香港資訊科技商會

Hong Kong Information Technology Federation

A GROWTH PLAN FOR HONG KONG'S ECONOMY: INCREASING INFORMATION TECHNOLOGY SPENDING AS A PORTION OF HONG KONG'S GDP

A *HONG KONG INFORMATION TECHNOLOGY FEDERATION* PAPER FOR GOVERNMENT LEADERSHIP AND INDUSTRY PARTICIPATION

1. In the Budget speech presented by the Financial Secretary on March 5, 2003, Secretary Antony Leung began by describing the restructuring of Hong Kong's economy, and that Hong Kong citizens are gradually coming to realize the inevitability of change. He said, "As the Chinese saying goes, 'from need to change, from change to solution'. To renew our strengths and set a new course, this could well be the best of times."[1] We, the information technology (IT) sector of Hong Kong, agree and strongly believe that this is also the best of times for our Government to come to realize the inevitability of change in the HKSAR's actions to foster the IT industry and re-evaluate the impact of IT on Hong Kong's economic development and restructuring.

2. Hong Kong has always been capable of responding creatively to change. From being the hub of low-cost manufacturing about 30 years ago, we have evolved into a service economy, powered in part by the adoption of IT in key industries, like finance, banking and transportation, and aided by ever-increasing leaps in computing power. Advances in communications and technology amplified our natural talents, connecting us to markets all around the world, creating opportunities that we were quick to recognize and maximize. Hong Kong is evolving again, and riding a wave of changes that will allow us to grow as a hub of the nascent knowledge economy. In this, we believe IT plays a crucial role in leading Hong Kong to become a truly-knowledge-based economy and the IT hub of Asia.[2]

3. Indeed, since the establishment of the Information Technology and Broadcasting Bureau in 1998, the Commerce, Industry and Technology Bureau in 2002, and the implementation of the Digital 21 initiative of "Hong Kong: Connecting the World"[3], Hong Kong has indeed made great strides in many areas, including:

- Increased telecommunications sector investment, resulting in a world-class telecommunications

[1] 2003-2004 Budget Speech, Hong Kong SAR Government, March 5, 2003, Point 2: http://www.budget.gov.hk/2003/eng/budget.htm#Introduction

[2] From "IT as an Enabling Force", Mark Phibbs, Microsoft Hong Kong, December 9, 2002: http://www.microsoft.com/hk/mscorp/industry.asp

[3] 2001 Hong Kong Digital 21 Strategy: http://www.info.gov.hk/digital21/e_index.html

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infrastructure with strong price and service competition;

- Development of a legislative framework for e-business and establishment of a local public key infrastructure;
- Development of infrastructure projects including the Cyberport and the Hong Kong Science Park;
- Improvement in public sector efficiency and e-business leadership through implementation of e-government initiatives at many levels;
- Measures to tackle the issue of the "digital divide" and to improve public awareness and knowledge about the use of IT, etc.

4. However, in search of a quantitative benchmarking of Hong Kong's performance in applying IT to benefit its economy, we have discovered that from a macro-economic view among competing countries in the region, Hong Kong's IT spending as a part of its GDP (gross domestic product) has been consistently lagging. In 2002, Hong Kong's IT spending as a percentage of GDP stood at 1.6%, behind Singapore's 4.0%, Australia's 3.3%, South Korea's 2.5%, and even China's 1.7%.[4]

5. The significance of the figures lies in a comparison of how increased IT spending can boost an economy's GDP growth. If we look at the 2002 figures mentioned above, it shows that Hong Kong was the only one out of the five economies that had a negative growth in IT spending (-5.5%), while each one per cent growth in IT spending in the other four economies correlates to 0.64% of GDP growth for South Korea, 0.50% for Australia, 0.44% for China, and 0.34% for Singapore.[5] If we want to be the IT hub of the region, insufficient IT spending will eventually drag Hong Kong behind the other countries in the region.

6. On the other hand, the IT opportunities that lie ahead if we increase our IT spending can be found from an analysis of the change in GDP per head per US$1 million incremental IT spending in the economy. In 2002, both Hong Kong and Singapore saw negative GDP per head growth, but in South Korea and Australia, each US$1 million increment in IT spending could be linked to 0.92% and 2.15% growth in GDP per head respectively, while in the more populated China the same increment in IT spending led to 0.02% growth in its GDP per head. Optimistically, projections have shown that Hong Kong stands to gain 3.29% growth in our GDP per head per US$1 million increment in IT spending by 2004.[6] If the HKSAR Government and the private sector can spend more on IT, the Hong Kong economy will definitely benefit from this incremental growth.

