

Hong Kong's Position as a Knowledge Society

Selected Articles

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COMMERCE, INDUSTRY AND TECHNOLOGY BUREAU
THE GOVERNMENT OF THE HONG KONG
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Introduction

The Hong Kong Knowledge Management Society held its sixth annual Asia Pacific knowledge management conference entitled: "**Intangible Assets – The Wealth of Knowledge-Based Economies**" in November 2004 in Hong Kong. For the first time since we started the series of the Asia Pacific Knowledge Management Conferences in 1999, we chose a topic that went beyond the usual organisational and managerial aspects of managing knowledge and innovation, and asked speakers to look at Hong Kong's position as knowledge-based economy.

The two-day conference, supported by the PSDAS (Professional Services Development Assistance Scheme) of the Government of the HKSAR covered a wealth of leading-edge knowledge management insights and experiences, presented by more than 20 local and international practitioners and experts. Speakers included experts from the Organisation for Economic Co-operation and Development (OECD), the European Union (EU) and other bodies. They discussed the challenges for knowledge-based organisations and regions in Asia Pacific, including R&D capabilities and human capital, intellectual property and intellectual capital, corporate governance and knowledge-based business strategies.

This post-conference publication contains some of the presentations as well as other invited papers written for this reader, which shall serve as an introduction to the topic and stimulate the discussion in the business community of Hong Kong. The papers represent the opinions of the individual authors.

There is no comprehensive research available on Hong Kong's position as knowledge-based economy; some of the reasons why this is the case are addressed in this reader. We hope that this collection of papers contributes to the discussion on Hong Kong's future development and leads to further studies and research.

Waltraut Ritter
The HK Knowledge Management Society
September 2005

THE HK KM SOCIETY

The HK Kong Knowledge Management Society is a professional, independent non-profit association, which started as a network of professionals in 1997 and became a registered society in 2000 (www.hkkms.org)

The main purpose is to create a platform for networking and information exchange among information and KM professionals in Hong Kong. Members are both individuals and organizations from the private and public sector. The HKKMS is also an accredited UN civil society representative in the ongoing World Summit of Information Societies.

Our goal is to create a strong, open and independent forum for those interested in creating wealth through knowledge management in Hong Kong. We consider our Society an open forum and refrain from commercial accreditation, certification, standardization and other programmes to formalize knowledge management in one direction or the other.

Since 1999 the Society is hosting the annual Asia Pacific KM Conference focusing on regional KM practices and strategies.

Chronology of previous conferences:

2-3 Dec 1999	1 st Asia Pacific KM Conference Knowledge Management in Asia: Strategic Directions for Business Transformation
28-29 Nov 2000	2 nd Asia Pacific KM Conference Managing Knowledge in a Networked Economy Developing KM Practices and Communities in Asia-Pacific
21-22 Nov 2001	3 rd Asia Pacific KM Conference Knowledge Shared – Knowledge Doubled
28-29 Nov 2002	4 th Asia Pacific KM Conference Visible Results and Ongoing Challenges for Knowledge Organisations
27-28 Nov 2003	5 th Asia Pacific KM Conference KM in Asia: Competitive Advantage and Challenges in Managing Knowledge
18-19 Nov 2004	6 th Asia Pacific KM Conference Intangible Assets – The Wealth of Knowledge-based Economies
8-9 Dec 2005	7 th Asia Pacific KM Conference (forthcoming) Global Trade, Global Knowledge

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Knowledge Management: Made in Hong Kong

Some Observations about the Adoption of KM in Hong Kong

1. Hong Kong as knowledge-based economy

“The ultimate competitiveness of nations and corporations is determined by the capabilities and skills of people. Then who will survive? Those who depend on knowledge workers. Who are knowledge workers? They are individuals who work with knowledge accumulated through continuous learning and innovative thinking.

Those who will lose ground will be those nations and corporations that depend on manual workers whose only competence is their muscle power.”

Dae Whan Chang, Ph.D., Executive Chairman, World Knowledge Forum 2000, Seoul

Knowledge-based economy, information and knowledge society are terms to describe post-industrial economies, where resources such as know-how and expertise are more critical than other economic resources. Knowledge is regarded as the main driving force of innovation, economic progress, modernization and development. Know-how based resources are also called intangible assets: nonphysical source of value (claims to future benefits) generated by innovation, discovery, organisational design or human resource practices. (Baruch Lev). How can organizations and, at a broader level, cities and regions generate value from intangible assets? This is one of the main questions knowledge management is trying to address.

How does Hong Kong create wealth from its intangible assets?

Hong Kong's advantages are based on intangible assets such as sound financial system, transparent common legal system and impartial judiciary, state-of-the art infrastructure and free flow of information. Taking human capital into account, most would add the business mentality and can-do-mentality of Hong Kongers.

Additionally, in most economic freedom rankings compiled by US-based Cato Institute or Canada-based Fraser Institute, Hong Kong is ranked the freest economy. Index measures include size of government, security of property rights, freedom of trade, regulation of credit, labour and business. (SCMP 27/06/2003). All these are vital, but also very difficult to measure, general intangible assets.

Using more concrete indicators of knowledge-based economies suggested by OECD, Worldbank and other intergovernmental organisations, the picture is different. Some of the indicators are: percentage of employment in IT and computer manufacturing, biotechnology and chemicals, high-tech services, expenditure on R&D, expenditure on higher education, number of innovation clusters and science parks etc. In all these indicators Hong Kong scores low, in fact, the numbers are so different from comparable, advanced knowledge based economies that some question if Hong Kong is an advanced knowledge-based economy according to the OECD framework. The question how Hong Kong compares to other advanced economies taking all indicators into account, cannot be answered without further research.

From an intellectual capital perspective, Hong Kong is an interesting economy, as its main intangible assets are derived from trading and trading networks. This type of know-how can be described as relational knowledge. The nature of relational knowledge, the networks, communication and transaction and distribution channels, as well as the operational efficiency of these processes, are the very core of the success of Hong Kong

companies and Hong Kong as an economy as a whole, however, the value of this know-how is much more difficult to measure than expenditure in R&D, number of patents and degree of tertiary education. The value of these relationships and business networks has so far only been measured by traditional trade-related financial figures. Hong Kong is one of the most trade-dependent economies in the world, largely due to re-export trade with China.

How can knowledge management help trading companies/economies to create a sustainable competitive advantage?

As a result of both intangible and tangible advantages, Hong Kong has a huge margin over mainland China in GDP per capita. The higher salaries and wages can only be justified by higher productivity and keeping and growing this competitive advantage is the knowledge challenge for companies, individuals and the city as a whole. Has the role of Hong Kong as trading and financial centre and service provider for Greater China become stronger since the handover in 1997?

2. Dominant Business Sectors and Business Characteristics

The main business sectors in Hong Kong are trading, property, logistics and financial industry. The largest Hang Seng listed companies are HSBC Holdings, Hutchison, China Mobile, Cheung Kong, Sung Hung Kai Properties, PetroChina, Hang Seng Bank, CLP Holdings, Swire Pacific and HK&China Gas.

What is the particular knowledge and expertise in these business sectors?

Only few of these companies have any formal knowledge management initiative, although it is quite evident that all companies are quite successful leveraging their intangible assets. However, on a global scale, are HK companies competitive?

Some economists argue that the role of conglomerates, low domestic competition and general risk adversity have a negative effect on growth and renewal capacity of local companies.

Hong Kong is famous for its laissez-faire economics and its closeness to big business. Should there be a tougher line on dubious practices such as price-fixing and cartels? Only recently has a formal debate on antitrust laws started, the first such debate since colonial days. It is well-known that Hong Kong is dominated by a few family-controlled conglomerates whose interests spread from real estate to utilities to retailing, and that local business has an influence over the government. The WTO has criticized HK on this point, and for an advanced knowledge-economy this characteristic of Hong Kong seems quite outdated. Driven by the HK consumer council, which has been lobbying for this issue since 1997, the HK government is working on a formal competition law to the economy, which currently only exists for certain business sector, e.g. telecommunications.

Another characteristic of HK companies is a low degree of R&D, which may be explained by general risk aversion of trading companies, but may also be part of the general business culture. Among the listed companies there is hardly any R&D based or technology-intensive company.

Turning the city into a major centre for innovation and technology in the next decade has been on the agenda of the government since 1997. In the past, the HK government made little or no effort to push the development of particular industries, and many doubt that HK has the culture to make use of such investments. The ingredients for high-tech – the scientific minds and entrepreneurial spirit - have to be in place. Can they be elicited by funding? There was a lot of discussion in the business community when the government

launched an applied research fund of HK\$750 million. (Asia Wall Street Journal 7-13 Dec 1998)

“As for Hong Kong and hi-tech, this is an oxymoron. The local government and the industry cartels mistake real estate developments for science support. They build a science park and Cyberport for huge sums. They forget to attract the brains to do the research in these buildings. Famous scientists and entrepreneurs from all around the world are attracted by other famous scientists and entrepreneurs, not by buildings.” Eberhard Schoeneburg, CEO Artificial Life Inc., SCMP 24/04/2003)

Does HK have the human capital and innovation infrastructure necessary to leverage such investments? It has a well-developed service industry, but a shortage of scientific minds. Hong Kong only spends 0.6 % of GDP on R&D (US: 2.69 %), up from 0.44 % in 1998. Compared to leading knowledge-based economies, such as Japan, Finland, US, Europe, it is a very low percentage.

Some economists argue that Hong Kong is better off capitalizing on the city's freedom of information and established legal system and financial services, and that the future lies in providing these services for China. If HK's future lies more in services than in hi-tech, then finding the formula for raising high-value services' competitiveness is indeed a knowledge challenge.

Hong Kong cannot compete with cheap land and labour that make China a preferred location for manufacturing and increasingly higher value-adding activities such as contract R&D and product development, but it can recruit Western-trained managers and scientists and has a legal system that protects their designs and patents. Piracy and intellectual-property theft are top concerns for companies operating in China.

Another characteristic of doing business in Hong Kong is a rather short-term focus; there is a lot of respect for quick deal-making, but little respect to science and long-term business endeavours with little prospect of immediate profits. High tech is considered high risk and potential high loss in the Hong Kong business culture.

Early adopters of knowledge management concepts are therefore not found among local businesses, but largely in foreign companies, or local subsidiaries of foreign companies, e.g. professional services companies (accounting and consulting, law firms, advisory services). Larger local companies and public sector were jumping on the bandwagon later on, in most cases with rather general aspirations such as sharing good practices across the organisation and improving the internal information resource management.

There is no comprehensive market research available on KM strategies and scope of activities, key players, KM perception and activities of local companies. A pilot explorative study on Knowledge Management in Hang Seng listed companies conducted in 1999/2000 by the University of Hong Kong showed a low degree of strategic KM activities and awareness.

3. KM perception in Hong Kong

A review of knowledge management activities of companies, public sector organizations including universities shows that 80-90 % of activities, programmes, curricula, and projects under the label of “knowledge management” are largely dealing with information management issues only. This may be illustrated by a typical description of knowledge management as dealing with “processes and techniques for the creation, collection, indexing, organization, distribution, and evaluation of institutional knowledge for re-use”. This narrow perception of knowledge as a resource may explain the low adoption of

knowledge management in local companies, as the knowledge as a resource view more or less confines KM to the realm of the IT department.

There is little attention paid to knowledge as a social, dynamic capability of people in organizations, and the understanding that human capital and competencies are the only value drivers in knowledge-based organizations tends to be difficult to appreciate in the context of the dominating Confucian culture and its underlying value system relating to information and knowledge behaviour.

The influences of Confucian thought on information and knowledge behaviour, work dynamism and social relationships in organisations are often overlooked, little explored and seldom addressed in KM programmes, although every manager will mention that the most difficult part of leveraging knowledge in an organisation is the “culture”.

Some aspects of this culture, such as respect for authority or harmony may at first sight be in contradiction to knowledge sharing; however, there are ways to achieve high trust and openness as several knowledge-intensive companies in the semi-conductor sector in Taiwan have successfully demonstrated.

Characteristic information policies in traditional Confucian culture are: employees are kept on a need to know basis, access to information is restricted to position and seniority in the company, strong information-is-power attitude, culture of secrecy rather than transparency, not speaking out and voicing ideas, and “father knows best”- mentality.

A manager of a leading local company, Johnson Electric, mentioned that empowering knowledge workers is the biggest challenge for most local companies. Empowering knowledge workers would imply greater autonomy for individual decision-making, increasing individual responsibility, more team working, fostering critical thinking skills and increasing information literacy.

Knowledge-workers are a scarce resource in Hong Kong; it is not only challenging to attracting and retaining them, but also to unleash their professional knowledge and creativity rather than directing or controlling their efforts. According to Watson Wyatt, a HR consultancy, local companies' capability to manage these types of professionals is relatively low. Hierarchically authoritarian management style in traditional Chinese business culture where all key decisions are made by the owner or chief executive are poorly suited for knowledge-based companies (P.S. Hempel, SCMP 08/08/2001)

Knowledge-workers require autonomy and decision-making power relating to their technical expertise; on the other side they are also required to working harmoniously within their team and organisation and show respect to their managers. Some argue that harmony may discourage innovation and creativity: “Innovation is the creation of solutions to conflicting demands. (...) Discomfort is almost a prerequisite for a great idea. (Claude Fussler, Dow Europe)

According to an employee attitudes survey on expectations on leadership (Watson Wyatt's Work Asia 2004/2005, SCMP 30/07/05), the lack of communication skills of senior management in dealing with their employees is evident: Questions relating to employee enablement “How would you rate your company on sharing of information and ideas across the company” receive less than 33 % favourable responses. There is also a perceived low level of trust between senior management and employees (29 %) and a low rate of senior management on encouraging employee involvement (30 %), both factors that have a strong influence on the success of knowledge management activities.

Understanding the culture and developing knowledge management activities that take these cultural aspects into account, is the major bottleneck for local companies to benefit from knowledge management, however, there are some companies that are beginning to make sense of the frequently found statement in annual reports stating “people are our main asset”.

4. Education for Information and Knowledge Management

One of the reasons that there is still a rather low awareness for knowledge management lies in the education system. There is no tradition of classical information and knowledge education in universities, underlined by disciplines such as information science and sociology (e.g. sociology of knowledge), philosophy or social anthropology.

Nearly all major universities offer some form of KM related education in the form of special seminars found in disciplines such as Information Systems and Computer Science, Engineering, Business administration. These courses are part of professional diploma and certificate courses, continuous education programmes or online courses. The first specialized Knowledge Management Course was offered by the HK University of Science and Technology in 2002. Other courses at different levels are offered by the HK University, the City University and the HK Polytechnic University. Government funded industry bodies such the HK Productivity Council and private training institutes are also offering short courses on knowledge management.

In most of these programmes the perception of knowledge is that of a manageable resource, a typical programme describes “KM as knowledge utilization and transfer of knowledge assets. KM allows organization to develop, preserve, add value and share the critical knowledge assets.”

The rather narrow understanding of knowledge is further underlined by a positivistic approach on managing knowledge, and there is little attention to discuss the nature and social construction of knowledge. This is also evident when reading the course content and curricula, where the danger of equating knowledge with information is constantly ignored.

None of the programmes addresses the sociology of knowledge, which studies the social sources and consequences of knowledge in all its forms relating to groups, organizations, and cities. Topics such as knowledge production, institutional power (e.g. political, industrial) different knowledge types, types of knowledge production (scientific, bureaucratic), the social systems of public knowledge and memory (the role of archives, museums), the social construction of knowledge and decision-making, the connection between knowledge production and economic development, the social organisation of innovation, incentives, nurturing genius as well as the social status of intellectuals, just to name a few topics that should be on the curriculum.

