



# **Global Lessons on Regional Information and Communication Technology Strategies**

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**Prepared on behalf of the Bay Area Council  
By Bonocore Technology Partners, LLC**

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# Contact Information

For more information about this report, please contact:

**Jim Wunderman**, President and CEO, Bay Area Council  
201 California Street, Suite 1450  
San Francisco, CA 94111  
415-946-8701  
415-981-6408 (F)  
[www.bayareacouncil.org](http://www.bayareacouncil.org)

**Joseph J. Bonocore**, President & CEO, Bonocore Technology Partners, LLC  
P.O. Box 673  
Corte Madera, CA 94976  
415-924-9992  
415-924-9993 (F)  
[www.bonocore.com](http://www.bonocore.com)

# Introduction

This report was prepared on behalf of the Bay Area Council by Bonocore Technology Partners.

**The Bay Area Council** is a business- sponsored, CEO-led public policy organization founded more than 50 years ago to promote regional economic prosperity and quality of life. The Council presents a strong united voice for more than 200 major employers throughout the region to help shape public policy. The Bay Area Council acts on issues related to transportation, environmental quality, economic development, water policy, education and workforce preparation, and telecommunications infrastructure.

**Bonocore Technology Partners, LLC** is a strategy & operations management consulting firm based in the Bay Area. Many of its clients are in the high technology and telecommunications industry. Prior to founding the firm, Joseph J. Bonocore, President & CEO, was Partner & National Industry Director for Telecommunications at KPMG and also was a Managing Partner at Coopers & Lybrand.

As with many projects, this project began with a simple question:

**“Is the Bay Area’s Telecommunications Infrastructure keeping pace with that of other international and domestic regions, such as Korea and Japan?”**

This question then leads to other more basic questions that have a direct impact on the Bay Area economy:

- “Will the Bay Area continue to be the place where Information & Communication Technology companies reside; relocate; and expand their business if we do not have the most advanced telecommunications infrastructure and business climate for them to grow?”
- “Will large company users of Information & Communication Technology products and services continue to reside; relocate; and expand their business in the Bay Area if we do not have the most advanced telecommunications infrastructure and the business climate for them to grow?”

Broadly defined, the International Information & Communication Technology Sector of the Bay Area Economy can be defined as the revenue provided by a wide number of present and emerging products and services that are technology based. They are dependent on a “world class” telecommunications infrastructure to be delivered. In the marketplace, these products and services are widely known under a variety of names. Examples in the service sector include: e-commerce services; e-banking services such as direct deposit of payroll and automatic bill paying; and various internet and mobile services such as the host of new data services being offered by mobile carriers over the last few years. The software and hardware sectors of the market are also significant.

Given these open questions, our task was to review what other regions may have done to help improve their telecommunications infrastructure. Our findings are contained in this report. We have also included recommendations for proceeding.

# Our Approach

We reviewed a number of International and United States Telecommunications Infrastructure strategies prepared by various organizations including:

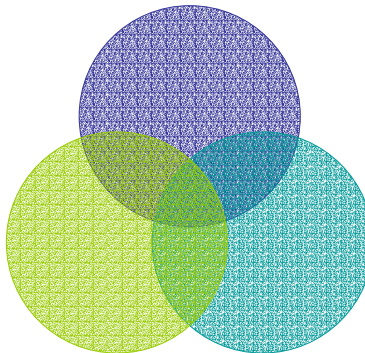
- Two strategies that were completed previously within the Bay Area
  - “Benefiting From Advanced Telecommunications And Information Technology In the Bay Area” The Boston Consulting Group, November, 1997
  - “Telecommunications Infrastructure Partnership- A Vision Statement”- Telecommunications Infrastructure Partnership Project (TIP) Task Force (Bay Area) June, 1997
- Three studies that were completed with the United States by/for State Governments
  - “Enhancing California’s Competitive Strength: A Strategy for Telecommunication Infrastructure”, California Public Utility Commission November, 1993 (Pete Wilson)
  - “New Jersey Telecommunications Infrastructure Study-“Opportunity New Jersey” 1991, D&T (Bell Atlantic) – “Opportunity New Jersey”
  - “Strategic Plan for a Statewide Telecommunications Infrastructure”, State of Colorado, February, 1998
- Five International Strategies
  - Queensland Government ICT Strategy Report, 2003
  - “ A Telecommunications Strategy for Ontario, 2004
  - “e-Japan Strategy II” , 2003
  - “Toward a Digital World, KISDI” Korea Information Strategy Development Institute-2004-Developing framework for “e-Korea” & the Telecommunications Structure to support it
  - “Digital 21 Hong Kong Telecommunications Infrastructure Strategy”- Government of Hong Kong. 1998,2001, and 2004

We then researched updated activities on these strategies where they were available and developed our findings & recommendations for this report.

