in facilitating the development of the local digital economy.   We will focus on promoting the on-going development of a start-up ecosystem; creating a favourable environment to stimulate innovations in technology and application; and encouraging students and the young generation to pursue study in ICT and

arousing their interest in ICT so that they will join the ICT profession in future.

Advice Sought

28.   Members are invited to note the above.

Office of the Government Chief Information Officer
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