In a way one could say that the current reflection of knowledge management in universities reflects another aspect of the HK culture: the strong focus on pragmatism. However, since knowledge production and discovery, as well as the social climate for knowledge creation, innovation, interaction are so deeply embedded in local culture and tradition, which in Hong Kong case is a complex mix of British and Chinese culture and traditions, it is questionable that the full potential of knowledge can be leveraged through existing curricula.

5. The Job market for Information and knowledge management professionals

Given the picture of the educational situation, it is not surprising that there are few jobs for information and knowledge professionals. Even for “classic” jobs for information professional such as library and information management, records management, information providing services, content management, taxonomy etc, there is only a small demand.

For newer professional specializations for people-related jobs for information and knowledge professionals, such as (online) community managers, Community of Practice managers, expertise locator, idea connector, mentoring/coaching for knowledge/learning transfer, these functions are added to existed line or corporate function rather than stand-alone functions.

Another level would be intellectual capital related jobs, such as specialists dealing with valuation of intellectual capital, information and knowledge auditors and analysts, as well as people overseeing and monitoring the development of intangible assets in the organisation as a whole.

Reviewing the recruitments sections of major newspapers in the past 4-5 years as well as interviewing recruitment agencies in Hong Kong shows that dedicated knowledge management positions on the whole are rare in the Hong Kong job market, particularly at the senior, strategic level. In a recent job advertisement with the title “create prosperity through knowledge” a director of innovation was sought, “who would play a key role in enhancing the city’s knowledge economy and devising policies that promote innovation in business and develop high value-added sectors such as life sciences, the creative, production and environmental industry. This director would report to the executive director of business & skills and work closely with all stakeholder and external partners including higher education institutions. This high-level strategic task to enhance the city’s knowledge growth was rather unusual but: it was meant for the City of London. (The Economist, 30/10/2004).

When will Hong Kong feel the need to put someone in charge for its knowledge growth?

References:

Bounfour, Ahmed; Leif Edvinsson (Eds). 2005. Intellectual Capital for Communities, Nations, Regions and Cities. Oxford: Elsevier Butterworth-Heinemann

Enright, Michael J.; Edith E. Scott; Ka-mun Chang. 2005. The Greater Pearl River Delta and the Rise of China. Singapore: Wiley (Asia)

Masuyama, Seiichi; Donna Vandenbrick (Eds). 2003. Towards a Knowledge-based Economy: East Asia’s Changing Industrial Geography. Nomura Research Institute (Tokyo) and Institute of Southeast Asian Studies (Singapore).

Menkhoff, Thomas; Hans-Dieter Evers; Yue Way Chay. 2005. Governing and Managing Knowledge in Asia. Singapore: World Scientific

Stehr, Nico. 1994. Knowledge Societies. London: Sage

SCMP = South China Morning Post

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2. Does Hong Kong have what it takes to become a Knowledge Economy?

My first thoughts come in the form of questions. What is a Knowledge Economy? Why do we need one? What does it take to have a performing Knowledge Economy? Where is Hong Kong today? What is it going to take to always have Hong Kong where it needs to be? What are other countries doing? What can we learn? What are the barriers? What are the opportunities? "Does Hong Kong have what it takes to become a Knowledge Economy?" Before answering these questions, let me first discuss knowledge, value creation, value extraction and value release.

In any venture, a company, an academic institution, a region or a country, the source of value is knowledge and what we do with it. However, not all knowledge is a source of value and a few more steps are needed to release the value created. This is why I talk about Intellectual Capital, which I define as the assembled knowledge of an organisation or society, tacit and explicit, codified and non-codified, which has the potential to create value. In making this simple definition, I am assuming a purpose for using the knowledge and introducing the concept of value. These are two critical steps that are all too often missing, and when they are missing we have a sub-optimal activity.

The Knowledge Economy, therefore, is at first base an economy which distinguishes between those pieces of knowledge which can create value in a given context, and those which cannot. The Knowledge Economy, therefore, manages intellectual capital towards a given purpose in order to create value. "Value" in this context means some form of economic, social, political or environmental benefit conferred upon a large number of people. The term "wealth" is often used to mean the same thing.

So let us ease into the first question: what is a Knowledge Economy? Such an economy is quite simply a place where the needs are known, the infrastructure is put in place to allow the needs to be fulfilled, an entrepreneurial culture is promoted and the ingrained culture of providing the solutions required, in time, in cost and with the appropriate communication and after sales service is created. We are already involved with much more than simply electronic systems, we talk about culture shift here. The internet changed global culture by allowing low cost instantaneous communication across the planet, yet many people have not yet realised the full consequences of this to their everyday lives, their businesses or their country.

To digress a little in order to come back to the same point with a clearer understanding, the Knowledge Economy has been around for quite a while but it received major boosts from two things, the creation of a low cost internet and the gradual globalisation of world trade. Now that the first of these elements is achieved, and the second is on its way, we have a truly global world market, and for this reason it is important for every economy to optimise and to create the conditions conducive to the growth of a Knowledge Economy within their borders. This begins to answer the second question, "Why do we need a Knowledge Economy?" and the answer is simply in order to compete on the world stage.

Thus it is critical for Hong Kong, China and all other countries, to buy into the need to create the conditions which provide fertile ground for the growth of a high performance Knowledge Economy, and to invest in showing those who need to be convinced that it is only themselves, the people within your boundaries, who can do the job and get Hong Kong to where it needs to be today and out into the future. A Government can only help by creating the correct climate, and that brings me back to the point I was making about culture, because here Governments play a critical role.

Creating the Knowledge Economy begins with education. In the schools it begins with a good grasp of the basic educational building blocks like reading, writing and math, with familiarity with the encouragement of development of the self as a basic human right, with familiarity in the use of computers, computer software and electronic mail, and in an understanding of how the world economy functions, yes in school before the age of 18. It continues thereafter in making available continual self education for all those in employment and in unemployment so that the pool of talent in a society is refreshed and at its best, a least for those who are motivated to learn. This training must be tailored to the needs of society, in line with the development plan created as the result of a base line study, and measured for success by performance measures related to application of the learning gained. Vocational training centres and academic institutions have a special role to play in providing core learning and research, and these activities need to be funded as an investment for the future. Society today needs a range of people with a broad spectrum of skills, ability, qualifications, training and personality, and channelling these people into the right jobs or activities in society is a further requirement.

Creating a climate which fosters the growth of the Knowledge Economy then continues in providing the correct infrastructure, an infrastructure to promote entrepreneurial activity, an infrastructure to allow rapid electronic communication, the provision of good transport infrastructure, an infrastructure that encourages new ideas to come from anywhere in the population and be screened and applied for common good with appropriate rewarding of the originator, an infrastructure which respects the common conditions of good business practice, including the role of and respect for intellectual property rights, and an infrastructure which imbeds the best practice at Government level in order to obtain the best result for the people in the country or region. No country or region has reached an optimal level as yet, thus it is important to do our baseline study, make our plans and create the climate that fosters the growth of the level of Knowledge Economy that is appropriate for our region or country. It is in our own hands here as to whether we succeed or fail.

Of course, once the education is in place and the infrastructure is there it is up to us, with guidance of course, to do the job. So “What does it really take to have a performing Knowledge Economy?” Of course the knowledge must flow, not just fundamental knowledge but also communication. Today electronic mail has replaced other means of written communication, and the internet and online systems have replaced many reference sources and libraries. This means that access to a high speed broadband connection is just as important as access to a telephone or to electrical power.

However, all of these capabilities are of no value if they are not used or not used efficiently. It is therefore vital to study what is happening in the world on a regular basis, modify our plan according to what is found, test out that our education and infrastructure is still on course, and communicate to society that which needs to be known. This is a classical role for a Government in society either directly or, more often, through the setting up of independent think tanks or specialist service groups which are at least in part funded by public money. This is especially true if the region or country has a high proportion of small or medium sized enterprises within its economy.

Perhaps the greatest problem today is the fact that many people in positions of power simply “do not know what they do not know”. This is particularly true with respect to the lack of understanding of the value of “intangibles”, otherwise known as knowledge, know how, intellectual assets, or intellectual capital, to any organisation or region or country. The greatest part of the value of any company today is intangible, yet only a few companies, although they invest heavily in efficiency, invest in understanding what is happening and in maximising the creation and extraction of value in a way that includes the intangibles. I was fortunate to work within a breakthrough company, Dow Chemical, for 27 years and to

have the opportunity to be one of those who developed and implemented the now well known Dow Intellectual Asset model¹. In the first 5 years of Dow's intellectual asset based business activity, licensing revenue rose from US \$25 million to US \$125 million annually. In the first 10 years, US \$40 million was saved in patent and trade mark costs. The intellectual assets began to be used for multiple uses, multiple means of value extraction (use in Dow processes and licensed out) and returned more value straight to the business bottom line for incremental investment. Most importantly, the focus was sharpened towards the use of knowledge as a tool for business growth. What large companies started in the 90s, small companies are beginning to work with today, and with at times astounding results.

The greatest part of the value today in any country is intangible, yet very few countries take account of this and invest in helping their population understand the value of people to the economy, and help leverage skills to the advantage of society. Countries too are looking at what the Knowledge Economy can bring and are acting. The European Heads of State decided in 1999 that the knowledge economy is critical to European success and are acting. As an example, the United Kingdom has taken the initiative on Broadband internet access. The UK targets that 99.6% of the UK population will have the option to connect to the internet via broadband by the end of 2005 a target which will be met. The UK considers broadband internet access to be just as critical today as access to a telephone or to electrical power. Most other European countries today lag far behind the UK in the provision of Broadband access. Hong Kong is in an excellent starter position here.

I am fortunate to have been born in one of the advanced countries, Scotland, which has invested public money in identifying, and providing advice on leveraging, those value generating intangibles in the economy. Scotland has created the National IA Centre², which I believe is the first organisation of its kind in the world. The Centre exists: "to assist Scottish businesses to maximise the economic potential of their intellectual assets." The IA Centre, which is particularly directed to providing assistance to SMEs, will raise awareness, will help companies diagnose their current position and will stimulate the growth of a private sector critical mass in IC business consultancies. Singapore is now moving in a similar direction: the Singapore IP Academy, originally created to educate on IP related matters, has recently communicated that it is expanding its brief to encompass intellectual capital.

Let me take a purely personal look at where Hong Kong is today. Here in Hong Kong you have a workforce that is hard working and which possesses a multitude of skills. You are forward looking and you have decided to dedicate resources at a Government level to promoting the infrastructure required for the knowledge economy. The Hong Kong SAR Government has embraced³ playing its part in providing the infrastructure required for leadership⁴ in the Knowledge Economy. The importance of education, lifelong learning, the need for competition, and the provision of assistance to those with a need to acquire new skills are all realised.

Hong Kong will have the highest broadband penetration of any Asian country by 2006, and has a plan to have 75% of the population net savvy by the year 2010.

Hong Kong has, in the Innovation and Technology Commission founded in the year 2000, an initiative to support an infrastructure which assists in developing technology and supports R&D and Technology Transfer. This is supported by your Innovation and Technology Fund and your Applied Research Fund.

¹ Gordon McConnachie, Journal of Knowledge Management, Volume 1, Number 1, pp56 – 62, 1997.

² See www.ia-centre.org.uk

³ Tung Chee Hwa, People's Daily, 1 March 2000.

⁴ Tung Chee Hwa, People's Daily, 14 December 2001.

So what is it going to take to always have Hong Kong where it needs to be, at the forefront of the Knowledge Economy?

First of all, you are not there yet. It has been identified⁵ that many companies and decision makers in Hong Kong have not yet fully embraced the principles of Knowledge Management, nor do they realise the value to be extracted from working their intangible assets. The main change that needs to come is a realisation that, in order to be truly competitive in today's world market, the intangible assets need to be taken on board and managed for value as part of the business or societal process, especially as intangible assets may have multiple parallel uses. This is what I call intellectual capital management and it is still in its infancy in Hong Kong, yet even the best companies or countries are only learning how to walk in this respect. A common thread is that the more we learn about intellectual capital management and the value it can help release, the more humble we become in stating how much we already know.

What are other countries doing and what can we learn? There are good examples in many parts of the world, be they companies (Dow Chemical [USA], Nestle [Finland] or Toyota [Japan]) or countries (Canada, Hong Kong, Japan, Scotland and Singapore). There is much to learn from success stories and from failures, and in this respect with the Knowledge Economy in its infancy, it is very important to have in each company or country a locus or community of practice so that we can learn from each other. The Hong Kong Democratic Forum or the Hong Kong Knowledge Management Society and other local peer organisations can contribute much to and learn much from the Intellectual Asset Centre in Glasgow, Scotland or the iCM Gathering of companies or current initiatives in the European Commission and others on the way to harness the value of intangibles. Here the key skill is networking, so that the ways in which knowledge is being used today or can be used tomorrow to further the way in which our economy functions, may be identified, incoming approaches selected which fit your situations in Hong Kong and modified and applied. The developments ongoing today are so many and varied that a good selection and validation process is required, whether you are looking at ways to create value, to identify value, to extract value or to release value.

So what are the barriers to success and what are the opportunities? Of course I could list many such barriers or opportunities but I would like to highlight one only. The greatest barrier to this movement into a Knowledge Economy are those who do not embrace the concepts and the value to be found: the greatest opportunity comes from those who realise the opportunities out there, and grasp them with both hands, realising the way will be stony and the work ahead will be hard, yet we must always remember that eventually those who ignore change will be left on their individual islands as the new and changed world flows past and around them. That reflection brings me to the final question.

“Does Hong Kong have what it takes to become a Knowledge Economy?” The answer is of course you do, but you are not there yet. None of us are. Hong Kong is full of hard working, well educated and well motivated people. You have the infrastructure in terms of hardware, internet access, software and education either in place or you are working on it. You are in a part of the world which is in the centre of growth of world trade. The past few years have been less prosperous, yet you have the ability to adapt quickly and implement. So I challenge you. Go for it! After all, if Hong Kong hasn't got what it takes to transform into a knowledge economy, who does?

Gordon McConnachie

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3. Measuring Hong Kong as a Knowledge-based Economy

1. Introduction

1.1 Most advanced economies have undergone significant changes in recent years. One of the key characteristics of the changes is the growing importance of knowledge in all sectors of economic activities. Knowledge, as embodied in human capital and in technology, is now seen as a key source of long-term economic growth.

1.2 The degree of incorporation of information and knowledge into economic activities has now become so great that it is inducing profound structural and qualitative changes in the way an economy operates. Driven by the rise in knowledge intensity of economic activities and the increasing globalisation of economic affairs, there has been a paradigm shift from the approach of devoting major attention to the traditional factors of production such as land, labour and capital.

2. Why is it Important to Measure Hong Kong as a Knowledge-based Economy (KBE)?

2.1 The forces driving the emergence of the KBE are constantly reshaping the world economy. Economic growth is much more dependent on the creation, production, distribution and use of knowledge than before. Increasing attention is directed to understanding the dynamics of the KBE and its relationship with traditional economic forces. All in all, new issues are being raised regarding the implications of the KBE and these are the focal points for policy makers to formulate appropriate development policies. As such, statistical indicators showing the evolution of an economy into a KBE could provide guides for devising appropriate strategies.

2.2 Many economies around the globe are now racing on the knowledge track. Appropriate KBE indicators would thus help ascertain whether the aims of KBE policies have been achieved, and to benchmark with other economies with a view to identifying areas for improvement.

3. Statistical Approach for Measuring Hong Kong as a KBE

3.1 To help understand the degree to which an economy is a KBE, an analytical framework is needed, following which relevant statistical indicators can be constructed. The analytical framework should be such as to enable relevant statistical indicators to be grouped, organised and analysed logically.

3.2 Up till now, while an universally accepted standard is not available, quite a number of different frameworks have been developed by individual countries and international organisations for measuring a KBE. Generally, a “descriptive” or “presentation” framework encompassing a suite of statistical indicators grouped into the following four dimensions is adopted.