# Our Findings

- **Most previous regional studies completed in the United States have looked at the Telecommunications Infrastructure issue as a “connection issue” and a “regulatory issue”.** That is, they focused on a subset of the problem i.e. the need for defining the connection points required (libraries; schools; homes; businesses; etc.) and estimated the costs. They also focused on defining the regulations that were necessary to change laws to allow for “telecommunications competition”. Many times the vision for “connections” was not realized because the costs were too great and the money could not be identified to execute the implementation plan. These strategies did not plan for the potential for the economic expansion of new products and services through the significant potential of the Information & Communication Technology marketplace.
- **The vision of many of the successful regional strategies was build around three key building blocks to a long term successful Information & Communication Technology sector in their economy.**

## Advanced Telecommunications Infrastructure



**E-Business /E-Government Applications**

**World Class ICT Center for International Commerce**

- An **advanced telecommunications infrastructure** as the foundation and enabler for the other two goals that follow;
- An **e-business and e-government applications** within the region to upgrade their capabilities; reduce cost and make them more competitive in the international marketplace; and

- A **world class international center for information & communication technology** commerce within their region as a long-term driver of economic growth.

Key examples are the strategies being executed by Hong Kong, Korea, and Japan. In all three cases, the region's vision was to build a strong and vibrant information & communication technology segment in their economy. This was to be accomplished by implementing three key projects:

These regions are well aware of the emergence of the "New Economy" which is based on two major trends:

- The first is the growing trend toward globalization and the increasing interdependence between the economies of Europe, North America and East Asia in terms of investment, trade, research and development.
- The second factor is the emergence of a new integrated set of information technologies that integrate computers, telecommunications and media together in digital form and is dramatically altering the economic calculus of production and distribution throughout the industrial economies.

Together, these key factors are reshaping the economies of both the industrial and industrializing regional economies and changing much of the accepted wisdom about how they operate.

- **In each case the Governments are leading the effort in producing the strategies and also leading in the implementation by assisting in funding and examples of action.**

In each of the cases that we studied, the Governments provided the leadership and the direction to the effort. In the case of **Hong Kong & Japan**, they defined and limited their roles to:

- Furnishing overall leadership & direction;
- Implementing regulatory reforms and competition policies (focusing on market competition)
- Motivating the activity of private sector (especially the adoption of e-commerce);
- Implementing minimum investments and gap remedies, as well as guarantee security; and
- Promoting more efficient government and the efficient distribution of resources (including implementing e-government).

Each of the regions assigned a regional organization to be responsible for the overall project. For example, in Hong Kong, the responsibility was given to **Information Technology and Broadcasting Bureau** and in Korea the responsibility was given to the **Korea Information Strategy Development Institute**. Each of these organizations was responsible for execution and updating of the strategy. They are also responsible for measuring its success against predetermined targets.

One task in these strategies was to identify & implement regulatory reforms and competition policies (focusing on market competition). They identified and "framed" the regulatory issues that should be addressed by the regulatory authority so that the Governments could review the issues and consider the necessary changes to help improve the climate. In most cases, the changes were made.

In one example in the regulatory area, Hong Kong believed that they have a world class telecommunications infrastructure and a critical mass of talents in program production. This made them well positioned to be a regional broadcasting hub.

In their strategy, they decided to create an environment that is conducive to investment and innovation in broadcasting and multi-media content production. This technological advance had to be supported by a flexible and facilitating environment.

The government therefore reviewed their broadcasting regulatory regime to ensure that it was in step with technological developments and market demands.

They enacted the Broadcasting Ordinance in mid-2000. Broadcasters were allowed to choose any technically feasible means of transmission for delivering their services to consumers. The four categories of television services under the Broadcasting Ordinance are domestic free, domestic pay, non-domestic, and other licensable television services. They are now regulated in accordance with their nature and pervasiveness rather than their transmission mode.

