8 December 2003

Communications and Technology Branch
Commerce, Industry and Technology Bureau
2/F, Murray Building
Garden Road
Hong Kong

Attn: Secretary for Commerce, Industry and Technology

Dear Sir,

In response to your invitation to comments on the draft 2004 Digital 21 Strategy, we are pleased to submit our paper in Annex-I for your review and consideration.

Congratulation. We are proud of the remarkable achievements that Hong Kong has done with the earlier Digital 21 initiatives and the international recognition that Hong Kong has earned in the past few years. Built on this solid foundation, Hong Kong is ready to enter the next wave of advancements in innovation and adoption of information technology for the benefits of the individuals and the community at large.

In the coming years, information technology enabled social and business development may reach another stage of accelerated growth as high performance computing platforms and ubiquitous Internet Protocol (IP) infrastructure in both wired and wireless spaces are available to the general public. Public policy would facilitate this evolution by nurturing a creative mindset in the community and developing incentives to drive the market towards another level of excellence.

As a major information technology user and a service provider, we are committed to support the future Digital 21 initiatives in driving innovation and adoption of information technology in the community.

Yours sincerely,

(*Electronic Copy* → *Signature on separate hard copy*)

Eric Law
Vice President, Unihub

Comments

To

The draft 2004 Digital 21 Strategy

SECTION ONE – Information technology and the community

1. Nowadays, information technology is a way of life that is so pervasive that it plays an indispensable part in our work and in our leisure regardless of the computer literacy of the individual and the level of computerization of the organization. When the individual uses an automatic teller machine, one is using an advanced financial computer system and network to conduct a transaction. Every retail purchase goes through some form of point of sales and backend processing system.

2. Information technology is a proven change agent, applied properly, would ease our transformation into a service-oriented economy.

3. Information technology is also a mindset that affects how effective and diffuse the uses of information technology are in our society.

4. We have witnessed substantial advancement in information technology in the last 30 years. However, another wave of technological advancements in both basic and applied research and development is possible with 64-bit computing becoming commodity, grid computing (massive parallel processing), sophisticated application development framework, low cost availability of broadband connectivity in both wired and wireless spaces, smart cards and many new frontiers.

5. Given a nurturing and healthy competitive environment, Hong Kong would develop into a center of excellence in innovation and adoption of advanced information technology in the region.

SECTION TWO – General Principle for Public Policy

6. Public policy in information technology directly impacts our work and our daily lives, as the HKSAR Government is one of the most influential Information technology users. The uses of information technology in various government departments define how public services are delivered.

7. It would also influence innovation and adoption of information technology by changing the social and business environment.

8. Generally the market would find the optimal point of the innovation and adoption of information technology. Government should intervene directly only when those innovation and adoption of specific information technology do not warrant private investment and voluntary participation.

9. We advocate that public policy should be facilitative rather than intrusive. It should concentrate on the macro perspective rather than manage the micro aspect. Otherwise it is putting a barrier to innovation and limiting the adoption of information technology to a specific angle. The government should consider the total social benefit approach for her information technology public policy with an aim to achieve optimal benefits for the whole community.

10. With the economy in recovery mode, it is now the time for the government to reinstate its facilitative and "non-interventionist" role in information technology.

11. The government should facilitate a healthy and competitive market environment for the information technology providers to compete for the support of the information technology users. We should let the market dynamics to define the survival and reward system for the fittest.

12. However, the government would continue to nurture the mindset for innovation and adoption of information technology through public education and incentive programs to individuals and organizations.

13. Information technology in this sense should be interpreted widely that covers telecommunication (the information conduit), information systems (the interface, processing and value add of information), data security and privacy (data, transaction and identity integrity) and support infrastructure.

SECTION THREE – WHERE DO WE GO FROM THERE

Government leadership should be interpreted carefully.

14. Instead of leading and directing, the government should consider its various departments as just users of information technology and they are free to choose the best offerings from the market that fits the public service objectives of the specific departments.

15. The tender process should balance the effective use of public funds and at the same time encourage technology innovation instead of limiting them to a specific technology that may be too conservative or too aggressive. Many suppliers of information technology have faced the dilemma of budget constraints and rigid interpretation of tender requirements. Most public tenders have very little room for alternative technologies.

16. The government should promote the mindset of innovation. Like the private sector, some projects may be more conservative while others may accept higher risks of employing innovative technologies.

17. Public information technology projects should be implemented with a public service orientation and a total social benefit approach. They should not be implemented just for the reason of having more information technology or just for price – let the market defines the optimal solutions at the best offers.

18. Government as an advocate and champion should be encouraged but it should use a system of incentive programs to reward innovations rather than dictating the technology direction in a rapidly evolving world of information technology. Of course, IT outsourcing and opening up of government owned intellectual property are examples of such means. To encourage innovation in IT outsourcing projects, alternative implementation using innovative technologies and work process models should be promoted.

19. E-commerce is still in its infancy and many innovative business models have not been practiced successfully. Public policy should create a healthy and competitive environment for innovations rather than dictating the direction or setting the examples with e-government services. E-government and e-commerce have many commonalities in technical infrastructures but they are in two distinct domains for their primary difference in maximizing profit for e-commerce and optimizing social benefits for e-government services. The two things should not be mixed together.