- (a) *Information and Communication Technology (ICT)* – indicators to show that an efficient ICT infrastructure operates, which allows individuals and businesses to readily and affordably access pertinent information from around the world.
- (b) *Human Resources Development* – indicators to show that education and training are widespread and of a high standard and that they generally continue throughout people’s working life and even beyond (i.e. lifelong learning).
- (c) *Innovation System* – indicators to show that innovation and technological

changes are pervasive and are supported by an effective economy-wide innovation system.

- (d) *Business Environment* – indicators to show that the business environment, including the social, economic and legal policies of government, is supportive of enterprise and innovation.

3.3 The above framework is established on the following premises:

- (a) The growing codification of knowledge and transmission through ICT are enablers of an information society.
- (b) Development of a pool of knowledge-rich human resources is the key for carving out competitive advantage.
- (c) Innovation and technology are crucial driving forces to enhance competitiveness.
- (d) The underlying social and economic characteristics together with the macroeconomic environment provide the pre-requisite for nurturing a successful KBE.

4. ICT Development in Hong Kong

4.1 ICT is the key enabler of change in spearheading towards a KBE. Economies at different stages of development all face challenges brought about by this unstoppable wave. Hong Kong is an open economy that thrives on international trade and commerce. Being an important trading hub in the global economy, Hong Kong needs to connect effectively to this global system and its partners and to use ICT to sharpen its competitive edge.

4.2 The development of ICT is underpinned by technical and commercial infrastructural support. Businesses and consumers in Hong Kong enjoy an excellent telecommunication infrastructure. With the full liberalisation of the telecommunication market in 2003, the telecommunication sector in Hong Kong is highly competitive. Hong Kong is the first metropolitan area to have the telephone network digitised in the early 90's, the first to adopt the CDMA standards in the world, the first in Asia to launch Multi-media Messaging Services (MMS) and one of the first to introduce General Packet Radio Services (GPRS).

4.3 Hong Kong is at the forefront of adopting new ICT and has been regarded as a test-bed for the industry. There is also extensive technology diffusion in the community, with broadband reaching all commercial buildings and virtually all residential buildings. Below is a glimpse of some ICT statistics:

- (a) The use of mobile phone is part of everyday life in Hong Kong. The mobile phone penetration rate reached 118% in end-2004, which is one of the highest in the world.
- (b) External telecommunication capacity registered a 20-fold increase since 2000 to about 900 Gbps in 2003.
- (c) Hong Kong has an IT-savvy population. While the number of personal computer (PC) per 100 inhabitants stood at 61.2 in 2004 (40.2 in 2000), the number of Internet users per 100 inhabitants also increased considerably to 50.6 in 2004 (27.8 in 2000).
- (d) Household PC penetration rate reached 71% in 2004 (50% in 2000), while the Internet penetration rate was 65% in 2004 (36% in 2000). Household penetration rate of broadband Internet service increased from 18% in 2000 to 59% in 2004.

Where do we stand?

Comparison of key ICT statistics in Selected Economies

Economy	Mobile Cellular Subscribers per 100 Inhabitants in 2003	Internet Users per 100 Inhabitants in 2003	PCs per 100 Inhabitants in 2003
Hong Kong, China	107.9	47.2	55.5
China	21.5	6.3	2.8
Japan	67.9	48.3	38.2
Korea	70.1	61.0	55.8
Singapore	85.3	50.9	62.2
Australia	72.0	56.7	56.5
U.K.	84.1(2002)	42.3(2002)	40.6(2002)
U.S.	54.3	55.1(2002)	65.9(2002)

Sources: Asia-Pacific Telecommunication Indicators 2004, ITU; World Telecommunication Indicators Database, ITU

Top 10 Broadband Connected Economies, Dec 2003

Economy	Broadband Subscribers per 100 Inhabitants
Korea	23.3
Hong Kong, China	18.0
Canada	14.7
Iceland	14.0
Taiwan	13.4
Denmark	13.3
Japan	11.7
Switzerland	11.4
Netherlands	11.4
Sweden	10.8

Source: Asia-Pacific Telecommunication Indicators 2004, ITU

5. Human Resources Development in Hong Kong

5.1 Knowledge is usually employed through the skills of individuals. Intellectual capital is widely recognized as a critical asset and development of human resources is the one of the critical strategic thrusts for sustainable development. Undoubtedly, education is the fundamental building block of human resources development. Highlights of the investment on education in Hong Kong are:

- (a) The percentage of Government expenditure on education to GDP in Hong Kong rose from 2.7% to 4.7% from 1993/04 to 2004/05, indicating Government's unrelenting commitment in investing in education.
- (b) Education is the single largest expenditure item of the Government's budget - taking up over one-fifth of the annual total government expenditure. Government expenditure on education as a percentage of total government expenditure increased from 19% in 1993/94 to 23% in 2004/05.
- (c) Post-secondary education opportunities for senior secondary school leavers were increasing steadily in the past few years. The Government's planning target is that by 2010/11, 60% of our senior secondary school leavers will have access to post-secondary education.
- (d) The overall participation rate of the age group 17-20 in tertiary education increased from 30% in 2000 to 53% in 2004.

5.2 Educational attainment is highly related to the level of knowledge and skills in the population. In today's knowledge-driven society, people in general are keen to better equip themselves and there has been an upward shift towards higher education and more skillful jobs. The inter-censal figures indicated that:

- (a) The stock of human resources with tertiary educational attainment as a percentage of the population aged 15 and above increased from 11% in 1991 to 16% in 2001. Besides, the proportion of persons in the age group 25-34 having

tertiary educational attainment almost doubled during the past decade, from 15.5% in 1991 to 29.5% in 2001. Among the persons with tertiary education, proportion of those with postgraduate educational attainment increased remarkably from 4% in 1991 to 13% in 2001.

- (b) The stock of human resources engaged in occupations classified as managers or professionals as a percentage of the population aged 15 and above increased from 8.0% in 1991 to 9.4% in 2001.

5.3 In a nutshell, developing human resources essentially comprises education, skill training and retraining, lifelong learning and the sourcing of global talents. This demands that we need to instill the spirit of continuous learning as an integral part of a learning economy.

Where do we stand?

Comparison of Key Human Resources statistics in Selected Economies

Economy	% of government expenditure on education to GDP	% of government expenditure on education to total government expenditure	% of population aged 25-34 with tertiary education attainment
Hong Kong, China	4.4 (2002)	23.3 (2002)	29.5 (2001)
China	3.1 (2001)	16.2 (2001)	4.7 of population aged 15+ (2000)
Japan	3.6 (1998)	9.3 (2000)	45 (1999)
Korea	3.6 (2001)	17.4 (1999)	35 (1999)
Singapore	4.2 (2002)	23.7 (2002)	33.5 (2000)
Australia	5.3 (2001)	13.8 (1995)	28 (1999)
U.K.	4.7 (2001)	12.6 (2002)	27 (1999)
U.S.	7.9 (2001)	15.5 (1999)	38 (1999)

Sources: IMD World Competitiveness Yearbook 2004, IMD; Human Development Report 2004, UNDP; Science, Technology and Industry Outlook 2002, OECD; Websites of respective economies

6. Innovation in Hong Kong

6.1 Innovation is the engine to enhance competitive advantage and economic growth, while technology is a powerful propeller for innovation. An innovation-driven economy builds upon these processes for sustainable growth of output and productivity.

6.2 Innovation is a complex process involving a system of interactions among different parties. Hence, a multi-dimensional view is adopted in analysing innovation indicators. Apart from facilitating policy development and programme evaluation, statistical indicators on innovation and technology are important for reflecting the level of innovation and technological sophistication in the economy and for international benchmarking. Highlights of some statistics reflecting the innovation activities in Hong Kong are:

- (a) Although the investment in R&D is not very impressive as compared with other economies, R&D activities in Hong Kong have been gaining momentum, with total R&D expenditure as a ratio to GDP increased from 0.44% in 1998 to 0.60% in 2002.
- (b) A substantial portion of our R&D activities (accounting for 64% of total R&D expenditure in 2002) are conducted in our universities and are basically funded

by the Government. In other economies such as USA and Japan, R&D activities are concentrated in the business sector (about 70% of total R&D expenditure)

- (c) Besides R&D, a business firm may undertake many other innovation activities which have no direct relation to R&D and yet play a major role in the performance of the firm. The proportion of business firms that had undertaken one or more types of innovation activities rose from 16% in 2001 to 46% in 2003.

6.3 While the R&D base is not as sizeable as other economies, Hong Kong has amassed a group of high quality researchers who are capable of pursuing innovations in areas such as integrated design, photonics, wireless applications, digital media entertainment and Chinese medicine. To further promote the development of innovation and technology, Hong Kong would continue to capitalise on its existing strength, bridge the gap between research capabilities and industry needs, and leverage on the production base in the Pearl River Delta region.

Where do we stand?
Comparison of Key R&D statistics in Selected Economies, 2002

Economy	R&D expenditure as a % to GDP	% of R&D expenditure by performing sector		
		Business Sector	Higher Education Sector	Government Sector
Hong Kong, China	0.6	33.2	63.6	3.1
China	1.2	61.2	10.1	28.7
Japan	3.3	69.3	19.6	11.2
Korea	2.9	74.9	10.4	14.7
Singapore	2.2	61.4	25.9	12.6
Australia	1.6	48.8	28.0	23.2
U.K.	1.8	67.0	22.6	10.4
U.S.	2.6	72.3	14.9	12.8

Sources: IMD World Competitiveness Yearbook 2004, IMD; Websites of respective economies

7. Business Environment in Hong Kong

7.1 A sound macroeconomic framework together with a level playing field is the cornerstone to encouraging business investment and consumer spending. This requires prudent fiscal management, stable inflation, robust legal and tax regimes, among many others.

7.2 Hong Kong is one of the most open, externally-orientated economies in the world, with free trade being its life-blood. Apart from being strategically located in the heart of East Asia on China's southern coast, we have many favourable factors that make Hong Kong an ideal metropolis for conducting business: the low tax regime; transparent common law system; impartial judiciary; robust financial system; state-of-the-art infrastructure; free flow of information; a clean government and entrepreneurial spirit. Some statistics depicting the economic performance of Hong Kong during the past decade are:

- (a) On visible trade, total exports of goods (comprising re-exports and domestic exports) was \$1,749 billion in 2003. This represented an average annual growth rate of 5.3% between 1993 and 2003. Imports of goods were likewise

robust, reaching \$1,794 billion in 2003.

- (b) On invisible trade, the value of exports of services grew at an average annual rate of 5.8% from \$200 billion in 1993 to \$352 billion in 2003. The value of imports of services also increased at an average annual rate of 3.5% from \$139 billion in 1993 to \$196 billion in 2003.
- (c) The structure of the economy continued to shift away from manufacturing to services over the past decade. This led to a further advance in the contribution of the service sectors as a whole to GDP from 81% in 1993 to 88% in 2003.
- (d) Per capita GDP reached HK\$ 200,100 by 2003. In constant price terms, it was an increase of 19% in a decade.
- (e) The labour market in Hong Kong has experienced several negative shocks in the past decade. The unemployment rate soared from a low level of about 2% in early 1990s to 6.8% in 2004. There are signs of recovery in the economy. However, the continual structural change of the economy would still pose challenge to the labour market.

Where do we stand?

Comparison of Key Economic statistics in Selected Economies

Economy	Ratio of total merchandise trade to GDP in 2002	Ratio of total trade of goods and services to GDP in 2002	Per Capita GDP (US\$) in 2003	Unemployment Rate in 2003 (%)	Ranking in World Merchandise Trade in 2003		
					Exports of Goods	Imports of Goods	Total Merchandise Trade
Hong Kong, China	2.51	2.93	23,322	7.9	11th	11th	11th
China	0.48	-	1,091	4.3	4th	3rd	4th
Japan	0.19	0.21	33,708	5.3	3rd	6th	3rd
Korea	0.57	0.69	12,638	3.4	12th	13th	12th
Singapore	2.73	3.41	21,825	4.7	16th	15th	16th
Australia	0.16	0.17	24,880	5.9	26th	19th	22nd
U.K.	0.40	0.55	29,989	5.0	6th	4th	6th
U.S.	0.18	0.23	37,483	6.0	2nd	1st	1st

Sources: International Trade Statistics 2004, WTO; World Competitiveness Yearbook 2004, IMD

8. Concluding Remarks

8.1 Knowledge, unlike conventional capital goods, has no fixed capacity and hence presents great challenges in terms of measurement. At the heart of a KBE, knowledge itself is particularly difficult to quantify and to price. There is no direct way to measure the performance of a KBE. Instead, a descriptive framework using a suite of indicators may be used to measure Hong Kong as a KBE.

8.2 Generally, Hong Kong positions well on many of the general characteristics of a KBE. We have excellent ICT infrastructure and our favourable business environment provides businesses with confidence. Our people are increasingly equipped in terms of knowledge and skills. Nevertheless, there is still much room for improvement. We need to strengthen our innovation capacity to fully exploit advanced technologies. To sustain the momentum of economic growth and continued vitality, we need to embrace a culture of continuous learning and improvement both at the individual and the organisational levels.

4. Knowledge Economies in Asia

As we know, Asia is currently a region of great diversity. Two of the most developed knowledge economies, Japan and Korea, operate alongside other countries that have only just begun to develop the infrastructure allowing for the development and penetration of technology, telecommunications and policies and laws to create, distribute and exploit knowledge. While both government and corporations play an equally important role in driving change, it is ultimately only through government reforms that economies can thrive. It is important to Factiva that citizens have the ability to access global news and information through the internet. As well, this news and information be generated in an environment where there is respect for the media, freedom of the press and an understanding that the exchange of information and ideas fuels innovation and growth. Asia is at a very crucial point in its progress towards understanding the importance of what is required to be a knowledge based region.

In his paper, *An overview of the Knowledge Economy*, Thomas Riley writes that 'for the last two hundred years, neo-classical economics has recognized only two factors of production: labor and capital. This is now changing. Information and knowledge are replacing capital and energy as the primary wealth-creating assets, just as the latter two replaced land and labor 200 years ago. In addition, technological developments in the 20th century have transformed the majority of wealth-creating work from physically-based to "knowledge-based." Technology and knowledge are now the key factors of production.'

'With increased mobility of information and the global work force, knowledge and expertise can be transported instantaneously around the world, and any advantage gained by one company can be eliminated by competitive improvements overnight.' The internet has been the solid force behind this sharing of research and findings. The exchange of research and ideas has accelerated innovation, inventions, and the creation of new goods and products at a rate never known before, thus, resulting in an increased momentum in the global economy. 'This globalization has had a profound impact on both the economies of nations and the pressures on countries to compete effectively in this new global environment. Globalization of the economy has also raised new issues of nationalism and protection of local culture. In this new environment two of the most important commodities of a nation have become information and knowledge.' (Riley)

Although, the Organization for Economic Co-operation and Development (OECD) has researched into its thirty member countries, at this point in time, there are few measures of how Asian countries compare to one another. A global report developed by Dr Robert Huggins entitled, "World Knowledge Competitiveness Index 2003/04 - Benchmarking the Globe's High Performing Regions," evaluates knowledge-based development occurring across the world's leading regions. Dr Huggins is the CEO of Robert Huggins Associates, the economic consultancy and 'think-tank'. His report is the first composite and relative measure of the knowledge capacity, capability, and sustainability of each region, and of the extent to which this knowledge is translated into economic value, and transferred into the wealth of the citizens of each region. Focusing largely on regions, as opposed to nations, he says: 'Regions are the primary spatial unit that not only compete for knowledge, but are the places within which knowledge is circulated and transferred.' (Huggins)

Many new Asian regions were included in this report, reflecting their rapid growth achieved in recent years. In the 2002 report Japan, Singapore and Hong Kong were the only Asian countries listed out of 90 countries. The new report has been increased to 125 countries, now including Seoul and Ulsan in Korea; Taiwan, Beijing, Pearl River Delta, Shanghai and Tianjin in China; and Mumbai, Bangalore and Hyderabad in India. Excluding Japan, the Pearl River Delta in 85th position, is the highest scoring Asian region. This highlights the rapid leaps the region is taking in becoming a major force on the global economic stage. Even more impressively, it was ranked 22nd in the knowledge intensity ratio, which assesses the importance of knowledge based activities as a proportion of overall economic activity.

