

**The Canadian Trade
Commissioner Service**

Canada Trade Mission to China and Japan

Dates:	April 7-12, 2013
Cities:	Shanghai, Hangzhou (China) and Tokyo (Japan)
Focus:	Information and communication technologies: <ul style="list-style-type: none">• enterprise solutions and mobile applications (China and Japan)• medical imaging (Japan only)
Led by:	The Honourable Ed Fast, Minister of International Trade and Minister for the Asia-Pacific Gateway

THE MARKETS

CHINA

China is playing an increasingly important role in the world's information and communication technologies (ICT) market. The country is now the largest telecom market in terms of the number of users, and also has the largest number of Internet users in the world. The following table gives a brief overview of the market's development in China over the past five years:

China's ICT market	2008	2009	2010	2011	2012
Internet subscribers (m)	298	384	457	513	564
Internet penetration rate	22.6%	28.9%	34.3%	38.3%	42.1%
Mobile Internet subscribers (m)	N/A	377	515	634	764
Mobile subscribers (m)	641	747	859	986	1112
Mobile phone penetration rate	48.5%	56.3%	64.4%	73.6%	82.6%
Land-line subscribers (m)	340	314	294	285	278

Source: Ministry of Industry and Information Technology, China

China's primary ICT clusters are located in the Yangtze River Delta (Shanghai and its surrounding cities: Hangzhou, Suzhou and Nanjing), the Pearl River Delta (the Shenzhen-Guangzhou-Zhuhai corridor), and the Bohai Economic Rim (Beijing and Tianjin).

ICT strengths in the Yangtze River Delta lie in enterprise solutions, digital media, integrated circuits and wireless technologies. This region boasts many local flagship companies, such as Alibaba (in Hangzhou), Insigma (in Hangzhou), and Shanda Games (in Shanghai). Shanghai and Hangzhou are the ICT sector's two main driving forces in the Yangtze River Delta.

JAPAN

Japan is the world's second-largest ICT market and home to several global leaders (NEC, Hitachi, Panasonic, Fujitsu, Sony, Toshiba, NTT, Nintendo, Sharp, etc.). It is a major hub for the global ICT industry, with a history of driving industry innovation and consumer preferences around the world. Japan's traditional strengths in ICT are in hardware design and manufacturing, telecommunications, and digital and mobile content. The greatest demand for foreign technologies and solutions lies in enterprise solutions and mobile applications.

Tokyo is home to the largest ICT cluster in Japan, with over 70 percent of the major original equipment manufacturers (OEMs), software developers, digital media companies and multinationals located in the city. The Osaka region contains the second-largest cluster, and is home to Panasonic, Sharp and Nintendo. Other notable clusters include Sapporo, Nagoya and Fukuoka.

Japan's ICT industry is undergoing transformation, driven by the growing overseas expansion of Japanese companies and a domestic market that is increasingly demanding technologies in line with global standards. With a market size exceeding \$900 billion (more than half the size of Canada's GDP), Japan's ICT industry provides an abundance of opportunities for Canadian companies with innovative technologies.

ENTERPRISE SOLUTIONS AND MOBILE APPLICATIONS

CHINA

In its 12th Five-Year Plan (2011-2015), China identified new-generation information technology as one of the seven emerging strategic industries it wished to promote. The Plan's development plan for strategic emerging industries further defines the focus of new-generation information technology as next-generation telecommunication networks, next-generation Internet technologies, Internet of Things (IoT), triple-network convergence, cloud computing, integrated circuits, new-generation displays, high-end software (such as big data management), and the integration of digital media technologies and cultural industries.

Both Shanghai and Zhejiang Province (of which Hangzhou is the capital city) have been following China's national development plan and have placed a priority on the development of cloud computing, Internet of Things and high-end software for the period 2011-2015. Demonstration projects have been launched to develop and implement cloud computing-based e-government solutions and smart-city solutions (which integrate various information technologies such as M2M, RFID, ITS, smart grid, intelligent building, smart surveillance, cloud computing, mobile Internet, etc.). Local governments are also looking to upgrade traditional manufacturing industries through the application of information technologies.

Market opportunities in China usually arise when local governments support priority industries by investing considerable funds, developing favourable policies and initiating various kinds of demonstration projects. Canadian companies can leverage these opportunities and resources by establishing business partnerships with key local companies, especially systems integrators.