20. To promote innovative uses of e-commerce and multimedia for work and entertainment, the government should facilitate a healthy and competitive environment in the provision of information technology and telecom infrastructures, leveraging the worldwide trend of ubiquitous Internet Protocol (IP) technologies such as IP-VPN and wireless IP. The market would find ways to take benefits of such interconnected infrastructure.

Sustainable e-government programme

21. As we have advocated above, the government should consider their departments as just information technology users of the wider community. They should encourage them to adopt innovative technology much like the private sector but e-government services must satisfy the social benefit objective and apply public funds effectively. The government has established good information technology infrastructures such as the smart ID card and digital certificate technologies.

Infrastructure and business environment

22. Hong Kong enjoys a world-class telecommunication infrastructure for innovative application of information technology for achieving e-government and e-commerce objectives. Following the liberalization of the telecommunication industry since 1995, new entrants no longer face any legal, regulatory, economic or technical barriers. The government should revisit her directive to allow all players including the most established one to compete on a level-playing field. The government should reward innovation in its e-government projects and to promote a mindset that acknowledges innovation, value and quality of service rather than just price.

23. The market would determine resource allocation, innovation and adoption of information technology. Only the fittest organizations and individuals survive and the viable technologies stay. In the last few years, the world has much expectation of 3G. Before its take off, new wireless technologies such as 3.5G and 4G are already being deployed and developed. The market and the whole community together would determine the winning technologies and infrastructures. The government should follow the market rather than driving the market in all areas of information technology including broadcasting and information security. Think of the government as one of the most influential information technology users and take a social benefit approach. In a social benefit approach, the government should consider the individuals (the concept of the "government for the people") and then the aggregates (the businesses, the organizations and shelters that protect and nurture the individuals).

24. The market is multi-dimensional. Different service providers and technology companies serve large organizations and small/medium enterprises differently. The government should consider incentive programs to encourage innovations by the SME using information technology and new business processes and to help them saving costs using common infrastructures by the market.

Institutional review

25. The creation of a Chief Information Officer (CIO) in the government would mimic her counterpart in the private sector that oversees information technology policy. However, it should be reminded that public policy should be focused with the social benefit objective rather than just for the reason of more information technology.

26. The case for a unified regulatory body is a natural evolution with the convergence of telecommunication and broadcast technologies. High bandwidth applications such as high definition TV and medium bandwidth multimedia applications such as MPEG2/4 can now ride on the common IP infrastructure. Bandwidth management is evolving to allow seamless integration of data, voice, fax, email and multimedia applications in the same pipe.

Technological Development

27. The government should support research and development though incentive programs rather than directly driving the direction. Like the private sector, the academic, research and development sectors are highly competitive and only the best researches would survive the tests. Basic research and development that have long-term impact but limited short-term prospects should still be encouraged. Applied researches would yield relatively quicker results in the market. Basic researches are important in evolving our knowledge base. The government should encourage both basic and applied researches.

28. Information technology is a proven change agent. It also promotes social mobility for those who deliver innovative technologies and solutions that survive the test of the market. It is an important instrument for the middle class and educated ones to differentiate in the community and collectively it is also a vehicle for our community to compete and differentiate from the rest of the region. Hong Kong would develop into a center of excellence in many frontiers of information technology. The government should foster a creative environment for the community in educating the younger generation as well as encouraging the existing work force to innovate and differentiate effectively.

A vibrant IT industry

29. While leveraging the strategic advantages of Mainland China in the Closer Economic Partnership Agreement (CEPA) and the Pearl River Delta (PRD), the government should not loose sights in nurturing the Hong Kong native grown talents. It should create incentives to encourage the local people to adopt and to add value to the new opportunities. Short-term economic gains may create long-term structural damage to local human resources and the government should closely monitor any structural changes that may potentially be harmful. The role of the government should be non-interventionist when the market works and should become more vocal when the market breaks down. In most cases, we should trust the market and handle the transformation through better monitoring and facilitation.

Human resources in a knowledge economy

30. The qualification framework would be controversial. When implemented properly, this would raise the professional standing of the information technology practitioners to a level comparable to other professional disciplines. When implemented poorly, this would become a barrier to entry that deters learning and innovation and reinforce passive learning mode rather than creative learning mode. The academic sector and the market already have robust systems to differentiate qualifications. The government should carefully revisit this proposition or elaborate more about her original intent of how this serves the social objectives.

Bridging the digital divide

31. Information technology is a social right that all individuals should have equal access. No one should be deprived of equal access to information technology because of financial condition or other reasons.

32. For those with accessibility limitations such as seeing, hearing or physical movement, the government should encourage alternative and innovative solutions that may be built in addition to the base platform for the average individual. This would reduce the complexity of IT development and at the same time offering customized solutions that really care about the minority.

SECTION FOUR – SUMMARY AND CONCLUSION

33. The government should focus more on the macro perspective rather than the micro aspect, facilitating a healthy and competitive environment for a connected digital economy rather than guiding and directing. The government should treat her departments as just users of the wider community, leveraging the innovations of the market.

34. The government should consider the social benefit perspective in the execution of the information technology policy and to foster an innovative and learning mindset for the individuals and the organizations for the community to compete effectively and to excel in a rapidly evolving digital global economy.

35. Hong Kong has the strategic opportunity to excel in innovation and adoption of information technology, leveraging her local talents and management expertise, and for us to differentiate ourselves in terms of innovation, value and quality of service.