The report is divided into four components: Human Capital, Knowledge Capital, Knowledge Sustainability and Regional Economy Outputs. Although the Asian regions gain the lowest scores for all four of the knowledge Sustainability components (per capita expenditure on primary and secondary education, per capita public spending on higher education, secure servers per one million inhabitants, and internet hosts per 1000 inhabitants), their human capital and knowledge capital inputs are only marginally lower than Europe. Huggins believes the main weakness of Asian regions lies in their economy outputs and knowledge sustainability, particularly educational and ICT infrastructure investment. This in turn could affect the future competitiveness of the region in terms of its knowledge creation and commercial exploitation capacities (Huggins).

The World Bank and Asian Development Bank have both conducted research and projects to assist with the growth of ICTs and knowledge based activities in developing countries. These contribute to achieving the United Nations Development Goals of eradicating extreme poverty and hunger, achieving universal primary education, and promoting gender equality and empowerment of women. All the reports and findings indicate that education, ICT infrastructure, and legal and market reforms are vital to advancing developing economies. Business, government, and the labor force must work together to exploit these key assets.

The ability to create, distribute, and exploit knowledge and information is crucial to how rapidly a country will develop its knowledge economy and is often regarded as the single most important factor inspiring economic growth and improvements in the quality of life. This creation of knowledge begins with education. It is therefore vital that developing countries in Asia aim towards the UN Development Goal: 'by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling.' The primary completion rate, measuring both the coverage of the education system and the educational attainment of students, is increasingly used as a core indicator of an education system's performance. It is a more accurate indicator of human capital formation and the quality and efficiency of the school system than enrolment ratios. Three regions – East Asia and the Pacific, Europe and Central Asia, and Latin America and the Caribbean – are on track to achieve the goal, while three others, with 150 million primary-school-age children – the Middle East and North Africa, South Asia, and Sub-Saharan Africa – are in danger of falling short. The latter continuously have low enrolment and completion rates (Columbia).

Creation of a Knowledge based economy also largely relies on research and development, and innovation and collaboration amongst businesses and groups to capitalize on findings. Innovation capability is increasingly the arbiter of competitive strength. How East Asian economies, especially those in the middle- and upper-income groups, might fully realize their potential to innovate will require policy, organizational, and institutional initiatives at many levels.

The economies of East Asia can be divided into two groups. The lower- and lower-middle-income category is comprised of countries such as Cambodia, Indonesia, the Lao People's Democratic Republic, and Vietnam, whose comparative advantage is in the resource-based and low-tech manufacturing industries. The middle- and higher-income economies range from the Philippines and Thailand at one end of the spectrum to Hong Kong (China), Japan, and Singapore at the other. While some of these middle- and higher-income economies still have substantially low-tech industries in the tradable sectors, they are under increasing pressure to move into middle- and high-tech activities. China straddles these two groups and is emerging as a formidable competitor for economies in both categories as it acquires high-tech capabilities. At the same time it is consolidating its position in low- tech products, forcing the low-income countries to match or exceed China's industrial productivity in order to remain competitive in world markets.

A World Bank paper, entitled *Can East Asia compete? Innovation for global markets*, written in September 2002, 'states that innovation in three intersecting areas will raise the likelihood that East Asia's middle- and higher-income economies will resume sustainable growth.'

An environment that stimulates innovation derives from spending on research and development (R&D) by public and private entities in a competitive space that, in turn, maximizes the incentives to innovate and commercialize findings by existing firms as well as by new entrants. Collaboration or networking among firms can promote innovation and efficient resource use and is more likely to occur and more fruitful when many producers form urban clusters. In other words, product and process innovation is a function not just of investment in R&D, but also of the clustering of networked firms in an open and competitive policy environment.

The financial sector and business services also endorse an area of innovation.

A significant share of future growth will derive from the expansion of services, both traditional and newly created services; gains in the efficiency levels of the services sector, currently lagging far behind those of the industrial countries; and closer interaction between services and manufacturing. Some of the commercially most successful innovation occurs when consulting, information management, and marketing services, for example, are combined with manufacturing in the biotechnology sector, automotive, engineering, and apparel industries as well as many others.

The third area is information and communication technologies, which are essential for innovation and underlying the distribution of knowledge within countries. The leading concern for all governments should be enabling wide access to both information and the internet and communication technologies (ICTs). This requires connectivity programs funded by the government to widen computer literacy and enable increased access in schools, the workplace, and the community. For example, Factiva is working with the National Library Board in Singapore to make information available to all Singaporean citizens. In some Asian countries, raising the overall literacy of the population is a primary goal. However, as countries adopt ICTs they should move one step further and ensure that the current and next generations become computer literate or are in a position to benefit from the changes technology is bringing. Information and communication technologies (ICTs) are a leading pillar of the knowledge-based economy. Thus, how countries adopt and master ICTs is key to their future economic performance (Yusuf).

The Digital Access Index (DAI) is the first global index to rank Information and Communication Technology (ICT) combining eight variables that cover five areas, to provide an overall country score. The areas measured include availability of infrastructure,

affordability of access, educational level, quality of ICT services, and Internet usage. Seven countries in Asia are in the top 25 global countries, with Korea being ranked fourth.

Nagy K. Hanna, in her World Bank report on ICTs titled *Why national strategies are needed to enable ICT development*, published in September 2003, states that ICT has an impact on competitiveness and all aspects of life in advanced economies as well as a potential impact on social and economic development. He says 'the strategic significance of ICT for enabling national development and poverty reduction strategies must be operationalized by countries striving to gain a competitive edge...economic history, the cumulative learning and transformation process involved in using ICT, and the pace of this wave of technological change suggest that, with timely action, many developing countries could participate in a technological revolution no less profound than the last industrial revolution' (Hanna). A preliminary comparative analysis of the ICT environment in some selected Asian Development Bank member countries shows great disparity in ICT preparedness. Some countries have the necessary policies and legislative framework already in place, but very slow implementation progress; others have formulated their policies but are still awaiting adoption; while some have IT or ICT plans that are not even implemented.

The Asian Development Bank lists examples of how some developing countries have been creating new ways to dramatically help the poor. For example, in India, one third of its software workers were tapped in programs aimed to eliminate poverty. Over the last few years, the government of Andhra Pradesh, one of the less developed states of India, has pursued an aggressive strategy to promote the pervasive use of ICT, especially in modernizing governance systems through E-government. Farmers in Bangladesh are using cellular phones to bypass intermediaries and get better prices for their products. In Shanghai, Project Hope created a paediatric hospital to bring high-technology solutions to thousands of health professionals.

The cost, convenience, and accessibility of telecommunications services will in large part determine the extent to which ICT contributes to innovation. Growth through innovation thus depends on the investment in R&D and the environment in which findings are put to effective use; a strong and efficient business services sector; the promotion of ICT as an end in itself and as a means of bolstering both manufacturing and other business services; and the coordination of these with steps to increase the regional integration of East Asia and its ties to world markets (Asian Development Bank).

Lastly, in creating knowledge based economies, the exploitation of knowledge and information is essential in allowing people to use the available information for further knowledge creation. Countries in the region need to be able to tap into global knowledge and governments need to adopt policies, such as trade, the encouragement of foreign direct investments, technology licensing, intellectual property right protection, that facilitate the introduction of knowledge into countries. Moreover, privacy and data protection laws are crucial in order to protect the rights of individuals from abuse of their personal information and give them control as to when and how it can be used. Information policies that give citizens equal and universal information rights are also required so that all citizens can benefit in the new economy. This is a major challenge for those groups in society who are seeking wide and effective access to government information, as most countries in the developed world have poor or inadequate information policies (Riley).

There are two global waves of change that are inducing government departments to change the way they manage their data and information. The first is global events that demand a response through greater co-operation from counter-terrorism imperatives national health crises such as SARS. The second wave is the trend in policy-making

towards open government and greater transparency. More and more countries around Asia are in the process of passing freedom of information (FoI) laws. The pace of change is increasing as the number of countries with FoI legislation has more than doubled in the past decade throughout the world. In the Philippines for example there is no FoI act per se, but a combination of the constitutional right and various other legal provisions make it one of the most open countries in the region. In Thailand the Official Information Act was approved in 1997. In the first three years of this act, there were numerous requests for information. One highly publicized request, and an example of the importance of such laws, was of a mother whose daughter failed the entry exam to an elite school. She demanded to see the exam results, but the school refused. She appealed to the Office of the Information Commission and the courts and was granted access to the results. She found out that in fact children of influential people were granted access to the school with low marks. As a result, the Council of State issued an order that all schools must accept children on merit only.

Finally, it is equally crucial that businesses be able to thrive in a competitive environment, and can compete, not only within their own country, but in the wider global economy. Diversity is a key characteristic of the knowledge economy. It is important that there be intellectual property laws, to protect businesses and innovators. However, the laws themselves must be flexible to ensure that monopolies do not develop. Overall, it is extremely important that there be innovation, creativity and diversity in the emerging knowledge economy.

Obviously, like most issues, challenges arise. Currently there are challenges surfacing around a government's ability to respond to the required changes to develop and enhance their knowledge based economies. The digital divide, economies of scale, trans-global organizations dominating the world markets, powerful economic engines of a few rich countries are only a few that give rise to concern about the gap between the rich and the poor and educated and uneducated. There is an argument to be made that the gap will widen over time if developed countries and international organizations neglect to move faster to narrow the gaps and bring in policies that will benefit all the people. It is imperative that countries in Asia move quickly to ensure that the gap does not widen any further. For example, in terms of internet penetration, while Asia accounts for more than a third of the world's population, with 3.6 billion people, only 7.1% of these have access to the internet. There are only seven countries in Asia with more than 50% penetration as of October this year. And while China has the second highest number of internet users in the world – 87 million – this only accounts for 6.8% penetration (Riley).

In a World Bank report from September 2002, *Can East Asia compete: innovation for global markets*, the authors say that East Asian economies are at different stages of development. However, in order to preserve-and to increase-their competitiveness through innovation and the opportunities presented by information and communication technologies (ICT), they need to move quickly to frame and implement policies in five areas. Reform and restructuring of the banking system are matters of high priority. Secondly, corporate governance in East Asia has lagged where management skills have fallen behind and the pressure on managements to pursue strategies aimed at maximizing shareholder value are often weak. Policies to build institutions, both legal and financial, to secure shareholders ' rights and sharpen the market for corporate control are needed. Thirdly, in an increasingly knowledge-based economy, the supply of workers with the requisite skills and creativity will determine how much innovation takes place. This requires reinforcing secondary and tertiary education, which influence analytical skills and the aptitude to innovate. Although computer use in East Asia is spreading and telecommunications are improving daily, e-business and e-commerce are greatly hampered by the inadequacy of supporting services such as secure credit card

transactions, fulfilment, logistics, and legal services. And finally, trade liberalization, preferably multilateral trade reform, needs to be actively pursued (Yusuf).

For any country to succeed, it must, by necessity, rely on its own internal understanding and the wisdom of its own culture. But, the lesson is the same, for any country to transform itself into a viable, knowledge-based economy, internal, institutional change will be vital.

Sources:

Asian Development Bank. "Toward E-Development in Asia and the Pacific: A Strategic Approach for Information and Communication Technology." [Online] November 2003. <<http://www.adb.org/Documents/Policies/ICT/default.asp>>

Columbia University. "General Assembly Topic A." [Online] 10 June 2005. <<http://64.233.187.104/search?q=cache:WR46AkdooswJ:www.columbia.edu.mx/documentos/ICUNS2005/Backgrounds/GeneralAssemblyTopicA.doc>>

Hanna, Nagy. "Why national strategies are needed for ICT-enabled development." [Online] 1 September 2003. <http://www-wds.worldbank.org/servlet/WDS_IBank_Servlet?pcont=details&eid=000160016_20031215120304>

Riley, Thomas B. "Tools for the Knowledge Economy: An Overview." [Online] 10 June 2005. <http://www.electronicgov.net/pubs/research_papers/tke/tools_for_the_knowledge_economy-june01.pdf>

Robert Huggins Associates. "World Knowledge Competitive Index 2003." [Online] 10 June 2005. <http://www.hugginsassociates.com/product_info.php/products_id/43>

Yusuf, Shahid and Simon J. Evenett. The World Bank "Can East Asia Compete: Innovation for Global Markets." [Online] 10 June 2005. <<http://64.233.187.104/search?q=cache:W-udy7khjyEJ:Inweb18.worldbank.org/eap/eap.nsf/Attachments/Can%2BAsia%2BCompete/%24File/caneastasiacompete.pdf>>

Simone Wheeler, Marketing Director, APAC
Factiva, a Dow Jones and Reuters Company

5. Hong Kong's Intangible Advantages

Every city/country/region, whether developed or developing, contains assets: natural and man made, old and new, tangible and intangible.

Looking at the last categorisation, tangible assets are easier to understand measure and judge. You can touch and see them, and even compare them against other places, based on indisputable and quantitative criteria. For example, in Hong Kong broadband is available in 100 % of commercial buildings and over 99 % of residential buildings. The network and the resulting connectivity it affords can be measured.

Intangible assets are, however, a bit more elusive. According to accounting standards, intangible assets are defined as “non-monetary assets without physical substance.” What are Hong Kong's such ethereal positives? How can you measure and communicate such assets as the entrepreneurial spirit of Hong Kong? How do you benchmark the perception of Hong Kong being a level playing field?

What are the key intangible advantages of Hong Kong that matter most to overseas investors and are vital in differentiating the city from its competitors?

Hong Kong - the brand

Hong Kong is widely known as a hard-working, 24-7 commercial hub and financial centre. It holds an enduring place in the hearts and minds of the world, regardless of whether it is as a business context or a tourism destination. Quite remarkable, that such a small place, in physical and population terms, has registered such character and meaning internationally.

As discovered in recent market research by APCO Asia, although people overseas may be a bit hazy about Hong Kong's political stature post-handover, for example, they do know that Hong Kong is a business city in the world-class league. It is very much the carrier bag city of Asia, metaphorically and literally, and sits very comfortably alongside its prestigious international peers. Many a premium brand shopping bag is adorned with the famous mix of “New York, London, Paris, Tokyo, Hong Kong”. And as we hear time and again from many even outside the retail sector, if a company wants to operate in Asia, it has to be in Hong Kong. This base line understanding and perception has future value and as such it is an asset.

Gateway to and from the Mainland

Hong Kong's proximity to the Mainland is crucial to the city's success and is a point of real differentiation from other Asian business centres. Because of this, Hong Kong enjoys the status of being a major engine driving the Mainland. In fact, this is a reciprocal relationship, in which both places are significant inward investors in the other and their economies are deeply intertwined.

Because of its mature, stable and “tried and tested” legal framework and soft infrastructure, Hong Kong offers great peace of mind for those enterprises wanting to enter the Mainland. This high degree of comfort found in Hong Kong, together with culture and language capabilities, make it the route of choice for overseas enterprises wanting to enter the Mainland. Only the most bullish of enterprises try to enter the Mainland direct from overseas and without a first base in Hong Kong. In essence, Hong Kong's role and position as the risk manager for business in the Mainland is a major advantage.