JAPAN

Enterprise solutions

As Japan's economy continues to be one of the world's most advanced, demand for IT enterprise solutions is increasing as all industries seek to streamline operations, enhance productivity and reduce costs. Japanese enterprises are focusing on the integration and reorganization of IT infrastructure, the visualization and re-engineering of business processes, the virtualization of technology adoption, digital content management and the integration of smart devices. A shift is also emerging whereby Japan's preference for local solutions (often in-house) is being replaced by demand for leading-edge solutions from outside the country.

Canadian companies with capabilities in the focus areas mentioned above, as well as in big-data analysis and in consulting for e-government architecture, will be in high demand in Japan.

Mobile applications

Japan pioneered mobile content almost a decade before the iPhone took the world by storm in 2007. Since then, Japan's mobile ecosystem has grown into arguably the world's richest, both in terms of content and revenue per user. At the same time, Japan's mobile market evolved in isolation from the rest of the world, so much so that it has come to be known as the "Galapagos" of mobile, with Japanese handsets evolving in and adapting to their local environment the same way that animals in the Galapagos Islands adapted to their specific environment. Over the last three years, however, driven by strong consumer demand, Japan has adopted global mobile standards (Apple's iOS and Google's Android). The domestic ecosystem's capabilities have not been able to keep pace with the shift towards iOS and Android, and there is a strong demand for quality content and development capabilities.

Canadian companies with capabilities in user-interface design and cross-platform development, and those with proprietary mobile development engines/frameworks, are finding many opportunities in the Japanese market. Companies with proprietary mobile applications (especially those with a B2B or B2C focus) will find a healthy appetite for their products in Japan.

WHO SHOULD PARTICIPATE?

- ▲ Canadian providers of hardware products (M2M technologies, high-performance RFID, MEMS sensors) and software solutions that can be integrated into applications for smart city (intelligent building, smart transportation, smart surveillance, cloud computing), smart manufacturing, Internet of Things etc.;
- ▲ Companies developing enterprise (all industries) and e-government software solutions;
- ▲ Companies in the cloud-computing and big-data-management space;
- ▲ Companies with mobile development capabilities, especially user-interface design and cross-platform development;
- ▲ Companies with mobile applications in the B2B & B2C and social media space.

MEDICAL IMAGING

JAPAN

Japan has one of the world's most rapidly aging societies, and spending on public and private medical care is expected to continue growing in the coming decade. Japan had the third-largest economy in the world in 2011, after the United States and China. In 2012, Japan was the third-largest importer of X-ray, radiography and radiotherapy equipment and parts, with imports totalling \$1.6 billion, a 13 percent increase from the previous year. Japan has the highest per-capita ratio of computed tomography (CT) and magnetic resonance imaging (MRI) devices in the world. In fact, medical imaging devices make up the largest subsector of the Japanese medical equipment market, followed by cardiovascular devices and orthopaedic devices.

In this highly competitive market, Japanese medical device companies continue to protect their market share through innovation and acquisition. The Japanese industry, which includes large manufacturers—such as Toshiba, Hitachi, Canon, Shimadzu and Horiba—and highly innovative SMEs and developers, is seen as highly innovative and increasingly interested in pursuing global opportunities through joint development of technologies, R&D partnerships and foreign-technology licensing. Conventional consumer electronics makers such as Sony have also recently entered the medical device industry in response to growing market opportunities and the potential for high returns in Japan.

For Canadian SMEs, Japan offers a wide range of opportunities, including co-development of technologies with highly innovative Japanese SMEs and in-country licensing or export through partnerships with the large players in this important and growing market.

WHO SHOULD PARTICIPATE?

- ▲ Companies developing medical imaging software, such as picture archiving and communication system (PACS), and radiology information system (RIS);
- ▲ Companies developing medical imaging devices (X-ray, ultrasound, computed tomography, magnetic resonance imaging);
- ▲ Companies developing hardware solutions for manufacturers of medical imaging devices and accessories;
- ▲ Companies looking for a co-development partner in any of the above-mentioned fields;
- ▲ Research institutions looking for a research/technology co-development partner in any of the above-mentioned fields.

CONTACT US

For more information contact:

Jennifer Gowan, Trade Commissioner
Foreign Affairs and International Trade Canada
Tel.: 613-944-0077
jennifer.gowan@international.gc.ca
www.tradecommissioner.gc.ca/trade-missions