Hong Kong believes that this technology-neutral piece of legislation provides a fair, open and business-friendly regulatory environment that is conducive to investment, technology application and innovation in the television industry.

Also, each of the regional strategies includes the commitment of funds that provide support to the local IT industry through a variety of funding mechanisms and to promote investment in the local IT industry. Each of the governments are financing technology development projects and research efforts that are undertaken by the industry and business sectors and in academia through various channels including:

- An **Industrial Support Type Fund** which finances projects beneficial to the industrial and technology development. As an example, in Hong Kong, this fund totaled approximately \$274m in 1998- 99) ;
- An **Applied Research Type Fund** which seeks to promote a culture conducive to technology venture by providing seed capital for local technology companies (As an example, in Hong Kong, this fund totaled approximately -capital of \$750m as of 1998); and
- A **Research Grants Type Fund** which finances research projects by Universities (As an example, in Hong Kong, this fund totaled approximately \$161m for computer science and IT projects since 1991).

In the last few years, Hong Kong initiated another **Innovation and Technology Fund (ITF)** for upgrading their technology and infrastructure with an injection of \$5 billion to finance specific projects which will contribute to innovation and technological upgrading in their manufacturing and service industries. Cyberport (which we will discuss later in this report) and Hong Kong's wireless development center was set up with some money from the ITF.

As mentioned, another key objective of the strategies was for the Governments to be committed to leading by example, especially in the use of e-business, both in conducting internal business operations of the government and in delivering public services to the businesses and community on an " anywhere and anytime" basis. In Hong Kong, by 2001, 65% of public services already had an e-option. That was increased to 90% by end 2003. This project will be discussed further under another section of this report.

While aggressively taking all of the tactical steps that Hong Kong and Japan were taking, many of which outlined in this report, Korea is also looking at a number of additional strategic questions. These are related to how these changes will affect their people, their culture, and their society.

For example, in Korea, extensive studies on the future information society were conducted with the research goal of examining the vision and direction of Korea, rules for a healthy society, and realization of the information society. In particular, by determining the essential impact of their changing society and its future direction, they are making concerted efforts to establish a national strategy for creating a knowledge-based society and building the future of Korea.

Based on the positioning of information technology as the basic infrastructure of society, they believe that there is a need to develop a national strategy with a long-term view for national development at a time when Korean society is experiencing rapid changes through the paradigm shift. For this purpose, a worldwide network of researchers and experts was formed for long-term understanding of the technological changes occurring in their society as well as creating a clear vision for Korea in the future.

- **Each of the strategies had active and full participation & cooperation from all key stakeholder organizations in the international regions.**

The international regions understand the need for active participation and cooperation from all the various stakeholders in their regions to achieve success in this most important effort. The reports clearly indicate that no single entity of the economy can do this job without cooperation from the others. There is integrated planning and follow up which is intended to maximize all the resources of the region toward a common goal. The stakeholders included the government, business, educational institutions, investors, citizens etc.

- **Our brief review suggests that this market-driven approach being taken by the Hong Kong, Korea, & Japan is working.**

Hong Kong, Korea, & Japan have been implementing their Information & Communication Technology market strategies that are built on a strong telecommunications infrastructure for approximately six to eight years. Each of them follows up with an annual update report to measure their progress.

As mentioned, Korea, for example, manages their ICT Economy on an annual basis. In their report, the Korea Information Development Institute states that as of 2005, the ICT industry's contribution to the Korean GDP stands at 47%. They also report that Korea is planning for digital convergence in its ICT industry. They have analyzed areas where digital convergence has become important in and out of Korea such as home network, intelligent robot, IP TV and WiBro.

- **Each of the key international strategies generally focused on the following three areas:**
  - Promote/ enhance the e-business and e-government environment in the region
  - Building an advanced telecommunications Infrastructure
  - Building the region's reputation/ability as a premier international information & communication technology center
    - Develop the region's workforce for the information economy
    - Attracting I & CT research & development activities to the region

We will discuss each of these areas with examples of how the Regions are addressing these issues.