Curiously, the reverse also applies. Increasing numbers of Mainland enterprises are choosing to pursue their regional and global goals by first investing and even raising funds

in Hong Kong. At the end of 2004, over 300 mainland companies were listed in Hong Kong, accounting for 30 % of the market capitalisation.⁶ Hong Kong provides cultural affinity for Mainlanders, and affords an attractive, prudent, convenient and central intermediary step before expanding to the world. Hong Kong is attractive to our compatriots up north as they look to globalise.

Framework

The Hong Kong Government prides itself in its overriding ethos: “market leads, government facilitates.” The business environment is completely driven by market forces and is open for all. Every entity is treated the same, whether native to Hong Kong or from overseas. With such a business-friendly approach from the Government, it is no surprise that business prospers. Potential investors are impressed that they encounter no or few bureaucratic barriers and certainly no more than an indigenous enterprise would. Furthermore, the Government also has a zero tolerance for corruption and proactively polices this through the Independent Commission Against Corruption (ICAC; see scoreboard).

Hong Kong fares well in a simple benchmark measure of red tape compiled by the World Bank⁷. In Hong Kong it takes 5 procedures and 11 days to set up a company, compared to the average for the East Asia and Pacific region of 8 procedures and 51 days.

Ask any entrepreneur who operates in the region, why is Hong Kong so good for business? And you get a stream of plaudits like “Hong Kong just works,, “It is so easy to get the job done” and “People have the enthusiasm and the risk profile to give new things a chance”.

Hong Kong’s other key framework strengths include:

The intellectual property regime is robust and comprehensive and is comparable with other developed economies in affording the owners of IP rights maximum protection. The Government is firmly behind the protection of IP rights, and regularly increases penalties for those who abuse it. Innovators can enjoy the benefits of their creations, which is a good incentive to encourage R&D.

Unlike many places in Asia, Hong Kong has broad freedom of speech and has a vocal media that enjoy this right. In one survey (see scoreboard), Hong Kong was measured to have the freest media in Asia, the second most important factor in affecting the choice of location for setting up regional operations.

Rule of law. The mature legal system, independence of the judiciary, grounded in common law, together with a level playing field, create a just and transparent system that affords great confidence to all businesses. There are no surprises.

Low taxes and simple tax structure is another key reason why investors chose Hong Kong. Cash flow savings through a lower fiscal bill is a key benefit of the city. According to a recent worldwide Forbes survey⁸, Hong Kong has the second lowest tax misery index.

⁶ Source TDC Monthly Economic Summary <http://www.tdctrade.com/main/economic.htm>

⁷ Source World Bank, <http://rru.worldbank.org/DoingBusiness/default.aspx>

⁸ Source Forbes, <http://www.forbes.com/global/2004/0524/074chart1.html>

Enterprises (and individuals) can move funds in and out of Hong Kong freely with no penalties or restrictions. The US dollar peg affords stability and protection against exchange movements.

Intellectual capital is key

Hong Kong's four pillar industries are the service sectors of financial, logistics, tourism and retail services; together they constitute around 87% of the city's GDP. Our economic success is now largely due to the application of the intellectual assets of residents in the form of services, which is a notable shift from 20 years ago when Hong Kong's service sector accounted for only 69%.

"Made in Hong Kong" was a widespread badge heralding the city's manufacturing prowess. However, now that most manufacturing has migrated north over the border, service capabilities have become Hong Kong's strong suit.

One thing that has not changed is Hong Kong's entrepreneurialism and the desire to do business. Hong Kong has reinvented itself as a world class service hub, while maintaining its stature and reputation as being a world leading business centre.

This shift in output demonstrates another intangible asset of Hong Kong – the ability of the city to transform, adjust and bounce back with its world class reputation intact, if not stronger. Looking to a recent example, few cities could recover, as Hong Kong did, to have GDP growth of 8.2% in the year after the city was knocked down by SARS.

The Government values the importance of the city's IQ. As stated in the Chief Executive's policy address given in January 2005, "In a knowledge-based economy, knowledge is more important than capital. Capital follows talent. The larger the pool of talent, the easier it is for a place to attract investment, thereby promoting economic development and increasing employment."

Domestically, every child is afforded 9 years of free and basic schooling and the city funds 14,500 first year first degree places at university places each year. The government has set a target of 60% of the 17-20 year old group to be given access to post-secondary education, and had achieved 48% in 2003-04. In terms of bringing in talent from overseas, the immigration requirements are not a barrier for those who offer genuine value-added skills to what is available locally.

R&D is understood to be key to Hong Kong's future. According the Chief Executive's policy address, "We promote and apply new knowledge and new technology to facilitate economic restructuring. We increase investment in education, attract more talent and upgrade the quality of our manpower. The number of local organisations and enterprises engaging in research and development (R&D) is on the increase, as is the number of technical workers employed in the field and overall R&D spending." (9) Recent initiatives like DesignSmart and Innovation and Technology Commission's R&D Centres exemplify this commitment.

Looking at one measurable output from this system, according to the United States Patent and Trade Office, the patents granted by Hong Kong is 42.36/1,000 R&D personnel, which compares favourably with other economies in the region.

Internationalisation

Because of its heritage, central location in Asia and externally focussed economy (Hong Kong is the 11th largest trading economy in the world), Hong Kong is a melting pot of diverse characteristics. Of the some 7 million population, around 5% are of non-Chinese ethnicity. This means that the collective experience and influences on the city are vast, with the wealth of cultures, languages, religions and tradition being very evident in the city.

Hong Kong may be small, but it has a rich and diverse international perspective and a mixed population all living in general harmony.

Having with some 45 international schools helps overseas families settle and feel at home.

Quality of life

As in any aspect of Hong Kong, one of its strengths is the contrast it offers. For example, although Hong Kong contains some of the most densely populated areas in the world, over 71% of the territory is undeveloped and 40% of the land is protected – including 23 country parks. Hong Kong, with 6,300 people per square kilometre, is actually less densely populated than Singapore, with 6,967 people per square kilometre.

Yet it takes more than green spaces to improve the quality of life. Steps are being taken to deal with the source of two common complaints: the unsatisfactory quality of the air and limited facilities for arts and entertainment.

In selling the city to the potential investors across the world, the challenge for InvestHK is to make these intangible assets understood. Such assets are often best validated through first hand experiences and through operating with the players in the market.

As Mike Rowse, Director-General of Investment Promotion at InvestHK, said, “Hong Kong has so many facets that make it appealing to investors. It is our challenge to make sure people understand these Hong Kong advantages, so that they can make informed business and investment decisions. Hong Kong’s intangible assets are vital to Hong Kong’s continuing success and a crucial part in differentiating the city from our competitors. Foreign investors buy into our business environment and all that entails; so, showcasing our intangible assets is a critical part of our communications strategy.”

Hong Kong’s intangible asset scoreboard

While intangible assets are difficult to identify, describe and quantify, they are a crucial advantage and way of differentiating Hong Kong from other locations. They cover key areas and are, therefore, a major selling point in winning investment into the city. InvestHK uses many of the indices compiled by independent experts to try to make tangible and quantifiable the intangible, and enable comparisons against competitor locations.

Here are some such indices that showcase different aspects of Hong Kong’s intangible advantages.

1) Freest economy

Hong Kong is ranked as the world’s freest economy in the Heritage Foundation/Wall Street Journal’s Index of Economic Freedom – an honour the city has earned in each of the 11 years since the Index was established. The Cato Institute, along with The Fraser Institute and more than 50 think tanks voted Hong Kong the freest economy in the world in their Economic Freedom of the World: 2005 Annual Report

http://www.heritage.org/research/features/index/chapters/Executive_Summary.pdf

2) Ease of raising capital

Hong Kong ranked 1st for third consecutive year in Capital Access Index compiled by the Milken Institute.

Scores are assigned based upon the ability of entrepreneurs within their borders to gain access to financial capital.

http://www.milkeninstitute.org/publications/publications.taf?function=detail&ID=308&cat=P_Briefs

3) Competitiveness

Hong Kong improved its rating in both indices and was ranked top small economy and 2nd among all economies in this 2005 World Competitiveness analysis of 60 economies by the International Institute for Management Development.

Looking at the constituent elements of the index, Hong Kong was voted the best economy in terms of business efficiency and government efficiency.

<http://www02.imd.ch/wcc/ranking/>

4) Freedom of speech

Hong Kong ranked 1st for press freedom in Asia, and 34th in the world in the 2004 in this Press Freedom Index compiled by Reporters Without Borders.

http://www.rsf.org/article.php3?id_article=11715

5) Corruption Perception Index 2004

Hong Kong came 16th out of 145 countries/jurisdictions ranked.

This index looks are several sources including indices and analysis from EIU, universities and management centres.

http://www.icgg.org/downloads/CPI_2004.xls

6) Human development index 2005 by UN Development Programme

Hong Kong came 22nd out of 177 countries.

Hong Kong beats Singapore by two places in this index, which focuses on three measurable dimensions of human development: living a long and healthy life, being educated and having a decent standard of living

http://hdr.undp.org/statistics/data/country_fact_sheets/cty_fs_HKG.html

7) One of the top five best cities in the world to live

Hong Kong was sixth, and top in Asia, in this review that looked at the city's nightlife, standard of living, job sectors, arts and culture, weather, state of affairs, and all of the other things that encompass daily life.

http://www.travelersdigest.com/best_cities_live.htm

The importance of intangible assets to overseas investors

Top 5 factors affecting the choice of location for setting up regional operations (most important first):

- 1) free flow of information
- 2) low and simple tax system
- 3) corruption free government
- 4) absence of exchange controls
- 5) communication, transport and infrastructure

From Census and Statistics Department Report on 2005 Annual Survey of Regional Offices Representing Overseas Companies in Hong Kong.

Fiona Donnelly, Invest Hong Kong

6. The Intellectual Capital of Cities and Regions

In the knowledge economy, the value of corporations is directly related to their knowledge and intellectual capital. But broaden the perspective a little wider and one begins to see the possibilities: Think of cities, regions, even entire nations, in addition to the public sector. If intangibles and intellectual capital are important to the private sector, they are also important to the productivity and competitiveness of the public sector, and so to communities and nations as a whole. In their book "Intellectual Capital for Communities: Nations, Regions, and Cities (2005) editors Ahmed Bounfour and Leif Edvinsson have brought together the best minds in intellectual capital throughout the world to focus on a new and fertile area of research: measuring and managing the intellectual capital of communities. This is a creative and cutting-edge area of research that has the potential to change how public sector planning and development is done. Once there is a clear way to identify where wealth is created in a given region/nation, this process has the potential to reveal a huge knowledge repository in the public sector with a significant—but idle—potential for collective wealth creation—the wealth of nations in waiting.

To stimulate the discussion on "Intellectual Capital for Communities ", we are printing excerpts of a transcription of an online event organised by the EU Knowledgeboard on 27/01/05.

Transcript:

Sari Ehrlich: Dear friends, It is a special pleasure to welcome our two guest today: Ahmed Bounfour and Leif Edvinsson the editors of the book: Intellectual Capital for Communities. Not often we get a chance to host a here man who compete Bill Gates and won. But Leif Edvinsson, that have been chosen to the, Brain of the Year, succeed in this. Leif is not just a thinker. He's a "doer." And was world's first corporate director of Intellectual Capital at Skandia And also a key contributor to the idea of Intellectual Capital (IC) and oversaw the creation of the world's first corporate IC Annual Report Our second guess Dr Bounfour Ahmed is specialized in Knowledge Management Intellectual Capital Reporting and Management Intellectual capital communities (Nations, Regions, Cities). He has special connection to the space .He is also the authors of several books on management. So as a virtual community we are looking forward to an inspiring conversation about communities with two specials guests

Chris Macrae: Leif, back to past compared with your expectations 10 years ago does the world get IC?

Sari Ehrlich: Ahmed, how would you define the Communities, what kind of typologies?

Leif Edvinsson: The world is starting to see the invisibles or the capabilities in the relations, i.e. relationship capital and social capital

Ahmed Bounfour: Yes certainly, I would define a community as a set of people connected (governed) by the recognition principle. Two types of communities then: Natural Communities (Nations, Regions, Cities) and emerging communities (business communities)

Leif Edvinsson: One angle to see is to look for the collaborative possibilities to shape commonwealth, or in other words the IC potential of a K-city

Albert Angehrn: ... like in OpenSource

Ahmed Bounfour: Yes, and this means that collaboration dominate the conflict

Sari Ehrlich: Leif & Ahmed, Why Communities now ?

Leif Edvinsson: Just remember the Commonwealth....also referred to as UK, of which we are just renting the language for this dialogue

Chris Macrae: Where have traditional leaders like those at the World Economic Forum best tried collaboration, common wealth

(...)

Leif Edvinsson: IC for a city is also the future earnings capabilities in terms of people, infrastructure, and relationships. A K-City can be defined as a City that purposely designed to encourage nourishing of collective knowledge as a capability to take efficient action to create a sustainable wealth

Abdul Samad (Sami) Kazi: At times the trust or harmony/enthusiasm seems to be overtaken/killed by a person or a group of person who tend to dominate the agenda within a community. Any ideas as to how this can be avoided

Ahmed Bounfour: A revolution ... in paradigms!

Leif Edvinsson: The C is standing both for Community and Context, for the knowledge worker. Therefore it is essential to develop a deeper understanding for the influences, pos and neg for the k-worker, i.e. need for new urban design for knowledge ecology

Edna Pasher: Ahmed, in response to your question, if someone tries to dominate a community the community needs to confront him/her directly.

Sari Ehrlich: Leif, Are their different types of levels of performance with regards to IC

Ahmed Bounfour: Coming back to the book, on the most important points for the future concern the link between Natural communities and Emerging communities

Christine van Winkel: Hi, Leif if some cities are becoming stronger K-Cities than others, is there any research that relates this to national cultural characteristics, such as willingness to collaborate, group orientation, entrepreneurialism etc?

Leif Edvinsson: Linux community offers a way of building organisational capital that resembles more of the political science than business admin. One essential dimension is to have so called protocols of volunteers rather than job description etc.

Edna Pasher: Leif, How is a knowledge city different from other cities and how will it show in an IC report?

Leif Edvinsson: Level of performances are many; but the most simple structure is to look for the levels of individual and the brain, then the group, then the larger group and finally the society...

Anssi Smedlund: In my chapter I point out that a successful knowledge based region should have simultaneous 1) knowledge creation 2) knowledge transfer and 3) knowledge implementing. And all these functions require special characteristics

(...)

Leif Edvinsson: Hofstede has done such culturally characteristics studies for regions among others,

Ahmed Bounfour: To say it simply, Linux community is not primarily transactional oriented

Sari Ehrlich: Leif, How would you define IC for Regions

Christine van Winkel: Is there any work that relates Hofstede (or Trompenaar's) work to the capacity of a region to become a better K-City / Region?

Leif Edvinsson: IC of Region or Community is the future earnings capabilities, or in others words the capability to generate sustainable wealth for its citizens, especially future generations.

Ahmed Bounfour: This is an interesting question. We will insert it in the next edition of the book.

Albert Angehrn: Leif, Ahmed: what would you say is the biggest challenge in having public sector representatives initiate IC/KM initiatives?

Ahmed Bounfour: It is leading from business organisations, yes ...but taking into account their community objectives (social capital is here more relevant than in business context)

Leif Edvinsson: To invite the public sector into IC of Regions is perhaps offering more meaning making dimensions, than pure business admin perspectives...

Sari Ehrlich: Ahmed, Are their specific projects in Europe that worth mentioning

Ahmed Bounfour: Yes, there several projects. In the book there is a chapter making the liaison -learning- between Sweden, Slovenia and Florence. The idea here is to develop the bench learning capabilities of Europe

Albert Angehrn: In companies I don't know of anybody being particularly rewarded because s/he initiated IC/KM initiatives. Why should this happen in the public sector? Is there some link between IC/KM and the probability of re-election?

