Introduction

1. **Background**: I welcome OGCIO's periodic review/revision of the Digital 21 Strategy to ensure its relevance to the dynamic HK operating environment as well as to benefit from technological innovation and cost effectiveness of more recent IT infrastructure, IT services and IT products. I have participated in the study/consultation of the Digital 21 Strategy since 1998 as well as in EMB's IT Manpower and Training Requirements Study in 1999. I am pleased with the progress of Digital 21 Strategy Development over these years.

2. **Overview**: While I think this 2007 revision of the Digital 21 Strategy provides some broad guidelines at the appropriate directions, I suggest that some more specific themes and visionary goals for using IT effectively to support and enhance HK's positioning/differentiation strategy as a leading business city in Asia and a global city within China should be enhanced. I propose that the 2007 Digital 21 Strategy should cater for the medium/long term development of IT in HK together with specific IT strategy development programmes in education, innovation and governance which would facilitate the rapid development of our local IT Industry and IT applications in HK.

3. **Terminology** that I use: **IT** includes Multi-media Telecommunications. Hence, IT is used instead of ICT in this submission.

Strategy Alignment

4. The 2007 Digital 21 strategy has enhanced its alignment with HKSAR Government Strategies and China's 11.5 Strategic Development Plans. The alignment initiatives should also include specific IT strategy development programmes in education, innovation and governance which would facilitate the rapid development of our IT Industry and IT applications in HK.

e-Government

5. I am pleased that some of our e-Government systems have received several regional and international IT awards. However, the utilization of e-Government service by average citizens or SMEs in HK seems to be relatively lower than our counterparts in Korea, Australia, Singapore or Japan. Hence, appropriate strategies in the promotion and offer of incentives to encourage the general public to use e-government services, should be considered as a priority. I consider that the citizen-centric mode of service delivery and the new Government portal, GovHK, are progressing in the right direction.

6. The development of e-Government tends to shift from infrastructure to application services and integration of systems within government departments and with other governments or sector-based business partners. Hence, further alignment of e-Government strategy with government's service management strategy and strategies

of sector-based business partners will ensure that they support and enhance each other.

Key Technologies

7.   Web 2.0: While I welcome the introduction of the new version of Internet Protocol (IPv6), I think the impact of the new version of WWW (Web 2.0), which provides a more enriched web-based community platform with various features and functions, should not be underestimated (e.g. web-based communities, RSS, AJAX, podcasting ...).

8.   I suggest that appropriate short-term strategies be incorporated to facilitate the steadfast adoption of Web 2.0 within government departments and across various business sectors so that HK will be among the fast adopters of this new and enriched web technology platform.

Vibrant IT Industry

9.   Business and IT Opportunities in China and India: Vast business and IT opportunities should be available with the rapid economic developments in both Mainland China and India. Hence, apart from servicing Mainland China, HK as the gateway between the East and the West, could also contribute to India by providing quality business and professional services to Indian companies with business connections to other parts of the world, especially Mainland China.

10.   China's accession into the WTO: Many global companies will continue to establish more branch offices and/or regional headquarters in Mainland cities and HK. These scenarios will probably be associated with the strong demand for various types of business and IT services to satisfy global, regional and local requirements of government and specific business sectors.

11.   ITO and BPO: I think the global trends of IT Outsourcing (ITO) and Business Process Outsourcing (BPO) will continue to enable medium and large organizations to achieve higher levels of comparative advantage and in optimizing the potential value added to their enhanced core competencies and efficient support functions/services.

12.   In view of the tremendous potential opportunities on the strategic impact of (9) to (11), I suggest that a further study on their major scenarios and opportunities for the IT industry should be initiated by OGCIO together with participation from key IT industry stakeholders and universities.

13.   Requirements of local knowledge and experience should be specified in tenders of government systems: This suggestion will not only ensure that government systems will better reflect the needs of local systems requirements but it will also encourage the participation of small and medium size local IT vendors to form joint-ventures with local/foreign partners in bidding for government systems/projects.

14.   Complementing our Strengths with the Abundant Supply of IT Scientists and Computer Programmers in the Pearl River Delta (PRD): To maintain the competitiveness of HK's future economic development, I envisage that we should focus on the core strengths of our graduates in terms of their awareness of our prudent regulatory frameworks, governance spirit, sound business ethics, good business knowledge with a global perspective, communication skills and soft computing skills. We should also leverage on the abundant supply of IT scientists and computer programmers in the PRD at a much more affordable salary rate. This approach will enable IT firms in HK to develop more cost effective and competitive IT application systems and services for the China and global markets.

Human Resources in a Knowledge Economy

15.   Importance of the Knowledge Economy: The 2005 Policy Address by the Chief Executive of HKSAR emphasized (section 92) "… to ensure that the overall quality of our population can meet the future demands of a knowledge-based economy…". Hence, enhancing the IT Literacy level of all secondary school students to an appropriate level will become a basic education requirement.

16.   The rapid growth in the application of the Internet is another important catalyst towards globalization and knowledge economy. Hence, we should equip our professionals and service-oriented work force to meet the emerging competencies that may be required in the knowledge-based economy (e.g. Internet, mobile and telecommunications technologies, knowledge management, digitized workflow/processes, and media technologies).

17.   4-Year University Programme from 2012: I suggest that this is an excellent opportunity to consider introducing appropriate IT-related courses for all university students.

18.   In transforming HK towards a Knowledge Economy, I envisage that there is a strong demand for graduates with interdisciplinary knowledge who can play an integral role in supporting high-value added applications across different functional areas or across various business sectors.

19.   An example is the role of Application Systems Specialists or Business Systems Analysts who possess very good knowledge in both information systems and business application. They should be able to plan, design and select appropriate application systems for supporting/enhancing HK's strategic developments in the service sectors such as Finance, Tourism, Logistics/Trade and Business & Professional Services (e.g. IT Audit, IT in Finance, legal informatics, e-logistics and e-marketing, etc.).

20.   As a follow-up to paragraphs (11) and (14), I suggest that universities in HK and UGC should be cautious of the possible scenario that there may be limited employment opportunities of our local graduates by local firms in some job categories, which have already been taken up by firms in the Mainland employing mostly graduates in the Mainland.

Qualifications Frameworks

21.   As reinforcement of the same suggestion in my submission for the 2004 Digital 21 Strategy, the establishment of relevant Qualifications Frameworks in the IT industry by the government will ensure IT professionals will have to remain "qualified" in bidding/working for large IT projects within/outside HK. While I welcome the recent commencement of the certification processes on two IT professional qualifications, namely "IT Project Director" and "IT Systems Architect", I suggest that EMB, OGCIO and IT professional bodies should further promote these two qualifications so that they will be better recognized by local/foreign stakeholders.

Conclusion

24.   I think the future of HK's IT industry and IT-related sectors will be very challenging but bright if we could plan and implement appropriate strategies together with relevant facilitating programmes in education, innovation and governance. Let us work together to build a better HKSAR with IT among its success factors.