2007 Digital 21 Strategy

We are glad to see and be able to participate in the technological advancements that had been catalyzed and speeded up since the first publication of the Digital 21 Strategy in 1998 by the Government of Hong Kong Special Administrative Region.

Since the emergence of Internet and graphical user interface of web browsers, the Internet has inevitably changed our living styles and paces in the community. The regulations and law enforcement also envisage unprecedented challenges. Especially in a city of highly advocated freedom of information flow like Hong Kong, challenges and excitements brought about by the high speed IT development are nevertheless immerse.

Hong Kong's Internet take-up started from early 90s and public users started to increase at high speed from mid-90s onwards, and number of users picked up exponentially since the introduction of broadband internet connections in 1999/2000. Until present time, Hong Kong becomes the world's most affordable Internet connection, statistics showed that Hong Kong has more than 180 Internet Service Providers; more than 950,000 registered dial-up service user accounts; more than 1,700,000 registered broadband user service accounts; and the household broadband penetration rate has passed the 65% mark (See http://www.ofta.gov.hk/en/datastat/key_stat.html).

The mobile phone development can be described together with the Internet development as the hottest IT double. The introduction of mobile phone services since the 80s has almost speeded our pace of working and living at large, first started from the commercial sectors and then spread to the general public. It is now becoming a necessary commodity that every one, from little kids to old aged senior citizens, can carry a mobile phone and would have a feeling of isolation without the mobile phone. The mobile phone development progressed and penetrated into our lives a few years earlier than that of Internet in Hong Kong, up to now, statistics showed that mobile subscriber penetration rate is over 130%; mobile subscribers is over 9 million; and 2.5G and 3G mobile subscribers is over 2 million (See http://www.ofta.gov.hk/en/datastat/key_stat.html). No wonder someone joked about Hong Kong people would one day micro-waved by such a volume of mobile traffic

and communications.

The success of the double was the result of the brave and visionary decision made by our government through its policies and strategies that had the core of the development of an open market and environments for the ICT advancements. The open up drive the costs down to affordable level that the general public could accept that in turn create the critical mass for ICT investments to be made effective and efficient. Under such open environments, Hong Kong was enabled to embrace the world's latest ICT inventions and state-of-the-art technologies and at the same time generated reasonable profits for ICT investors.

The world is constantly changing and when it comes to ICT, the changes are greater and faster. ICT investment is huge and no guarantee that ROI is proportional. It is a big challenge for our government to devise strategic ICT polices so as to encourage investment on ICT and, at the same time, be able to navigate investors to place their chips in the promising ICT directions and future.

Hong Kong's success in providing a vibrant ICT environment and being a leading digital city should be taken lightly for granted, it has been the government's right decision for making the right strategic policies at exactly the right timing. Success never comes easy, our government should take a directional role in guiding our community to get strong hold of this advantages. Knowing what our strengths and weaknesses are; excelling in areas where Hong Kong is good at and complementing areas where Hong Kong is lack of by filling the gap with the help of easily accessible expertise from the globe.

Technology and innovation are essential in helping Hong Kong to compete by enabling businesses to transform and provide goods and services of increasing value. At the same time technology and innovation is depending on a large pool of talents and an active environment of venture capitalization, which are not currently available due to the population demographic and immature state-of-the-art technology and innovation commercial demand and supply. It is not recommended for our government to fund technology and innovation, but it is even more not recommended for our digital strategic policies to excuse at the helplessness in areas of incubation and attraction of talents from all over the world including our closely connected mainland China, and also the creation of a technology and innovation hub which

comprises talents, R&D capitalizations, and markets for the commercialized technology and innovation.

From a macroscopic commercial perspective, all technology and innovation should be market driven. No matter how advanced or innovative the state-of-the-art technology is, it has to be commercialized and its success is only measured by its acceptance and sales in the market. This is the reason why we do not suggest government funding because an innovative idea that does not accepted by the commercial sectors, it is either the idea does not work out in the commercial world or the idea works but developer is incapable of introducing the idea to the right targets. In both cases, the funding of the development of the innovative technology would not bear economical fruits. The solution could be to let our government to setup a strong team of ICT sales expertise that understands ICT development adequately well and able to bridge the technology and innovation developers and the commercial sectors, or only fund developers that have already received orders from the commercial sectors and lack of initial startup financial supports.

To address to population demographic changes, the digital21 strategy could also provide government with statistics about the market demands on ICT workforces. Digital21 could undergo research and even hire survey companies to gather information about Hong Kong ICT's demand for the different types of talents. Digital21 could provide suggestions to government so as to devise immigration policies that attract overseas talents from other places; and education policies that incubate local talents; for matching the ICT market demands.

Our government has been successful in implanting the general public with the concept and its importance of transforming Hong Kong into a knowledge-based society, the general public is well aware and ready for the transformation. The SME adoption rate of computers, office software, and internet broadband, website setup and email services is high. As the infrastructure or hardware of a vibrant ICT for knowledge-based economy and the ICT-ready people both exist, the Digital21 strategy is now moving in the right track of encourage the society in adopting the software that add real values to the goods and services SME provides. It has been pinpointed in the digital21 strategy consultation paper that such software is relating to constructing industry specific data standards, information management, and intellectual property rights protections as well as the education and promulgation of

positive ICT adoption mindsets for both organizations and general public i.e. adopting ICT products to add values to our goods and services that increase our competitive edges; and at the same paying tributes and respects to ICT products providers by using licensed and copyrighted products so as to allow the ICT industry to develop and grow healthily that will benefit the knowledge-based Hong Kong eventually.

