





Submission on the 2010-11 Policy Address: Information and Communication Technology^I

 $1 \cdot It$ is disappointing that although the SAR Government (hereafter the Government) endeavors to facilitate local economic development by suggesting some incubated ideas including development of "six economic areas" in recent years, it seems to pay inadequate attention to Information and Communication Technology (hereafter "ICT") industry. Amongst local ICT practitioners is a general view that ICT industry can play not only an important supplementary role of supporting economic and social development, but also keep abreast with the development of the "six industries", if adequate incentive is given. Against this background, the crux is whether the Government is determined to engage itself into creating a favourable environment, coupled with resource input, to boost ICT development.

 $2 \cdot In$ view of the forthcoming landing of submarine cable over the territory, the trade considers that there would be a considerable potential for developing Hong Kong as a major data centre and telecommunication hub in the region. In addition, the 12^{th} Five-Year Plan of the Mainland is also expected to bring about huge business opportunities for the development of ICT industry. It should be beyond any doubt that government's resolve to put as much effort as possible through provision of necessary policy tools and negotiation channel with various levels of Mainland Government is of critical importance.

 $3 \cdot Recently$, Internet security and privacy of an individual are issues that attract public attention. Coupled with tremendous development of computer and communication technology, burgeoning mobile network, social networking, as well as cloud computing incur multitude of cyber security and crime issues including organized cyber crime, as well as numerous hacker attacks from overseas upon information infrastructure, as far as the trade is concerned.

 $4 \cdot$ Last year, the Government launched a public consultation on Personal Data (Privacy) Ordinance. Most citizens were not so aware of the severity of this problem until sagas concerning transfer of personal data for profit making purposes by

Octopus and numerous banking corporations were brought to light. Since then, people in general demand more protection from any possible infringement of individual's right of privacy, but the recent consultation did not cover the area including profit making through sales of personal data amongst business corporations. Furthermore, government proposal is so lenient that these corporations are allowed to inform the victims on a voluntary basis when leakage of personal data emerges. Ironically, the reason of allowing so, as far as government's argument is concerned, is to avoid some heavy burdens on these corporations. Apparently, such a proposition fails to maintain a healthy balance between the interests of these corporations and individual consumers. In addition, "prohibition against transfer of personal data to place outside Hong Kong except in specific circumstances" in section 33 of Personal Data (Privacy) Ordinance (Cap. 486) has not been enforced yet, which would hinder the development potential of provider technology service in the long run.

5. Variety of problems has been derived from a lack of good governance for the Internet, telecommunications and broadcasting, as well as a highly competitive legal environment. In the light of this, the Government put forward a proposal on Strengthening Copyright Protection in Digital Environment in 2009 but rejected by copyright owners, individual and business users, as well as online services providers, resulting in further procrastination of copyright protection. In this connection, privacy of an individual and consumer right are severely overridden by business interests and their convenience of operation accordingly, revealed by the fact that these business operators are more preferred to adopt a mode of "opt out" rather than "opt in" that allowed them to use and deal with personal data they have. In addition, most enterprises do not provide full descriptions on cookies functions when users are requested to install them, which could result in a severe damage to individual right of privacy. Since the operation of "Unsolicited Electronic Messages Ordinance" in 2007, there has been no significant improvement concerning persistent "cold calls" received by most Hong Kong people, not to mention manual calls, which are not covered by this law. Against this background, it is anticipated that consumers are not confident to use more advanced ICT in the future, therefore stifling not only ICT but socioeconomic development.

 $6 \cdot$ The Government is advised to formulate a holistic policy to create an environment favourable to the development of ICT through the following measures:

- Provision of policy environment that is favorable to the development of the trade;
- Stepping up the security of information and protection of personal data;

• Good governing structure should be in place to effectively regulate the Internet, telecommunications and broadcasting.

I. Facilitating development of ICT industry

A. Construction of telecommunications hub

7. The Government should try to understand the difficulty in revamping the existing industrial buildings and using lands designated by the Government to build advanced data centre. Also, in a bid to trigger the development of Hong Kong as a regional data centre and relevant value-added services, the Government should capitalize on the growing demand in domestic market as well as grasp the opportunity arising from the landing of submarine cable in the foreseeable future. In fact, Hong Kong will have the edge to develop into a regional major telecommunications hub, if the Government could offer necessary assistances. These include:

- To streamline the application process for the conversion of industrial buildings for better efficiency, one-stop service should be provided by Development Opportunities Office under the Development Bureau;
- Co-location is one of the main characters of advanced data centre. The land use terms has been relaxed by Hong Kong Science and Technology Parks accordingly. It would be advisable to maintain the existing flexible land grant provision in a bid to facilitate further development of advanced data centres.