[4] Appendix 1, IT Spending as a Percentage of GDP

[5] Appendix 2, GDP Growth for Each Per Cent Growth in IT Spending

[6] Appendix 3, Change in GDP Per Head for Each US$1M Incremental IT Spending

7. In the recent past, the HKSAR Government has sustained the momentum of IT adoption and e-government programs. According to the 2003-2004 Budget, the Government has earmarked HK$1.967 billion (Capital Works Reserve Fund) for meeting capital expenditure on Government IT projects for the financial year, which is higher than the approved provision of HK$1.6-1.7 billion in 2002-2003, although the IT industry may still be concerned about the final provision as Government departments cut back on their outsourcing. The support shown by the Government in a period of austerity is welcomed by the IT industry.

8. To reiterate, short-term spending cuts by the Government will have a devastating effect on the local IT industry because of the overwhelming proportion of departmental budgets held by salary cost. Roughly 80% of department budgets are taken over by salary cost which cannot be touched, so a seemingly modest 3% cut in IT spending across department will translate to 12% in actuality. Similarly, a 10% in the departmental budget will translate to 40% cut in real IT spending. Therefore, Government must ensure that departments do not delay or reduce their IT spending, despite the initial promising figures reported by the "central" Bureau.

9. Moreover, IT adoption by Hong Kong's business sector has been disappointing, especially among SMEs. The Hong Kong Information Technology Federation (HKITF) has consistently expressed concern about the danger of Hong Kong losing its core ability in IT as a result of low adoption of IT by SMEs. New IT graduates have found it more difficult to enter the IT job market because of the lack of positions provided by SME IT service-providing companies or SMEs. This trend may have a serious negative effect on the development and preservation of IT manpower in Hong Kong.

10. According to a survey conducted by the Census and Statistics Department during April to July 2002, although the percentages of establishments *using personal computers (PCs)* and *having Internet connection* rose from 50% to 55% and 37% to 44% respectively from 2001 to 2002, only 77% of medium and 51% of small establishments were using PCs, and only 66% of medium and 41% of small establishments used the Internet. Most disappointingly, the proportion of medium sized establishments using PCs dropped from 79% to 77% from 2001 to 2002.[7]

11. In the same survey, about 12% of the establishments had a web presence in 2002, a growth of only 1 per cent from 2001. While 61% of large establishments had a web presence, the figures for medium and small establishments were significantly lower, at only 32% and 8% respectively. Only 10% of the establishments having Web pages/Web sites used them to serve as a channel for online ordering of products and services. In other words,

[7] 2002 Survey on IT Usage and Penetration in the Household and Business Sectors, Census and Statistics Bureau, 2002. Medium establishments refer to those under 100 employees in the manufacturing sector, or under 50 in other sectors; small establishments are those employing under 10 persons in any sector.

the development of e-business adoption by SMEs is equally disappointing, despite much effort by the HKSAR Government to promote such activities.

12. Under the first tranche of the SME Development Fund applications, funding support of over $28 million had been approved for 17 trade and industry associations, industry support organizations and professional bodies to implement 27 proposed projects which were conducive to helping SMEs in general or SMEs in specific sectors to enhance IT awareness and adoption.[8] Among these projects, "CMM Support Program for Hong Kong Software SMEs" and "Establishment of a SME-friendly IT Solution Directory" were both undertaken by HKITF, with industry sponsorship provided by Microsoft Hong Kong, and implemented by the Hong Kong Productivity Council (HKPC). We hope that more proposed projects may receive funding to encourage SMEs to exploit IT applications to make them more productive and competitive.

13. However, despite much effort by the Government, involving significant spending over the years, the IT industry is still faced with considerable difficulties – partly because of Hong Kong's internal circumstances as a small market, and external factors of the sluggishness of the global economy. However, problems like the low adoption of IT and e-commerce by local SMEs have not yet been successfully overcome. In other words, the awareness of *knowledge-related assets* at a community-wide level remains low when compared with our neighbors. While the Government cannot dictate private sector adoption, the Government may re-align its own spending and investment on IT and research promotion, that is, instead of concentrating our investment on organizations that are largely "industry support" in nature, or overheads at worst, and redirect the resources to directly benefiting the industry and providing incentives for private sectors to invest in IT.