Again we do not recommend our government to subsidize SMEs in adopting ICT solutions. Our government has already done enough to make fundamental ICT infrastructure economically available for SMEs. Their adoption of ICT solutions should be purely driven by the urge of improving competitiveness of their business activities. If ICT solutions do not bring values to their business activities, it would be a wastage subsidizing them, whereas if ICT solutions are real importance to the business operations, SMEs would implement them at all costs anyway.

The role of government as mentioned in the Consultation Paper is imperative. Our government is itself a single largest ICT applications user and therefore a big ICT investor; the expedition of e-government program requires adoption a variety of technology and innovation, and also implementation as well as R&D funding; it is also vital that our government plays the role of regulator, and facilitator of cross-boundary technological cooperation.

It is highly recommended that the government spends on ICT development projects and adopts the state-of-the-art technology and innovation. There must be failures and successes in the process of implementation of new ICT projects; the government should have no fears for failures because we could learn from such failures to see whether they are the results of immature technologies, or improper management of projects, or mismatch of ICT skill sets, or insufficient funding, or inadequate promulgation; or lack of infrastructure support; or even unacceptable by target users. Our government should cultivate an atmosphere of being not afraid of responsibilities and accountabilities, the society should not try to find someone or some departments to blame for failures, on the contrary, the community would gain awesomely from failures. Being tax players as companies, employers and employees, we do not blame governments for unsuccessful ICT projects, but we simply look for the transparency in of ICT projects development before and after their completion. There should be enough information to be revealed to the related public so that we know what our government's aim is for conducting the projects and what objectives and targets the

government is trying to achieve; how much our government is going to spend on such projects and for how long; what sorts of the state-of-the-art technology and innovative are to be adopted in such projects; what the performance of the projects is in terms of usage; if the projects does not meet the pre-defined targets, then what and where the projects go wrong, the unsuccessful information and details are important to the related public and parties because such unsuccessful experiences have immeasurable value for the ICT commercial sectors which might follow the footsteps of the government when the technology and innovation are successfully adopted. In this sense, the commercial world is benefited splendidly as a result of failure in the government. The government should not be blamed for ICT project failures, because first mover and adventurer should be allowed margins for measuring its performance and effectiveness of the projects. Should the government be successful in expediting the state-of-the-art ICT applications, Hong Kong would be no double become the leading digital city and a fierce battlefield for all giant ICT incorporations and organizations; and a vibrant ICT market is followed. Hong Kong is not the best, but Hong Kong could learn how to attract the best to come here.

Another important issue is that the government should refrain itself from being an ICT application user or ICT technology and innovation expeditor, the government should not try to re-sell its successful ICT solutions itself or through its subsidiaries to the commercial sectors or even providing funding to specific industries. This is because such involvements would destroy a vibrant and open ICT market as no one or no organization could compete with the government. If the government is to help, it should help fairly through profit tax relief.

We are glad to know that Digital21 strategy mentions the government would also take the role of being the regulator and facilitator of technological cooperation and trade. Our Mainland China has an enormous ICT market that the world keeps its eyes in focus, experiences of trading and technological development in the areas tell us that the regulations are sometimes very strict and difficult to understand. But anyhow the Chinese ICT companies find their ways to survive and flourish into ICT giants and this is because they learned how to live with the rules and regulations. Should our government become the regulator of technological cooperation and trade, what our government would do to provide the best environment for our ICT industry to grow. As ICT participants, we aware that if the rules and regulations in both Hong Kong and China are formulated too stringent and tight, our ICT peers would be very difficult to

compete with their counterparts in Mainland China, because Chinese companies have their ways to juggle between rules & regulations and getting businesses going; whereas Hong Kong companies are bounded by rules that suppress innovation and new ideas for development. As ICT participants, we earnestly recommend our government to strive for a favorable ICT environment which is with loosely coupled rules and regulations at the beginning and gradually tightened up as ICT market expands and approaches maturities.

Cross-boundary technological cooperation would involve bi-literal or multi-literal talks between different countries and regions. Being a facilitator our government should be suggested to take initiative and be more pro-active, we are thankful that our government bears the responsibility of finding and expanding business opportunities for the Hong Kong commercial ICT sectors. Our government could be more well prepared in such technological cooperation by inducing the commercial sectors to take part and submitting their opinions and stances. Through balancing the interests, and needs of all parties, our government could find niches for Hong Kong ICT commercial sectors to provide their value-added goods and services, make business partners with potential foreign companies for their local presents.

As far as the ICT or digital opportunities and challenges that Hong Kong faces at this moment in time are the convergence of computers and handheld devices and the wireless mobility. The infrastructure is mature for the concept of ICT enabled people on the move to be realized to its promising potential. Coming along is the emergence of the better designed computers that downsized to the similar size of handheld devices. Computers and mobile phone would eventually merge their functions. Wireless and mobility is the coming challenge because there would be greater demand for higher bandwidth wireless transmission, when 3G and WiFi are still on the market recruiting customers, the higher bandwidth and speed outcry has urge the development of WiMax which is a much more speedy wireless communication technology. The government has to face the challenge of balancing the ICT operators which has spent on the infrastructure setup for 3G and WiFi and the inclusion of the state-of-the-art technology. To become the leading digital city in the world, Hong Kong is no way back. There must be someway Hong Kong can achieve this target if our government really wants it.