- **Promote/ enhance e-business and e-government environment in the region.**
  - **Creating the environment within the region to encourage all the stakeholders to be trained in; invest in; and implement e-business and e-government applications**

In each of the strategies, programs were identified and implemented to encourage and promote the use of IT and e-commerce and e-government across the private sector and government sector within the region, especially in small and medium sized enterprises, including establishing public recognition awards. .

For example, The Hong Kong Computer Society secured \$2.66 million from the Industrial Support Fund to develop a process for rewarding entrepreneurs and individuals that demonstrated achievements in IT. The first awards were made in 1999.

Also, in Hong Kong, the government led the way to foster e-business by proclaiming goals related to implementing an e-government strategy. Specific private enterprise applications were not defined but incentives were defined for companies to adopt e-business as a way of doing business. However, the government did lead by example in implementing their e-government applications.

Since 1998, Hong Kong has adopted an active outsourcing strategy for the provision of ICT services within Government. This has helped enlarge the delivery capacity, accelerate the delivery of ICT solutions, and create a market of sufficient size to encourage the development of the local ICT industry. By 2001, they achieved their target of outsourcing two-thirds of new Government IT projects each year.

Through implementing the I&CT strategy, Hong Kong Government became a significant supporter of the private sector I & CT local business development effort through its e-government outsourcing program. They had an initial target of meeting 90% of amenable public services with an e-option. About 88% of their new IT projects in 2002-2003 were outsourced. Today they continue to press on with their e-government strategy and expand their outsourcing policy.

The Hong Kong Government currently provides support through various institutions to assist technology development by the industry and business sectors, especially small and Medium Enterprises. They include technical development and advisory services provided by the Hong Kong Productivity Council, the Hong Kong Industrial Technology Centre, as well as the Science Park.

In Japan the story is the same. Their strategy was to define national priority e-business applications and to implement those applications first. The Japanese national priority applications were:

- Medical services
  - Food
  - Lifestyle
  - Small & medium enterprises
  - Public service
- **Building an advanced telecommunications Infrastructure**

Many of the regions are working to successfully develop the necessary infrastructure for delivering e-business and e-government. This includes telecommunications infrastructure, regulations and legislation, public key infrastructure and certification authorities, and language interfaces.

A good example is The Cyberport in Hong Kong which captured global and local attention as it was completed between early 2002 and end 2003. At the time, Cyberport had the state-of-the-art information infrastructure and the networks connected to the different areas of the integrated Cyberport campus and link the campus with the rest of the world.

It was an example of how government and the private sector could work in an effective, timely manner to integrate networks, facilities, and systems to the benefit of the economy.

The initial scalable bandwidth capacity was expected to see Cyberport tenants comfortably through their first quarter century of rapid digital development. This was complemented by a wide range of high-tech facilities such as a multi-media laboratory, content centers, studios, and media conference theatres.

In the center of the Cyberport is a Cybercenter where professionals enjoy a wide range of cyber-related retail and entertainment facilities and where the public experiment with innovative IT applications through the technology-themed retail and entertainment facilities. The Cyberport infrastructure supports and facilitates e-business in all aspects.

In addition to e-business companies, working 24 hours a day and seven days a week at the Cyberport there are also 'start up' companies developing new technologies, applications, services and content in many different fields.

For example, the center houses a Digital entertainment- Digital Media Center which was funded by Cyberport and the Innovation and Technology Fund. Multi- media creators can use the facilities of the center to make their own content and this facility is spawning new companies

- **Build the region's reputation/ ability as a premier international information & communication technology center.**

Each of the regions developed an overall business and marketing strategy for leadership in the information economy of the 21st century. They developed a marketing strategy for enhancing public and international awareness of their image as a leading digital city, an e-business-friendly economy, and a hub for key exploiting technologies and applications.

Some strategies included the development of a marketing program to promote their image including activities such as road shows, press conferences, exhibitions, trade fairs, advertising and various international forums. Some also have regional websites.

Hong Kong also used their brand for all e-business and IT related marketing material, so as to strengthen the brand both locally and internationally.

Early on, to enhance their reputation as a technology center, Hong Kong also entered into collaborative arrangements in the form of a Memorandum of Understanding (MOU) or bilateral agreement with six partner economies which were advanced in the use of ICT. These regions were Canada, Australia, the United Kingdom, Finland, India and Israel -to enhance cooperation and exchange in the field of IT and telecommunications.