B. Giving the go-ahead for release of government-possessed information

8. It is suggested that the Government should open numerous databases under its control to facilitate the ICT industry in developing value-added services. There will not be any alleged accusation of collusion between government and businessmen because chance will be open to all members of the relevant trades. Also, the community as a whole will be benefited. Below shows some measures that the Government may consider:

- Expediting release of government-possessed data of non-sensitive category. This would be of utmost importance to help ICT and other sectors of industry, by virtue of these databases, to explore the potential of numerous value-added services. It should be noted that these data are of huge commercial value but always out of the reach of ordinary people to collect, not to mention data compilation. Selected examples include land and company registry, drug registration and bilingual legal system, so on and so forth.
- Publishing the Application Programming Interface ("API") of government services to non-sensitive data so as to enhance efficiency on programming writing, which would be more cost-effective.

C. Paving the way to promotion of e-learning

9. Since handover, IT education has represented a constituent of education policy as a whole. Given that the project on e-learning resources development introduced last year was still under pilot, the Government should not review progress simply for the sake of formality, but try to tackle major hurdles at the early stage. Here are some specific measures:

- Facilitating the sharing of copyright via promotion of "Creative Commons", so as to encourage teachers and students to create their teaching materials;
- Facilitating the collaboration of schools, teachers and IT companies who are capable of creating their own teaching materials via the existing Quality Education Fund to jointly prepare teaching materials, so as to support application and development of multifaceted teaching and learning mode;
- Actualizing the spilt price-setting mechanism amongst textbooks, learning and teaching materials, in order to reduce burdens on parents.

D. Promotion of diversified e-payment mechanism

10. Hong Kong has been the world's freest economy for over ten years, but development of payment methods is going in the opposite direction. In view of Octopus's domination of business, choices available for e-payment are so limited. It is detrimental not only to fair market competition, but also introduction of new payment method application embracing advanced technology. Here are some specific measures:

- Creating an environment favorable to the development of other payment methods, like the use of mobile transaction, radio frequency identification ("RFID") developed by VISA and MasterCard; or
- Revisiting the report on "Complaints against the Easy Pay System" by the Consumer Council in 2000 and its recommendations. The aim is to introduce a competitive charging mechanism across banks, under which individual banking institutions would have to provide varying payment and charging methods, even under the same debit network.

E. Grasping the opportunity of 12th Five-Year Plan

11. The Government should strive for participating in the formulation of 12th Five-Year Plan, so as to explore chances for the industry to engage in the development

of information and communication technology in Mainland China. But the four long-term strategic recommendations established in the previous Five-Year Plan are yet to be implemented. In the light of this, while considering new suggestions, it is also of utmost importance to expedite the implementation of recommendations as follows:

- The Government should actively involve itself in the development and establishment of product specifications. It should also strive for endorsement from relevant central government department so that it would also be joined by relevant local businesses;
- There should be a further strengthening of cooperation between Hong Kong and Shenzhen, therefore further study on feasibility of Shenzhen/Hong Kong Innovation Circle would be possible;
- The Government should also actively embark on overseas campaign of a more extensive scale to promote favorable conditions attained by Hong Kong to be one of the most important regional data hub; and
- Consider launching a pilot project in Shenzhen to examine the feasibility of establishing e-commerce transactions and digital transmission services for cross-boundary business operators.

F. Re-establishment of Technology Bureau and Applied Research Fund

12. In order to let the burgeoning of ICT industry become the reality, some fundamental institutional changes have to be involved. The Government is advised to consider the following two directions:

- Technology Bureau should be re-established so that a more comprehensive and holistic policy to facilitate the long-term development of science and technology would be possible;
- To reinstate the Applied Research Fund. Its targets should be instead on research concerning service development and application, while handing over items concerning approval of research fund to ICT trade experts;
- Problems concerning the Innovation and Technology Fund should be reviewed and the current university-and-research-institute-dominated situation should also be rectified.