Leif Edvinsson: Projects in Europe are several, quoted in the book, the most recent is about IC of EU, done by D. Andriessen and C. Stam, see www.intellectualcapital.nl

Edna Pasher: I believe the business sector has a lot to learn from the communities in cities and nations re. collaboration and trust and voluntary work.

Raphael Bidault-Wad: Hello Ahmed and Leif, according to you, does IC of Region and Communities includes the ability to create or accumulate historical assets and patrimony ?

Ahmed Bounfour: Albert, but the perspective is different. Take what China and India are doing in terms of strategic planning of their intangible resources. See how their students behave in our faculties!

(...)

Leif Edvinsson: The book can be seen as a prototype for invitations of more prototypes on IC of Cities, Nations or regions.

Edna Pasher: Leif, maybe we should call them Innovation Cities instead of knowledge cities?

Ahmed Bounfour: Functional policies such as R&D, Human education and bench learning internally as well as externally. For the moment, Europe is mainly driven by market competitions conditions

Ahmed Bounfour: I agree with Leif, Prototyping is a very stimulating perspective

Edna Pasher: How can we teach collaboration instead of competition?

Christine van Winkel: Ahmed, to what extent do you think that the market focus of Europe is being shaped by the US economic perspectives?

Leif Edvinsson: Edna, I fully agree on the shift of focus to Innovation Cities, in short IC

Ahmed Bounfour: Yes, but this is misleading. If we see into details national performances, some Nordic countries are doing better than US, while achieving a good social cohesion

Ahmed Bounfour: And this is one of the objectives of the Lisbon Agenda

Raphael Bidault-Wad: Should IC strategies for Regions and Communities be crossed with pure political ideas?

Ahmed Bounfour: What do you mean by Political ideas?

Albert Angehrn: Edna, We are developing a new Simulation exactly on Collaboration (similar to the successful one we have developed on Change). If anybody wants to contribute let me know (we will also set up an EC project around it).

Ahmed Bounfour: No Standards for reporting and measuring performance of Communities

Leif Edvinsson: We have to remember that the industrial dimensions are a temporary concept that has been around for about some hundreds of years. As such very efficient to give wealth to nations. But what we see today is also that there is a global dynamics resulting in lost of wealth for many nations. Remember around 1000 years ago Sumatra was a very wealthy place, later followed by South America and after that Europe and next to come.....

Full transcript see www.knowledgeboard.com

INTELLECTUAL CAPITAL AND KNOWLEDGE CITY NAVIGATION

Some emerging questions and Quizzes for Knowledge City Navigation

Who is creating value and where is value being created in your city, region or nation? How does the City Map or common image of the city IC potential look like? Where do we have intelligence communities or intelligence of cities on a global scale? What kind of Social Capital feeds an intelligence perspective for society entrepreneurship? Can there be another approach of social intelligence systems and Society Entrepreneurship to turn the Future into an Asset? Who is IC cultivator of the attractiveness and innovations of the City?

More and more cities are declaring themselves as knowledge cities, where the political agenda is developing the context or structural capital from human capital growth to collective wealth. Here is a list of some of the emerging key cases:

- Singapore
- Barcelona
- Manchester
- Copenhagen/Malmö
- Dubai
- Melbourne
- Shanghai
- Sao Paulo

The value of a city is very much related to Intellectual Capital, defined as intangible factors for future value creation. In other words it can be described as the roots for the future fruits. It can also be regarded as the context and surrounding culture for the future harvest or wealth creation. The major components of IC are human capital, organisational structural capital and relationship capital. Consequently for a city it is of utmost importance to know what are the driving factors for the future attractiveness for the talented people to come and hone their skill, talent and creativity. This requires a quest for knowledge navigation of intangibles to nourish the knowledge city of tomorrow. For IC –rating of Cities see also www.intellectualcapital.se

Ragusa as an historical bench learning case

Ragusa is an interesting bench learning case of city of IC wealth. It was both a city and a republic on the coast line Mediterranean, more precisely the Adriatic coastline. Today it is called Dubrovnik. It had one of the highest standards of living for 500 years. In an article 2002, "Ragusa intelligence and security 1301-1806: A model for the twenty-first century?" -The late professor Stevan Dedijer, known as the "father of social intelligence" elaborated on the key success factor for Ragusa. I have rephrased it to key *sustainability factors for knowledge regions*.

Ragusa can be regarded an intelligent city as its government used its international contacts to detect signals from the surrounding world to learn and adapt rapidly. One of the most intriguing learning is this capability to develop inside as well as outside "eyes and ears" for the future. For that purpose they were among others developing special young dragomans for the role as knowledge navigators or more formally ambassadors. Totally they had 60 ambassadors or intelligence offices in the Mediterranean.

In order to gain sustainability a knowledge region or city has focus on social innovations and for that it needs intelligence. Social intelligence is the capability of a society or enterprise to learn about its environment, context, and its self and to foresee the future, according to Dedijer. It is not about being informed but rather the understanding of gathered information and using it for sustainability.

Intelligence Recipe

Based on a comparative research with Ragusa the intelligent city I would like to summarize the following attributes as a Checklist or *Knowledge -recipe for City Intelligence*:

- attractor for knowledge workers and the creative class
- good geopolitical position
- mobile city with networks to various clusters and meetings places with know who's
- communicative city with good logistical flow
- cooperative city with high value making through various exchanges
- healthy, fresh and humane to offer good quality of life
- curious citizens with active interfaces towards the unexplored
- generous city with cultural capital and coherence emphasizing values
- action intensive city with multitude of active interfaces
- wealth creating
- safe and peaceful

Urban Design

In its extension urban design becomes a sustainability factor for the migration and insourcing and retaining of talent (human capital) also called the Creative Class (Florida 2004). Now in the 21st century is emerging innovation based knowledge innovation zones, with a more amplified dimensions collaborations and quality of life for its citizens. As an example can be mentioned Barcelona, that has been extremely good in attracting the creative class on a global scale. The work on urban design can be viewed as working on the 4th dimension of value creation. It goes beyond the economical dimensions (logos), to focus on experiential dimensions, also called mythos. In more political terms it might be called quality of life. But more scientifically it is the value planning in a longitude perspective, a task requiring knowledge navigation and social intelligence for the City Council as well as society entrepreneurship to reshape continuously the space for the citizens. The City Leadership will be to combine these challenges and turn it into sustainable wealth for its citizens as the new bottomline. (see www.bottomline.se)

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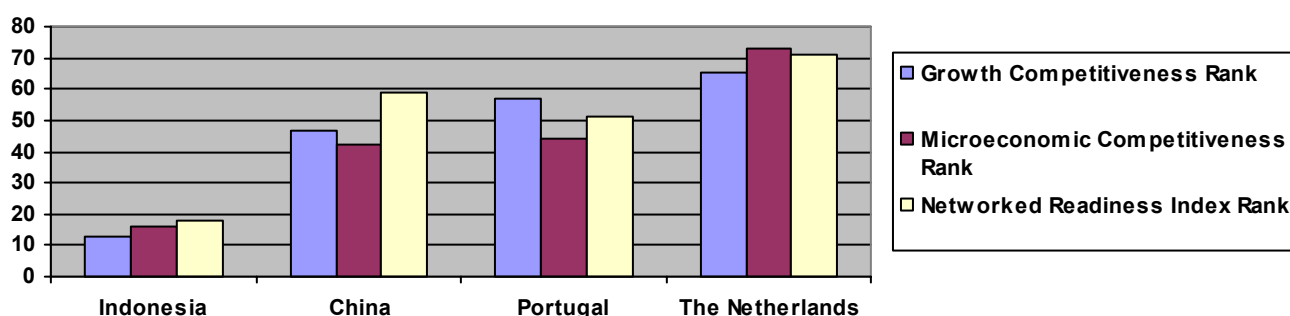
7. Towards a Cross-Cultural Approach of Intellectual Capital Management

Some countries in Asia and Europe are far ahead of others in remodelling their economies towards the key features of the knowledge economy. To what extent is this phenomenon of the knowledge economy perceived differently in Western and Asian cultures? Basically, many features of the knowledge economy have an intrinsic relationship with cultural perceptions: brand perception, leadership, tacit knowledge, teamwork, organizational culture, partnerships. These features are inextricably intertwined with cultural frameworks. There are clear differences between Singapore and Australia, and between Germany and Japan. Having said this, a cross-cultural study of the key features of the knowledge economy (intellectual capital, knowledge management) has so far has not produced any solutions for managing Intellectual Capital within a specific cultural context.

Differences in Country Competitiveness Ranking

At the Lisbon Summit in 2000, the European Union set for themselves the objective of becoming the 'most competitive and dynamic knowledge based economy in the world by 2010'. Achieving this goal requires an overall strategy aimed at preparing and facilitating the transition to a knowledge-based economy and society.¹ Also in Southeast Asia, a growing awareness of the need to match the requirements of the knowledge economy can clearly be perceived. At the 4th ASEAN Informal Summit in Singapore (November 2003), leaders agreed on the need for specific, more professional training and time-to-market course programs in the field of communication and information, business economics and technology.

The Knowledge Navigator of the World Economic Forumⁱⁱ gives us access to the knowledge climate of 80 economies across the world:



One of the striking features is the many differences in the level of knowledge-intensive activities in between countries in one continent, and between countries across the continents. If we compare some countries in more detail, the differences in cultural background are obvious, although the degree of growth competitiveness hardly shows substantial differences. An obvious contrast in cultural background with an equating competitiveness ranking in the list is the position of Finland and Taiwan.

	Finland	Taiwan
Growth Competitiveness Rank	02/80	03/80
Microeconomic Competitiveness Index Rank	02/80	16/80
Networked Readiness Index Rank	01/82	09/82

Sources: Global Competitiveness Report and Global Information Technology Report 2002

In their recent publication *The Intellectual Capital of the European Union. Measuring the Lisbon Agenda 2004*, Daan Andriessen and Christiaan Stam draw the following interesting and appealing conclusion, after having stated that the Nordic countries

(Sweden, Denmark and Finland) perform considerably better than the others like a large group of followers (Belgium, The Netherlands, Luxemburg, Germany, France, Austria, United Kingdom and Ireland), or the group of laggards (Italy, Spain, Greece and Portugal).

According to Daan Andriessen and Christiaan Stam: "The leading group consists of northern European countries (>54° latitude), the group of followers consists of middle European countries (45°-54° latitude). The laggards are all southern European countries (<45° latitude). A possible cultural explanation for this could be that the Nordic countries throughout history have developed an attitude of looking to the future. In order to survive the long and severe winters they had to plan their resources carefully."

Countries differ in expenditures and investment into intangibles and have a different valuation of intangible business values. It is notable that a higher percentage of patents were awarded to Asian companies and therefore seems to be leading in the knowledge revolutionⁱⁱⁱ, whilst American companies focus more on brand reputation as a feature of organizational excellence, and seem to be leading in the brand revolution. Countries like India, Malaysia and many more have committed to so far unrealized ambitions to invest in education and to profile India as the knowledge hub of the world, in order to be even more competitive than any other Western country. Countries also differ in values like commitment to the work floor compared to the GDP per worked hour. Countries appreciate different entrepreneurial attitudes, as ratings in disagreement about "One should not start a business if there is a risk it might fail"; risk appreciation as a value differs from country to country and is apparently dependent on cultural norms.

Recent studies about the *social capital* of nations (trust in interpersonal relations, institutional trust) disclose that culture matters, although this has hardly been researched in depth at a macro-economic level. More quantitative comparisons are to be made, but the examples suffice to ask for the role of *culture* as a catalyst of hindrance or challenge in the readiness and preparedness of a national economy to be responsive to the needs of the knowledge economy and to leverage intellectual capital.

Partial cultural explanations of a nation's success

Often, simplified cultural explanations of a nation's economy are common sense and taken for granted. Behind this explanation, the hypothesis of *cultural determinism* is visibly discernable. Economic competitiveness in the framework of cultural determinism implies that some cultures are more likely to make developmental progress than other cultures. On the average, cultural explanations of the economy are formulated in terms of premature statements about the impact of cultural values on social and economic behaviour.

Regarding the economic stagnation of Arab countries and their disappointing growth^{iv}, many observers tend to link economic underperformance of the Arab world to the inhibitory and impeding influence of Islam, a presumption already heard in the 19th century when the French philosopher Ernest Renan stated that the Islamic world could never jump on the bandwagon of economic renewal because of the retarding impact of Islam as a religion of subjugation and subjection to resignation.

Similarly some decennia ago, the general presumption was that the Japanese cannot compete at a global level, as Japan only imitates products and services from other countries, a hypothesis mainly rooted in a generally perceived pedagogical ideal of Japanese culture where imitation is valued highly as a mean of education, be it during childhood, school, company training or mastering any kind of arts. This presumption about the Japanese is sharply contrasted to the German pedagogical ideal where creativity and originality are supposedly highly valued: "Here in Germany, we have the 'not invented here' syndrome: Only our own original work counts", versus: " In Japan, they have the

'hammer in outstanding nails' syndrome: Only work that reaches past complexity counts. The word 'originality' has a bad sound.

The increasing competitiveness of some Asian countries and their enormous ambition to enhance the quality of education in recent years illustrate however the Asian paradox. On the one hand, many a Westerner defends vehemently stereotypes like the presumed passivity of Asian learning styles against those of Western students who have performing and active learning styles instead. On the other hand, many Asian students demonstrate to be able to excel and to combine styles of cognition, memorization and understanding at the same time. Experts in cross-cultural research on motivation and learning strategies like Simone Volet and Jan Vermunt emphasize that the stereotypes of passive (East) versus active (West) appear to be untenable. Andreas Helmke and Vo Thi Anh Tuyet argue that the stereotype of the "Chinese Learner as rote learner" is not supported by the data: "There is empirical evidence that repetition played a major role among Vietnamese learners, but this was not accompanied by deficits in deep learning strategies or in less critical thinking. Furthermore, very similar patterns of correlations were found between motivation on the one hand and deep vs. surface-level learning on the other hand, supporting the notion of fundamental and general - i.e. not culture-specific - laws governing the dynamics of motivation and learning."

Currently, amidst the debate about the propensity of European countries to compete with other prosperous knowledge economies, some consultants in The Netherlands postulate that the Dutch will never be able to match the requirements of the new economy because of their 'polder-model', a term used for the Dutch model of gaining consensus in which employers, syndicates and the government meet with each other to make agreements about labour. This postulation was made against the general opinion of some years ago, when this same polder-model was perceived as the main cause of the economic success of the Dutch in the 1990s: "Consensus lies at the heart of the Dutch success where unemployment has been cut to half (2% in 2000) of what it was in 1997. The government, with support of employers and unions, has cut public spending as a share of GDP from 60 to 50%. It is the combination of a quiet and flexible labour market with a solid monetary and fiscal policy and introducing more dynamic markets which is the core of the polder model."

It is noteworthy to compare the differing and mutually exclusive explanations given to some periods of China's economy. These examples exemplify and ascertain how dominant some ideas are in interpreting success or failure in recent years. It appears that prematurely the paradox of collectivism-individualism functions as the hypodermic presupposition that clarifies various and differing achievements of China's economy. First of all, is there the story about European entrepreneurship as if he were a self-made-business man. Industrialization in 19th century Europe is perceived as mainly achieved by the self-made men, whose entrepreneurial behaviour was supported by religious and cultural values. In contrast to the European entrepreneur, businessmen in Asia are thought to be culturally more inclined to operate along collective forms of business organization. Up to the early 1970s, the predominance of joint-family enterprises in India and of business networks among Chinese entrepreneurs in East and Southeast Asia were held responsible for the lack of economic development in Asia because they hindered Asian entrepreneurs from becoming large-scale productive industrialists who are able to compete with their Western counterparts.^v

However, since the 1970s a contradictory opinion came up. Following the rise of the East Asian economies since the 1980s, co-operation, family enterprises and business networks, *guanxi* networks among successful entrepreneurs were seen as the key explanatory factors of the Asian economic success. And then, July 1997, the onset of the Asian economic crisis, economic developments are once again interpreted out of the same paradox of individualism-collectivism: "the origin of the Asian crisis", as Mario Rutten

summarizes, “partly lies in the inability of Asian businessmen to organize their enterprises on principles of autonomy, individualism, independence and universalism; instead their forms of business organizations are based on collective identity, dependency and particularism.” This rapid shift in explanations of China’s economic performance is ever and repeatedly attributed to the dominant Western perception of Asian cultures along the lines of collectivism-individualism. Mario Rutten concludes: “The emphasis on economic individualism among the Asian entrepreneurs as the mark of an emerging bourgeois group is partly based on the current interpretation of European industrialization: the self-made man as the chief agent of productivity”.