Korea expanded their active participation in major international organizations such as the Asia-Pacific Economic Cooperation (APEC), World Trade Organization (WTO), Organisation for Economic Co-operation and Development (OECD) and the Association of Southeast Asian Nations (ASEAN) as well as establishing export strategies and IT trade agreements for export of domestic technologies.

For Korea, entering the new millennium, the digital divide became a challenging issue for international community. In keeping with the goal set by the UN and ITU to build a strong and prosperous information society, cooperative research projects and studies are being conducted with the primary aim of strengthening cooperation in the Asia-Pacific region and to establish related initiatives for the development of information and communication.

Other Korean initiatives included preparatory studies for trade strategies of telecommunications services in accordance to the WTO agreement, a project to bridge the digital divide in developing countries through the establishment of the Development Gateway Foundation – Korea Training Center (DGFKTC) with the World Bank, programs for the World Summit on the Information Society (WSIS), research on technology applications, and policy direction of information technology with the OECD.

#### **Attract/assist in the growth of I&CT Companies in the Region**

Each of the strategies included a task to attract and assist in growing new information & communication technology companies into the region.

While part of this issue was addressed by a good marketing and promotion campaign, it was clear in many of the strategies that they also included addressing other issues such as environment, good working conditions, the best technology, a good education system, and many other factors would be important in attracting and retaining these companies and their employees.

The strategies tried to build on the regions' strengths and also tried to improve their weaknesses where they could.

Some examples in the strategies that were emphasized included:

- Hong Kong believes that they have a major competitive advantage in the film industry. Part of their updated strategy was to develop an environment which is more conducive to investment and innovation in multi-media content production to take advantage of this opportunity. They built out a multi-media lab area in Cyberpoint and outfitted it with all the latest hardware and software necessary to create the latest in multi-media creations. All of this was funded by the Innovation and Technology Fund. Applications were accepted from potential new companies to utilize the space and new multi-media companies were born.
- Hong Kong also saw a significant opportunity in local development and hosting of innovative and attractive Internet sites, especially those that contribute to developing Hong Kong as a gateway for electronic commerce with the Mainland of China.
- NanoChina was launched to provide a wide range of market-specific nanotechnology information services for businesses, researchers and the public sector in China. NanoChina will act as a bridge between the nanotechnology activities that are taking place in China and the rest of the world, with the aim of

disseminating information and setting up nano-business and networking opportunities.

**Leverage the region's strengths in exploitation of enabling technologies.**

Each of the regions defined specific areas in the ICT market where they thought they had market advantage and could take a significant portion of the world's market share.

For example, In the case of Hong Kong, they have their eyes set on the following goals. They believe that they can win in these four areas because of their advanced telecommunications infrastructure and the significant investments that have been made in these technologies.

- Develop next generation wireless technologies; (Hong Kong has high mobile penetration and early issuance of 3G)
- Exploit smart card technology ( strong e-business environment and citizens card usage)
- Development and deployment of digital terrestrial television ( flexible government policies and multiple TV options)
- Ensure Hong Kong's active participation in the development of next generation of Internet technologies ( significant regional investments; telecommunications infrastructure)

In India, their national goal is to be an Information Technology power and one of the largest generators and exporters of software in the world in the next ten years.

To accomplish this, India has worked to develop into one of the largest cost-competitive technical workforce nations, conducive to foreign investment environment. This has been aided by a very stable democratic environment over the last 50 years of independence.

India supplemented this by creating an organization called Software Technology Parks of India (STPI). STPI's role began in the government's shadow but it acted more entrepreneurial, working directly with software companies and functioned like a corporation. STPI did not function like a typical government department. The role of STPI was more of a service provider that could be leveraged by software companies.

- To establish and manage infrastructure resources such as Data Communication facilities, Core Computer facilities, Built-up space and other common amenities.
- To provide 'single window' statutory services such as project approvals, import certification software valuation and certification of exports for software exporters.
- To promote development and export of software services through technology assessments, market analyses, market segmentation and marketing support. To train professionals and to encourage design and development in the field of software technology and software engineering.

The objective was to help create new software companies and grow bigger software companies in India.

### **Develop the region's workforce for the information economy**

Each of the international strategies addressed the important issue of training the region's workforce for meeting the job requirements of that I&CT companies need. The strategies define the training requirements gap as large and the problem of meeting this need significant.