II. Problems concerning information security and privacy protection

13. In view of the changing public sentiment, the Government is strongly advised to strengthen the consultation in particular on collection of personal data by private business operators before submitting its legislative proposal during autumn this year, so as to grasp the surging public appeal concerning privacy of an individual and its protection. Specific measures include:

- Serious attention should be paid to public concerns about collecting personal data by authorized organizations/business operators and their responsibilities accordingly. Public views on penalties concerning disclosure of personal data should also be addressed. In the meantime, relevant legislation should be launched as soon as possible;
- Section 33 of Personal Data (Privacy) Ordinance (Cap. 486), "prohibition against transfer of personal data to place outside Hong Kong except in specific circumstances", should be put into effect as soon as possible;
- The Government should legislate to require public and private institutions to have mandatory notification of breaches concerning personal data and inform the affected victims in order to strengthen the protection of consumers.

14. It is advisable for the Government to conduct a thorough strategic review on issues concerning information security and cyber crime. In 2000, the Inter-departmental Working Group on Computer-related Crime had provided a systematic review on problems arising from development of information and communication technology. The report provided the guiding strategy to the Digital 21 Strategy development of Hong Kong. However, new technologies (such as social networking, cloud computing, mobile network) and new security threats (such as organized hackers' community, cross border cybercrime and sophisticated attacks towards critical information infrastructure) have emerged in the past 10 years. It is appropriate in timing to revisit the topic for the sake of sustaining the development of Hong Kong in the new Internet era.

15. We are of the view that exceedingly stringent regulation would be detrimental to development and application of information and communication technology. A more balanced strategy would be to strengthen the community-wide education concerning IT security and privacy protection, in a bid to ensure members of the public would be more knowledgeable, therefore well-informed of their right to be protected. To this end, in view of the current asymmetry of information between organizations and individuals, improvement is expected to happen.

III. Establishment of a more valid structure of governance on the Internet, telecommunications and broadcasting

16. A holistic approach should be in place to look into how collection and use of personal data can be better managed through the existing Personal Data (Privacy) Ordinance and Unsolicited Electronic Messages Ordinance, so that the so-called "upstream" and "downstream problems" can be tackled. As regards collection of personal data, specific measures include:

- Enterprises are not allowed to collect any personal data of exceeding scope that is not directly relevant to their businesses.
- There should be terms of references to make sure that enterprises concerned are fully responsible for the safety of personal data of their clients, in which measures should be in place to minimize the risk of disclosure, as well as to acquire their client's consent when transferring clients' personal data.

17. Strict regulation is not supposed to be a panacea, which would otherwise have negative influences on application of new technology and development of industry if overdone. In the light of this, self-discipline would be of utmost importance. Also, the Government is expected to play the role as a constructive reminder and regulator where necessary and appropriate. Specific examples include:

- It is necessary for the Government to properly regulate the use of cookie. In order to ensure a more effective protection of individual right of privacy, enterprises should not have data collection and monitoring functions added when designing their cookies. Meanwhile, cookie should be programmed to be cleaned up after being logged out by users. More importantly, there should be terms of references to make sure that users are all well-informed of the functions of the cookie to be installed including how to delete.
- If business operators and enterprises prefer an "opt-out" mode, it would be indispensable of them to explain to their clients the relevant arrangements in details. More importantly, quick and convenient way for their clients to opt out or quit should be provided.

Oct 5, 2010

¹ The submission parties of this paper like to acknowledge the moderators & panelists of the ICT Professional Forum held on 2 September 2010 for giving precious comments and stimulating thoughts and exchange, and participants who actively contributed ideas that help enrich the content of the paper. This paper does not necessarily reflect the views of the panelists and participants of the forum. The moderators and panelists who took part in this forum are as follows:

- Mr. Charles Mok, Vice Chairman, The Professional Commons (moderator)
- Mr. SC Leung, IT Voice (moderator)
- Mr. Dale Johnstone, Vice-Convenor, ISO/IEC JTC 1 SC27 WG1
- Mr. Ian Christofis, Professional Information Security Association
- Mr. Lento Yip, Vice Chairman, HK Internet Service Providers Association
- Mr. Michael Yung, President, ISACA China Hong Kong Chapter