Recent approaches to the study of Asian entrepreneurship are partial and biased, since they often discuss the economic *métier* of Asians in terms of individualism versus collectivism, positing that some groups are more inclined towards co-operation than others. This biased attribution provokes the question whether a new paradigm is necessary to develop an intervention theory that goes beyond the opposition of individualism-collectivism. Mario Rutten suggests that a new intervention theory of Asian and European entrepreneurship will be necessary, not so much focusing on the paradox of collectivism or individualism as agents of successful or unsuccessful entrepreneurial behaviour, but the flexibility to “adjust to social and economic forms of organization to changing circumstances in terms of space and time.”

Cultural determinism

Many people presume that some cultures are more likely to make developmental progress than others. Those people maintain that cultures, more suited to match economic welfare, have inherent values while others do not, so that there is a trade-off between performing economically well and being able to adjust to new economic requirements. This assumption can be traced back to many authoritative writers like the sociologist Max Weber who pretended that the emergence of Western capitalism is mainly due to the decisive role of the Protestant ethic of thrift and frugality. Although very appealing, his theory is highly contestable because of the recent success of non-Protestant economies in the Western and Asian world as well.

In the UN Human Development Report 2004 the program reporters reject this apparent form of *cultural determinism*, as deceptive causal relations are constructed. Theories of cultural determinism have often been in contraction with the real world. Cultural predispositions can not be used in such unilateral way to explain economic differences, as other factors are to be taken into consideration: the bigger role of business groups in Korea, close relations with Japan and the United States, a higher literacy rate and a more extensive school system in Korea compared to Ghana. (p.19)

Similar assertions about the impact of culture on economic behaviour presume that ethnically diverse countries are less able to develop, so there is alternatively a trade-off between promoting diversity and development. This presumption that diversity is an obstacle to economic development is not evidenced by the facts of multi-ethnic societies nor can be defended that the mono-cultural society is a prerequisite for economic performance. On the contrary, in the U.N. Human Development Report 2004, it is said that “just as there are multi-ethnic countries that have stagnated, there are others that were spectacularly successful. Malaysia, with 62% of its people Malays and other indigenous groups, 30% Chinese and 8% Indian, was the world’s 10th fastest growing economy during 1970-1990.” On the other hand, “Mauritius ranks 64 in the human development index, the highest in Sub-Saharan Africa. It has a diverse population of African, Indian, Chinese and European origin –with 50% Hindu, 30% Christian and 17% Muslim” (UNHDP, p.4) There is no evidence of a clear relationship between cultural diversity and development. Although undeniable that many culturally and ethnically diverse countries have low levels of income

and development, there is no scientific evidence that diversity explains deficient economic performance.

Cultural resources and the knowledge economy

Key questions surrounding the knowledge economy transcend all cultures, as the impact of new business values will have an effect across all industries that have common strategic themes. These new business values such as information and knowledge values; changing organization and management structures; changing value chain and channel dynamics; and changing customer and product profiles transcend all national industries and organizations. It will be obvious that these value drivers of the knowledge economy are at the same time heavily dependent on the external shared assumptions, beliefs, expressions, norms and values of the national culture. Required competences of the knowledge worker are inextricably intertwined with cultural resources, values and norms. The changes in the knowledge economy need a profound translation into the assumptions, values, reasoning, and communication of a cultural and social group, be it human motivation, regulations, communication, valuation of knowledge, commitment to the local and global market or whatever.

Competences and new values

Regarding Singapore's transition to the knowledge economy, Mitchell van der Zahn states that all emphasis was laid on labour management policies and work ethics of employees instead of the efficiency with which human capital resources contributed to the economy. These management strategies, however, were successful in Singapore's transition from a Third World economy to a industrialized economy. In the Industrial Age, according to Van der Zahn "wealth creation is generally associated with an increase in "mass", such as an annual increase in gross domestic product. Also, it is common practice to divide the "mass" item by a "piece" unit, such as number of workers used, to give an idea of improvements in the economy. In the new economic era of knowledge, improvements in the economy can, or should not, be viewed as function of "mass" and "pieces". Rather, the measurement system in the new economic age should be based on "relationships" and "efficiency". Specifically, relationships between resources employed in creating additional value relative to the efficiency with those resources are employed now forms the measurement system best representative of the new economic age."

Knowledge economy	Industrial economy
short lifetime of products & services	linear and predictable development
global competition	local competition
targeted marketing & customer retention	mass marketing and customer acquisition
small entrepreneurial & networking k-based firms	large firms and organizations
middle-up down management and collaboration	top-down or bottom-up management and control
experimental and diversity	predictive and standardization
shifting borders and partner management	clear institutional boundaries
actionable knowledge and employability	fixed job description an skills

It will be obvious that the intangible economy requires a complete mental shift of employees, and the question arises: "How do we shape this culture? Because the drivers and values of the knowledge economy are fundamentally different from the industrial economy, it is necessary to reformulate the kinds of core competencies and skills that workers must have in order to support their organization when introducing new products and services. Analyzing the cultural obstacles and resources in order to motivate people to

engage on the intangible economy is an urgent necessity, both at a corporate and micro-economic level and at a national and macro-economic level.

Pluralism

The UNESCO Universal Declaration on Cultural Diversity (2001) and the UN Human Development Report 2004 strongly advocates an approach that respects and promotes cultural diversity and keeps countries open to global flows of capital, capital and people. (UNHDP,p11) Although many people across the world experience globalization as a threat to local and national identity, in fact this is a conservative and regressive tendency in view of the current economic situation. Globalization in economics increases consumer choice, making necessary that people and nations break down all kind of barriers and cultural walls.

Conservative trends may see globalization as endangering national and local identities, the solution is not to return to conservatism, nationalism and isolationism. The challenge of the knowledge economy is to design multicultural policies to promote diversity and pluralism.

“Globalization is driving ever-increasing interactions among the world’s people. This world needs both greater respect for diversity and stronger commitment to unity. Individuals have to shed tight identities if they are to become part of diverse societies and uphold cosmopolitan values of tolerance and respect for universal human rights.”(UNHDP, p.12)

The need for a new paradigm

A new paradigm in cross-cultural communication is necessary as the various business values in the networked world of the knowledge economy differ decisively from other types of economies. A cross-cultural approach to Intellectual Capital Management is a new field of inquiry and is still in its embryonic stage. The aim is to study cultural obstacles and cultural resources to support knowledge economy-strategies.

A number of questions that arise that need further inquiry are:

- Are concepts of knowledge economy and Intellectual Capital culture-bound or just universal phenomena?
- Are some cultures in Europe or Asia better equipped to match the demands and requirements of the knowledge economy and to boost the key drivers of the knowledge economy?
- Are cultural barriers and cultural drivers to be identified that hinder or enhance the creation and application of knowledge-intensive activities, and if definable what are the consequences for macro-economic and micro-economic measures to be taken?
- How does national culture influence performance and profit and what are the prerequisites for a culture of innovation?
- How to choose the right cultural components and the right cultural mix for leveraging Intellectual Capital in relation to Human capital, Structural capital and Relational capital within a cross-cultural context

¹ See Presidency Conclusions, Lisbon European Council, 23-24 March 2000, at <http://ue.eu.int/en/Info/eurocouncil/index.htm>

¹ <http://www.weforum.org/site/knowledgenavigator.nsf/Content/KB+Home+Page>

¹<http://www.weforum.org/site/homepublic.nsf/Content/Global+Competitiveness+Programme%5CAbout+the+Programme>

¹ The top 15 list of the highest ranking countries of 2003-2004 of over 100 countries are: 1. Finland, 2. USA, 3. Denmark, 4. Sweden, 5. Taiwan, 6. Singapore, 7. Switzerland, 8. Iceland 9. Norway, 10. Australia, 11. Japan, 12. Netherlands, 13. Germany, 14. New Zealand, 15. United Kingdom. In the latest edition of the year 2004-2005 we see some remarkable changes in ranking. 1. Finland, 2. USA, 3. Sweden, 4. Taiwan, 5. Denmark, 6. Norway 7. Singapore, 8. Switzerland, 9. Japan, 10. Iceland, 11. United Kingdom, 12. Netherlands, 13. Germany, 14. Australia, 15. Canada, 16. UAE

¹ Daan Andriessen & Christiaan Stam, *The intellectual capital of the European Union. Measuring the Lisbon Agenda 2004*. Centre for Research in Intellectual Capital, INHOLLAND University & Baak - Management Centre VNO-NCW 2004, p.5

¹ US Patents granted in 2002: IBM 3,288, Canon 1,893; Micron Technology 1,833; NEC 1,821; Hitachi 1,602; Matsushita 1,544; Sony 1,416; General Electric 1,416; Hewlett-Packard 1,385; Mitsubishi 1,373 (Source: USPTO, elaborated by Daan Andriessen)

¹ Rank Brand 2002 Brand Value (\$billions): Coca-Cola 69.6; Microsoft 64.1; IBM 51.2; GE 41.3; Intel 30.9; Nokia 30.0; Disney 29.3; McDonald's 26.4; Marlboro 24.2; Mercedes 21.0 (Source: Interbrand, elaborated by Daan Andriessen)

¹ Source: Flash Eurobarometer 107

¹ About: Social Capital, see <http://www.oecd.org/dataoecd/22/22/2381883.pdf>. For more about European Values, see: *European Values Studies*, Brill Academic Publishers ISSN 1568-5926. This publication consists of the following titles: European Values at the Turn of the Millennium; The Cultural Diversity of European Unity; Religion in Secularizing Society; From Cold War to Cold Peace?; Values in Western Societies ISSN 1568-5926

¹ Challenges for Arab Economies 26.01.2003 Annual Meeting 2003.

¹ Imitation and Originality in Authentic Learning LO24963 From: KiWiDressler (KiWiDressler@t-online.de) Date: 06/24/00

¹ Andreas Helmke & Vo Thi Anh Tuyet, *Do Asian and Western students learn in a different way? An empirical study on motivation, study time, and learning strategies of German and Vietnamese university students*. In: Asia Pacific Journal of Education, Volume 19, Number 2, 1999.

¹ <http://www.studyinthenetherlands.net/common.asp?id=16&instantie=0>:

¹ See Mario Rutten, *Individualism and collective forms of business organisation: rural capitalists in India, Malaysia and Indonesia*; in: Thomas Menkhoff & Solvay Gerke (eds), *Chinese entrepreneurship and Asian Networks*. RoutledgeCurzon London/New York 2004, p.293-318

¹ Mario Rutten, o.c. p.295/6

¹ Mario Rutten, o.c.p.296

¹ Thomas Menkhoff & Solvay Gerke (eds), *Chinese entrepreneurship and Asian Networks*. RoutledgeCurzon London/New York 2004, p.295/6; *Introduction*, p.17

¹ J-L.W.Mitchell van der Zahn (with Greg Tower & John Neilson), *Intellectual Capital and the Efficiency of value added. Trends in the Singapore Capital Market 2000-2002. 2004.* ISBN 1-9208-8462-9, p.5

ⁱ See Presidency Conclusions, Lisbon European Council, 23-24 March 2000, at <http://ue.eu.int/en/Info/eurocouncil/index.htm>

ⁱⁱ <http://www.weforum.org/site/knowledgenavigator.nsf/Content/KB+Home+Page>

ⁱⁱⁱ US Patents granted in 2002: IBM 3,288, Canon 1,893; Micron Technology 1,833; NEC 1,821; Hitachi 1,602; Matsushita 1,544; Sony 1,416; General Electric 1,416; Hewlett-Packard 1,385; Mitsubishi 1,373 (Source: USPTO, elaborated by Daan Andriessen)

^{iv} Challenges for Arab Economies 26.01.2003 Annual Meeting 2003.

^v See Mario Rutten, *Individualism and collective forms of business organisation: rural capitalists in India, Malaysia and Indonesia*; in: Thomas Menkhoff & Solvay Gerke (eds), *Chinese entrepreneurship and Asian Networks*. RoutledgeCurzon London/New York 2004, p.293-318

8. Policy-Making in Hong Kong – A Knowledge Management Process?

INTRODUCTION

Policy-making is a knowledge-intensive activity. Making “good” policy involves combining knowledge inputs of different kinds – technical, sociological, demographic – from different sectors of society. Identifying and capturing such knowledge inputs, and combining and distilling them into a policy framework, is a demanding task. The policy-making process is a good place to see the workings of a knowledge society in action. It can perhaps even be said that a good policy-making process is a hallmark of a knowledge society. It is by the quality of its policy-making process that the knowledge society can be essentially distinguished.

In this article, the various mechanisms and institutions typically involved in the policy-making process in developed overseas polities are considered and compared with their counterparts in Hong Kong. Case studies of Hong Kong policy-making are used to illustrate the characteristics of the local system. Finally, the paper makes recommendations for improvement in the Hong Kong policy-making process.

1. WHAT IS POLICY?

Policy is a somewhat nebulous term which can be used with a wide range of meanings. Some definitions of the word *policy* are as follows.

“A course of action adopted and pursued by a government, party, ruler, statesman, etc; any course of action adopted as advantageous or expedient.” (Oxford English Dictionary).

“A stance, which, once articulated, contributes to the context within which a succession of future decisions will be made.” (Friend¹)

“A purposive course of action followed by an actor or set of actors in dealing with a problem or a matter of concern.” (Anderson²)

Taking these definitions as reference, a policy is then a principle or guideline for an agent in dealing with a large population of events or situations. A policy is thus an attempt by the agent – be it individual, enterprise, state or supranational - to define in advance categories of event or circumstance and the preferred action that will apply to such categories. A policy brings order and definition to what would otherwise be a bewildering succession of events. It provides guidance for action, obviating what would otherwise be endless fresh examination of each individual occurrence.

Policy and knowledge

The development of policy has, or should have, a large knowledge component. In order to develop a policy that optimally furthers the objective across the population of individuals or events, it is necessary to gather information on the attributes of the population and analyse this information to estimate the desired effects or results which, if manifested in the population, would constitute realisation of the objective. Further thinking is needed as to how these effects can be achieved, for example the linkage between feasible actions and desired effects. Consideration needs to be given to the possible impact on other programmes, both related and apparently unrelated. Appropriate resources to achieve the

effects need to be identified. And there should be measurement after implementation of the success or failure of the action, and possibly further refinement of the policy.

A combination of different kinds of knowledge is needed – analytical, empirical, technical, creative, political, and practical/managerial. Policy-making is a complex activity, requiring a variety of processes to combine the diverse sources of knowledge that are needed to produce the output. At its highest level, policy-making requires input from the executive, from the interest groups affected (perhaps via their representatives), the statistician, the analyst, the technician, the finance specialist, the bureaucrat. Most of all it requires input from the subjects of the policy – the people whose lives will be affected or shaped by it.

2. THE POLICY-MAKING PROCESS

A number of different models of the policy-making process have been put forward by academics.

Howlett and Ramesh identify the various actors in the policy-making process. In descending order of importance, these are, in their view,

1. Elected officials
2. Appointed officials
3. Interest groups
4. Research organisations
5. Mass media.

Lasswell identifies seven stages of the policy making process.