Generally, an ICT task force was assigned and asked to address the question of ICT staff supply in the regions. The task force was usually comprised of representatives of the ICT industry, employers, professional bodies, industry associations and providers of training and education. It provided a forum to channel information from the demand side of the staffing equation to the supply side, and made recommendations on how to strengthen their ICT staff supply. The key role was to identify and drive new initiatives that bridged the ICT staffing gap in the region.

As an example, Hong Kong developed a 5-year IT education plan called "Information Technology for Learning in the New Era". The plan called for capital spending of HK\$3.2 billion and annual recurrent spending of over HK\$550 million. Part of this plan included:

- Charging the **Hong Kong Vocational Training Council (VTC)** to monitor the market demand for required skills in IT and communications, review the present programs regularly, and propose new ones in consultation with relevant industry bodies. New programs were introduced in the last few years to add needed skills and expertise to the marketplace. These skills included game design, 3D animation, and video production and multi-media development.
- Creating "**Hong Kong Education City**"- which is Hong Kong's web Education Portal which among other things acts as an online ICT training guide for teachers.

### **Attracting I & CT research & development activities to the region**

Each of the strategies saw the need to encouraging research and development in their region as a key to the long term success of their goal of a strong and vibrant information & communication technology sector within their economy.

For example, Hong Kong established the Hong Kong Applied Science and Technology Research Institute, which is growing into a very prestigious research organization. The Applied Science & Technology Research Institute has identified communications & Internet applications as its major areas of focus.

The National Center for Nanoscience and Technology of China is a newly established non-profit legal research entity and a state-run technological platform and research center for nanoscience and technology equipped with advanced facilities in nano-fabrication and characterization. It is located in the Zhongguancun Science Park, Beijing. It was first established jointly by the Chinese Academy of Sciences, Peking University, and Tsinghua University and will be open to the scientific community of China.

The Korea Information Strategy Development Institute (KISDI) sets and helps in the implementation of the national agenda for information technology in Korea. They are a research institute and are involved in the analysis of various national issues, expansive theoretical and practical research, policy recommendations as well as international cooperation. In addition, as one of the foremost government sponsored research institutes, KISDI plays a critical advisory role to the government for all IT policy issues in Korea.

In Korea, the construction of the Trans-Eurasian Information Network (TEIN), a research network linking Asia and Europe, is being built to strengthen cooperative ties for research between the two regions. The APII testbed project was successfully launched for the deployment of high-speed lines that connect the economies of the Asia-Pacific.

Also as part of the initial Hong Kong Strategy in 1998, the Chief Executive's Commission on Innovation and Technology recommended a number of measures to strengthen technological collaboration between Hong Kong and the Mainland, including cooperating with the Mainland in the area of technological support infrastructure including joint R&D, partnership between the future Hong Kong Science Park and its Mainland counterparts, and technological exchanges between universities.

In Hong Kong, a targeted amount of the HK\$5 billion Innovation and Technology Fund has been earmarked to encourage private sector collaboration with universities in technological research and development.

One example of how research money is being spent in Hong Kong is the how they issued a solicitation theme sponsored by the Innovation and Technology Fund on "media technologies for digital entertainment" to specifically invite applications for conducting research and development on digital entertainment. Seven applications totaling HK \$16.8 million were approved under this theme. They continue to encourage research and development activities in this manner.

# Our Recommendations

- **The Bay Area Stakeholders should organize to evaluate the Bay Area's position as an International leader in the International Information & Communication Technology Marketplace.** The study suggests that a number of International Regions are very aggressive in developing and executing strategies to compete with the Bay Area in this area. While the Bay Area has significant strengths in this marketplace, it appears that other regions are gaining ground quickly and a regional evaluation is appropriate.
  
- **The goal of the evaluation should be to help the Bay Area to retain its competitive edge by emphasizing the importance of using information & communication technology (ICT) as a leading edge to drive the Bay Area's overall economic expansion.**

Any study that the Bay Area initiates should have as its overall goal the expansion of the Information & Communication Technology economy in the Bay Area.