14. In addition to the support already provided by the HKSAR Government to encourage IT adoption by SMEs, HKITF has proposed for the past few years the establishment of a matching fund for SMEs to purchase and improve their IT applications and systems, similar to support measures provided to SMEs in other economies, like Singapore. Such a funding scheme can be devised through a restructuring of the SME Fund, under which its SME Education Fund and SME Marketing Fund provide similar matching. At present, the SME Business Installations and Equipment Loan Guarantee Scheme provides only loan guarantees but not any direct funding support, and hence is insufficient to help SMEs in today's market conditions. In view of this, the HKSAR Government has to re-consider our proposal.

Hong Kong Information Technology Federation
April 10, 2003

[8] List of projects funded by SME Development Fund: http://www.smefund.tid.gov.hk/eng/list.htm

Appendix 1 IT Spending as a Percentage of GDP

Source:
GDP - The Economist Intelligence Unit (Q4 02 publication)
IT Spending - IDC (Aug 02 publication)

GDP US$bn	**2000**	**2001**	**2002**	**2003**	**2004**
China	1080	1159	1261	1370	1497
Hong Kong	165.4	164	165.7	167.6	180.6
South Korea	461.3	422.7	470.6	516.6	576
Singapore	92.7	85.6	88.4	93.7	99.7
Australia	378.1	358.7	400	464	497

IT spending US$M	**2000**	**2001**	**2002**	**2003**	**2004**
China	15701	18639	22035	27643	35094
Hong Kong	3050	2800	2647	2922	3287
South Korea	12348	10816	11816	13984	16580
Singapore	3415	3291	3533	3967	4543
Australia	13852	12457	13358	14656	16235

IT spending as % of GDP	**2000**	**2001**	**2002**	**2003**	**2004**
China	1.5%	1.6%	1.7%	2.0%	2.3%
Hong Kong	1.8%	1.7%	1.6%	1.7%	1.8%
South Korea	2.7%	2.6%	2.5%	2.7%	2.9%
Singapore	3.7%	3.8%	4.0%	4.2%	4.6%
Australia	3.7%	3.5%	3.3%	3.2%	3.3%

Appendix 2 GDP Growth for Each Per Cent Growth in IT Spending

Source:
GDP - The Economist Intelligence Unit (Q4 02 publication)
IT Spending - IDC (Aug 02 publication)

GDP Growth, %	2000	2001	2002	2003	2004
China	7.9	7.3	8	7.9	7.8
Hong Kong	10.2	0.6	1.3	2.3	4
South Korea	9.2	3.3	5.9	5.4	4.9
Singapore	10.3	-2	2.5	3.5	5.1
Australia	3	2.7	3.6	3.2	3.6

IT spending Growth %	2000	2001	2002	2003	2004
China		18.7	18.2	25.5	27
Hong Kong		-8.2	-5.5	10.4	12.5
South Korea		-12.4	9.2	18.3	18.6
Singapore		-3.6	7.3	12.3	14.5
Australia		-10.1	7.2	9.7	10.8

GDP Growth % per 1% growth in IT spending	2000	2001	2002	2003	2004
China		0.39	0.44	0.31	0.29
Hong Kong		(0.07)	(0.24)	0.22	0.32
South Korea		(0.27)	0.64	0.30	0.26
Singapore		0.56	0.34	0.28	0.35
Australia		(0.27)	0.50	0.33	0.33

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Appendix 3 Change in GDP Per Head for Each US$1M Incremental IT Spending

Source:
GDP - The Economist Intelligence Unit (Q4 02 publication)
IT Spending - IDC (Aug 02 publication)

GDP per head Growth US$	2001	2002	2003	2004
China	50	70	80	90
Hong Kong	(430)	(60)	(30)	1,200
South Korea	(890)	920	880	1,140
Singapore	(2,220)	(10)	590	710
Australia	(1,200)	1,940	3,050	1,440

IT spending Growth (US$M)	2001	2002	2003	2004
China	2938	3396	5608	7451
Hong Kong	-250	-153	275	365
South Korea	-1532	1000	2168	2596
Singapore	-124	242	434	577
Australia	-1395	901	1297	1579

Change in GDP per head per 1M incremental IT spend	2001	2002	2003	2004
China	0.02	0.02	0.01	0.01
Hong Kong	1.72	0.39	(0.11)	3.29
South Korea	0.58	0.92	0.41	0.44
Singapore	17.98	(0.04)	1.36	1.23
Australia	0.86	2.15	2.35	0.91