1. Intelligence. Information on the issue and possible solutions is gathered and evaluated.
2. Promotion. Solutions preferred by the actors are promoted to the relevant constituencies.
3. Prescription. Action is recommended.
4. Invocation. The decision is made to adopt the recommended solution.
5. Application. The solution decided upon is implemented.
6. Termination. The decision is made to bring the solution to an end.
7. Evaluation.

3. THE POLICY-MAKING PROCESS IN HONG KONG

The preceding sections define policy and identify processes and actors typically found in the policy-making process. This section analyses the Howlett and Ramesh's public policy actors as they are in Hong Kong. Then, using Lasswell's seven-stage framework, the performance of these actors in two case studies is considered – (1) the proposal to build a Superprison on Hei Ling Chau, and (2) Hong Kong public housing policy.

3.1 Policy actors

(1) "Elected officials"

In the Hong Kong context, there are no officials elected by democratic process. Under the Principal Official Accountability System (POAS), introduced by Mr Tung in his second term in July 2002, the executive comprises the Chief Executive, who is selected by a committee

appointed by Beijing, and the Principal Officials who are appointed by the Chief Executive himself.

Does it matter from a policy-making point of view that the executive is not democratically elected? It matters from the point of view of policy content, in that one major route by which the wishes of the people can be channeled into the policy process is lacking. Mr Tung's "election" platform was almost empty, and he had to closet with his team over the summer of 2002 to work out what policies to adopt. Once that was done, it was a further task to build up public support for the platform. The policy process thus started two steps behind the equivalent process in a democratic society. It is perhaps not surprising that the policy initiatives of Mr Tung's second term were so unsuccessful.

(2) "Appointed officials"

Much academic research has been devoted to discovering that the bureaucracy, nominally intended merely to implement policy, actually has a large role in making it. In Hong Kong, this was never in doubt. Under Hong Kong's colonial system, the Policy Secretaries were in fact officially policy-makers, openly combining this role with that of policy implementation. One merit of the POAS was that it sought to establish a policy-making cabinet of political appointees separate from the career civil service. Nevertheless, since the Chief Executive lacked a popular mandate, the political appointees themselves were hardly in a strong position. Indeed, they were arguably weaker than the civil servants they were supposed to supervise. Thus it seems that Hong Kong's civil servants continue to have no less influence over policy-making than their overseas democratic counterparts, and probably have a great deal more.

The Hong Kong Civil Service system derives from that of the UK. In particular, Hong Kong has adopted the former UK Administrative Officer (AO) system under which an elite corps of generalists rotates between policy-making jobs in different departments. Typically, postings last two or three years, and the AO is then sent on to the next job, where the policy content may have no relation to his previous work. The British AO system itself derives from deeper traditions of the "gentleman amateur", typically with a classics background, who was considered qualified to administer remote regions of the Empire in its heyday³. Through the process of public sector reform in Britain over the last two decades, the role of the AO has been diminished, much policy work being delegated to specialist agencies or dealt with by long term specialists. But Hong Kong retains the AO system. The quality of policy input from these powerful appointed officials is necessarily low since on the whole they lack deep knowledge of the policy areas for which they are responsible.

(3) Interest groups

Like every polity, Hong Kong has its interest groups. These are given especial prominence in Hong Kong's constitution by the functional constituency (FC) system by which half (30) of the legislative council (Legco) seats are elected. Accountants, lawyers, doctors, stockbrokers, various sectors of business, and other groups, some of them relatively minor, have Legco seats. Does this result in effective transmission into the policy process of at least the concerns of these favoured groups?

The FC system has had some success in this respect. It would appear doubtful that in a more democratic system, such groups as accountants, lawyers and doctors would have been able to resist external regulation of their affairs for as long as they have in Hong Kong. However, whether this is in the overall public interest, ie whether it results in optimisation of policy-setting from the community's point of view, is more doubtful.

Moreover, it may be questioned how effectively the FC Legco members actually represent even their own sector's interests. Some of the Legco seats, particularly those involving individual constituents such as the professions, see contested elections and candidates striving to identify and champion the needs of their members. In such FCs, the concerns of the sector have a good chance of being channelled into the policy process. However, many of the FC seats are uncontested, being in effect private bagatelles at the disposal of an individual or a small circle. In these cases, there would be little if any canvassing of sector's opinions.

Another important mechanism in Hong Kong for channelling expert opinion into the policy process is the advisory body. Hong Kong has some 400 of these bodies, most being committees on specific policy areas, such as the Transport Advisory Committee. One problem with these committees is that the members are appointed by the Government and the agenda may be strongly influenced by the Government. In such cases the policy input may not be very independent, and the committee may become a mechanism for the Government to promote its ideas to the community rather than the other way around. There are a number of other problems with the way the committees are constituted, for example some individuals are members of too many committees and so cannot spare much time to provide input to any one of them.

Outside the formal constitutional process, it seems that by far the most important local interest group in Hong Kong is that of the major leading businessmen. They seem to speak out in a coordinated fashion on issues affecting them, and visibly influence government policy⁴. Most are members of the committee that elects the Chief Executive.

At the next level, formal business associations such as the Hong Kong General Chamber of Commerce (which also has a Legco seat) have effective channels to reach the Government. Hong Kong is said to be an economic city rather than a political city; thus the voice of business is heard.

Hong Kong also has non-business interest groups, such as charities, activist groups and special interest groups such as environmentalists that seek to lobby the government. There are also traditional local groups, the *Kai Fong*. However, Hong Kong NGOs are typically not organised on a large scale and do not have the mass memberships that equivalent organisations have in developed countries. Most such groups in Hong Kong have a few tens or at most a few hundreds of members, while the UK Royal Society for the Protection of Birds, for example, has over one million members (albeit that the UK population is some nine times Hong Kong's). Some organisations formed for charitable purposes are subvented by the Government, or are even started by the Government. Investor associations in the US are private bodies, funded by its members; one proposal to start an investor association⁵ in Hong Kong requested funding by a statutory levy on stock market transactions. The consumer body, which in the UK is privately funded; the Hong Kong Consumer Council is a Government-sponsored body.

(4) Research organisations

Hong Kong has very few formal policy research institutes. There are numerous research centres and institutes in the universities, but their mission is primarily academic. In their individual capacity, academics may be co-opted to serve in policy-making roles in the Government, for example by secondment to the Government's Central Policy Unit (CPU). However, the CPU has only three members, and a small staff of civil servants. There is one policy research institute with full-time executive staff in Hong Kong⁶, but it is of small scale.

(5) Mass media

The mass media is of lowest importance among Howlett and Ramesh's five key actors, contributing, in their view, only occasionally and marginally to the policy process. How well does Hong Kong's mass media fill this modest role?

On the plus side, the print media are numerous and diverse - at least the Chinese press. Coverage of sensitive subjects, such as the Chinese leadership and Taiwan independence, has remained quite active after the Handover, confounding the expectations of many. Radio Television Hong Kong retains an independent viewpoint, notwithstanding the removal of its chief executive and pressure from some Chinese officials to turn it into a Government mouthpiece.

On the negative side, the English language press remains dominated by a single paper, which has removed a number of its staff who produced pieces that might have been viewed as sensitive to the Chinese leaders. Self-censorship is an acknowledged problem. There are only two television broadcasting companies, with a total of four channels, in the territory, leading to a rather narrow offering. Foreign ownership of television broadcasting companies is prohibited. And although there are numerous Chinese newspapers, this does not necessarily translate into plurality of view: there is a tendency for them to agree on the story for the day and the way it should be handled, competing instead on sensational items.

In contrast with, say the US or the UK, a career in the mass media is not well-regarded in Hong Kong. Consequently, the profession tends to attract young people, predominantly girls, who do not necessarily have the experience to challenge politicians. Investigative journalism is at a premium.

3.2 Case study (1) – Superprison

In 2004, the Security Branch proposed establishing a Superprison on Hei Ling Chau to replace various existing ageing small prisons and to provide more prison accommodation. The proposal met strong resistance from various groups within the community, and was aborted in August 2004. Following Lasswell's framework, the various stages in the policy process are briefly described below.

Intelligence-gathering.

The analysis presented to the public in the consultation papers can be summarised as follows. It was argued (1) that Hong Kong's prisons were overcrowded, (2) that the trend would worsen as the population expanded, (3) that many existing prisons were old and/or in valuable urban sites and could not be expanded, (4) that, following such examples as Singapore's Changi, a single very large prison – a Superprison – would be the best solution, and (5) that only two sites were available for such a prison, (6) of which one – the frontier region at Kong Nga Po – had development potential, leaving only Hei Ling Chau.

Although the above chain of reasoning might appear plausible, in fact most of these propositions were incomplete or misleading.

It is true (1) that Hong Kong's prisons are overcrowded, but a significant proportion of the inmates are Mainlanders without valid visas – a low-risk category of prisoner not requiring high-security detention on an island. (2) The trend might not get worse, or not rapidly worse, since Hong Kong's population growth is slowing, and the future course of sentencing policy is uncertain. (3) Some existing prisons, particularly those outside urban areas, could be expanded – and in fact the Government is now understood to be examining this obvious and low-cost option. (4) It true that some overseas jurisdictions

are building large-scale prisons, but others are moving in the opposite direction with an emphasis on rehabilitation within the community and countering recidivism, at least for less serious crimes.

Apparently, the Planning Department, when asked, had provided only two possible sites for a Superprison (5). However, it is likely that there are more, for example Pak Nai or the former military site Burma Lines. It was never explained what the mysterious “development potential” of the frontier region was. And choosing Hei Ling Chau, right next door to Disneyland and in an area for tourism designated in a separate government exercise, as the site for a prison, appears grotesque.

Finally, the Superprison was to be very expensive, at HK\$12 billion. Since the prison was to be on an island, fixed access via a bridge or tunnel had to be provided. And the costs would not only be at the establishment stage; maintaining and supporting such a remote facility would also involve costs. So from a cost-effectiveness viewpoint, the Government’s solution appeared unattractive – particularly at a time when the Government’s budget was in deficit.

Promotion

The solution preferred by the Government – Hei Ling Chau – was promoted to the public. However, the exercise was rather unidirectional, in that only the one option was put forward, and the concerns raised by green groups and the rest of the community were not convincingly addressed.

Prescription

The recommended action was to proceed with the development of the Superprison via a site feasibility study. Again, only one site – Hei Ling Chau – was subject to the detailed assessment. Thus the Government attempted to channel public debate into consideration of ways and means of tackling the problems of the Hei Ling Chau site, rather than into comparison of various possible sites – let alone consideration of whether a Superprison was in fact needed at all.

The other stages in Lasswell’s system were not carried out because the Superprison project was aborted.

Analysis

The main failures from a knowledge point of view in the Superprison case were as follows.

1. The Government was faced with a complex of perceived issues centring on prison overcrowding and prison ageing. Its response to this complex of issues was to come up, in effect, with a single option – the Superprison – rather than exploring other options, or, perhaps more importantly, re-examining the supposed issues to confirm their seriousness. The thought process was thus truncated.
2. The Government worked its idea up to a fully-fledged concrete proposal - namely a Superprison of certain dimensions in a particular location, Hei Ling Chau – before consulting the public. The public thus effectively had no chance to input on the perceived issues or other possible options. The consultation process was thus truncated, forced to focus on a pre-conceived solution.
3. Insufficient attention was paid to policy objectives being pursued concurrently by other organs within the Government. The area of Lantau concerned was in fact earmarked for its tourism potential. The thinking within the Security Branch was thus too narrow.

4. The policy actors – the Security Branch – did not receive sufficient information support from the relevant branch of Government – the Planning Department – since the latter only provided information on two possible sites.

5. The project was not realistic from a financial point of view. It was a very big ticket item, at a time of financial stringency. Sooner or later it would have been challenged, if not within the Government then by the taxpayers' representatives in Legco. The proposal did not meet the most basic value-for-money test.

6. From a practical viewpoint, the project also lacked credibility. The problems in manning and supplying a very large facility on a remote island were not acknowledged. For example, it is doubtful that one fixed access route would be sufficient: a second bridge or tunnel might well have been felt necessary, eg to provide a "fire escape" for prison staff in the event of a riot.

Overall, the Superprison solution may be characterised as an administrative response to a policy question. The knowledge resources within the Government were not tapped to develop better options for solution, either because the mechanisms or the will to do so were lacking. Even more importantly, the knowledge resources within the community were not used.

One positive outcome from the Superprison experience is the performance of the green groups in opposing the proposal. Although very small and with limited resources, the groups coordinated their lobbying and wrote articulate rebuttals of the Government's position. To a limited extent their points were picked up by the media.

3.3 Case study (2) – Public housing policy

In the 1950s, Hong Kong was a poor developing society flooded by immigrants from the Mainland. The overriding need was to provide shelter quickly for the masses. And following the Shek Kip Mei fire of 1953 which destroyed squatter huts, the Government decided on a simple policy solution. It would build public housing. The early public housing flats were small and extremely basic, but people were pleased to get them. So the policy was an early success.

Unfortunately, the public housing policy was never sufficiently re-examined in the subsequent decades as Hong Kong became a developed rich society. Income and wealth levels rose, and expectations rose accordingly. People wanted bigger and better quality homes in better locations. They wanted to own their homes. So the factors that prompted the original policy decision had changed completely. Ideally there would have been a rethink of the policy. But the Government kept on with its original policy solution – providing public housing – and tried to adapt it by building bigger and better dwellings in better locations. Eventually, the Government built public housing in a prime harbour view location – Hung Hom. And the Government also became a developer, building homes to sell at subsidised prices. However, this still failed to meet needs, and at the same time crowded out the private sector. Moreover, the recipients of this vast outpouring of welfare constituted a large segment of the population, a segment not in fact poorer than dwellers in private rental housing.

Thus Hong Kong's public housing policy, initially a success, eventually became by several measures a failure. This happened because there was no rethink of the policy solution when the conditions it had been designed to meet changed. The sixth and seventh steps of Lasswell's process, termination and evaluation, did not take place.

CONCLUSION

This brief article explores the policy-making process in Hong Kong. It suggests that there are numerous deficiencies in the process, deficiencies which are hardly compatible with the claim that Hong Kong is a knowledge society. Most of these deficiencies are linked to the governmental structure. The lack of a directly elected legislature and executive results in a policy vacuum. Attempts by the Government to fill this vacuum with internally-generated ideas (the Superprison) or by perpetuating existing policy solutions (public housing) are not very fruitful. The situation is exacerbated by the underdeveloped state of private sector policy actors, such as think-tanks and interest groups.

Perhaps the single most important step to improve the policy-making process in Hong Kong would be to introduce direct elections for the Chief Executive. A competitive election process would at least result in the formation of a policy platform which was supported by the electorate. In the absence of the above and in the interim period, Hong Kong will benefit from the building up of some form of knowledge management capacity in the form of public and private sector think tanks. The need to build up such a capacity was identified and acknowledged by the Central Government in Beijing. It is now up to the Hong Kong SAR Government, the business community, community groups and political parties in Hong Kong to recognise this need and to work together to put a "Public Policy Knowledge Management Process" into practice.

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1. Quoted in *The Policy Process in the Modern State*, Michael Hill, 1997, page 6
2. Quoted in *Studying Public Policy, Howlett and Ramesh, 1995 ("Howlett")*, Page 6
3. In *The Lost Victory*, Correlli Barnet traces the roots of this tradition back to the eighteenth century
4. For example, following statements by leading property developers during the summer of 2001, the Government suspended sales of Home Ownership flats. The decision not to prosecute Sally Aw, on the grounds that it would affect a major Hong Kong business is perhaps a further illustration.
5. The Hong Kong Association of Minority Investors(HAMS), David Webb, webb-site.com
6. Hong Kong Policy Research Institute. Depending of definition, there are arguably a few small institutions, for example Civic Exchange.