The specific objectives should include:

- Promoting an e-business and e-government environment within the region
- Building an advanced telecommunications Infrastructure
- Building the region's reputation as a premier international information & communication technology center.
  - Developing the region's workforce for the information economy; and
  - Attracting I & CT research & development activities to the region

By targeting the study on economic value for investing in the telecommunications infrastructure and other efforts needed to build a strong Information & Technology Economic base, the Bay Area Council will be doing a great service to the region.

Hong Kong, Korea, and Japan approached their studies this way because they saw the real emerging needs which required the international flow of goods and information between regions and they wanted to capitalize on those needs.

For example, they saw the growth of international needs emerging for:

- Buying products and services from anyone, anywhere, any time and at lower prices;
- Selling more easily to customers beyond their traditional markets;
- Relying on IT tools in the workplace to enable them to work more effectively and efficiently;
- Communicating with their families, friends, and colleagues over long distances more easily and at less cost;
- Sharing their knowledge and experiences with a wider global audience more easily;
- Having access to a wealth of information and knowledge to enhance their own personal, education, social and working lives; and
- Having their own unique choices and needs for products and services delivered more easily and efficiently.

- **Benefits to completing this evaluation of the current state of the Information Communication & Technology Industry in the Bay Area & develop a plan for meeting the international competition.**

We believe that there are a number of reasons for the Bay Area Council complete this study as soon as possible. The Bay Area Council could take the leadership role in:

1. **Educating all the regional stakeholders in some key factors that are reshaping the Bay Area Regional economy and changing much of the accepted wisdom about how the economy operates including:**
    - a. How we must cope with the competitive realities of the global economy; and
    - b. How we must learn to take better advantage of the opportunities afforded by the new information and communication technologies.
  2. **Mobilizing the Bay Area resources (business, government, education, capital, etc.) to develop a region wide plan to take advantage of the future emerging Information & Communication Technology market opportunities while improving our competitive position.**
    - a. As demonstrated by the Korean example, preliminary research indicates that Hong Kong, Korea, and Japan have made some significant progress in executing against their plans in this area in some key industries segments. This was only accomplished by a coordinated effort of business, government, universities, and capital sources working together to make it happen under an integrated plan.
    - b. The Bay Area has many valuable assets in this area that can be built upon if organized and directed. For example, we have a number world-class Communication & Technology Industry companies headquartered here; a significant Venture Capital base; excellent Universities and other resources that can be mobilized to provide a significant amount of resource to compete globally.
  3. **Marketing the Bay Area as an ICT “destination” and a place “to be”.**
    - a. The Asian Regions have also proven that there is great potential of attracting new ICT businesses and research & development activities to their regions if coordinated effectively. This is another topic where the Bay Area leadership could provide a significant amount of value to the study and the resulting implementation.
- **Recommended principles to use in guiding the project:** Based on our experience, we would suggest that the following principles be used in organizing the project to achieve strive for the best results on the project.
    - **Stakeholder Participation:** We recommend that the strategy be developed by key knowledgeable executives representing “stakeholder” organizations within the Bay Area. This would be accomplished through the vehicle of convening 6 Stakeholder Advisory Committees facilitated and guided by our firm. This will allow for ownership of the recommendations and will enhance the possibility of implementation.

- **Market Focused & Issues Driven:** Our research in other international regions indicates that the most “traction for action” resulted from those strategies that were driven by market factors through shareholders who were focused around a set of relevant issues. Examples are discussed later in this report.
- **Identify Examples:** We also propose the identification of examples in the discussions (both within the region and international) so that there are concrete situations that can be identified and benefits can be measured. With this, we can work with reality and not assumptions.
- **Present Ideas from other regions/sources when possible:** We would like to identify what other areas and other regions are doing. What has worked for them? Will it work for us?

## Further Reading

- Digital 21 Strategy: Hong Kong (2004)  
[http://www.info.gov.hk/digital21/eng/strategy2004/strategy\\_main.html](http://www.info.gov.hk/digital21/eng/strategy2004/strategy_main.html)
- E-Japan Strategy II Acceleration Package (Provisional translation)  
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- World Economic Forum’s “Global Information Technology Report 2006-2007” is available in several forms at  
<http://www.weforum.org/en/initiatives/gcp/Global%20Information%20Technology%20Report/index.htm>
- A brief about the Waseda University e-Government Ranking report is available at  
<http://www.egovblog.com/2007/03/01/2007-world-e-government-ranking-from-waseda-university/>