

The ICT Sector in the Philippine Economy

BERNARDO M. VILLEGAS

Almost everyday President Gloria Macapagal Arroyo or some official of her administration heaps praise on the information and communications technology (ICT) sector as a major engine of the Philippine economy. Because of its large pool of university-trained workers, the Philippines is pinning a great deal of hope on such businesses of the ICT sector as e-software, e-services, e-commerce, e-technologies, and e-people (skills). Indeed, in 1996, for example, close to 300,000 university graduates entered the labor force. Fourteen percent of these graduates, over 41,000, had completed courses in engineering and information technology.

In a paper titled "Information Technology, E-commerce, and the Philippine Economy", University of Asia and the Pacific economists Roberto de Vera and Peter Lee U reported that from 1993 to 1999, software exports of the Philippines grew steadily at a compound annual growth rate of 41 percent. Companies such as Andersen Consulting (now Accenture) have been subcontracting significant amounts of software programming work to teams of Filipino IT specialists. Multinational firms, like Caltex and Ford, are so satisfied with the performance of their software professionals in the Philippines that they export many of these employees to their regional branches. As Drs. De Vera and Lee U wrote: "Filipino IT workers, being fluent in English, have an edge in the English-based website that proliferate in the Internet. Although these workers may not approach the programming savvy of their Indian counterparts, they are usually more suited to providing the back room services for e-commerce operations."

E-commerce is not expected to play a significant role in the ICT sector for at least the next five to ten years. The Philippines sorely lacks e-infrastructure. It has a low Internet usage rate of about 0.8 users for every 100 persons. Telephone density is one of the lowest in East Asia, less than 10 lines for every 100 persons, compared to more than 50 lines per 100 in Hong Kong, Korea, and Singapore. Less than 10 percent of government agencies are online. The country continues to have a low credit card penetration rate and has few third-party logistics providers.

In the next five years, the major trends in the East Asian region that will impact favorably or unfavorably on the Philippine ICT sector are:

- Because manufacturing firms in Asia, which produce 50 percent of the world's manufactures, buy more direct goods than indirect goods, the potential for B2B commerce may be more limited than in the West. Direct goods such as Kraft paper and transistor chips, are directly used in the product while indirect goods such as paper clips and travel, contribute to, but do not end up in, the final product. In Asia, direct goods comprise 80 percent of total company purchases compared to 60 percent in the United States. In U.S. experience, companies are more cautious about purchasing direct goods because they need to be custom-made to firm specifications. This suggests that companies may be less willing to buy direct goods on-line and that Asian companies may not engage in on-line purchasing to the extent that American companies do.
- Supply chains in Asia are less efficient than in Europe and the United States. For example, the share of distribution and logistics costs is 12 percent of FOB steel prices in Asia versus 4 percent in Continental Europe. In Asia, there are usually three or four intermediaries between buyers and sellers versus one or two in Europe and the United States.
- Infrastructure for e-commerce is poorly developed.
- National markets are smaller in Asia than in the United States, and thus may not be large enough to support B2B ventures.
- The Philippines will continue to outsource backroom services to foreign firms. This is coming on the wave of increasing demand for skill-intensive differentiated services produced in developing countries.
- The United States, even amid the slowdown of its economy, is expected to remain one of the Philippines' major trading partners.

The most attractive opportunity for the ICT sector is found in IT-enabled services that target the world's largest market, the United States. The Philippines has a unique advantage of having a long-standing economic and cultural relationship with the United States. Even Indian firms recognize this distinctive advantage of the Philippines. Instead of competing head-to-head with Philippine IT enterprises, a number of forward-looking Indian companies are investing in training Filipino IT professionals with a view to using them to serve the lucrative U.S. market. A sort of "co-opetition" strategy is being followed by leading Indian IT companies wherein they tie-up with Filipino enterprises in order to capture a bigger share of the U.S. market.

IT-enabled services include customer interaction services (call centers), animation, finance and accounting, and medical transcription. These services do not require the highest IT skills, but have a great employment-generating effect. Indeed they employ more non-IT workers such as commercial artists, accountants, nurses, physical therapists, and liberal arts graduates. These services absorb a significant portion of our white-collar workforce of more than 5 million. In a recent meeting of the Employer Confederation of the Philippines, member companies pledged to employ 35,000 IT workers during the first 100 days of the Arroyo administration.

The Philippines already has four or five cyber cities or cyber parks that house many of these IT-enabled services. Firms that locate in cyber parks receive investment incentives including tax holidays and exemptions from tariffs on capital goods imports. Since human resource training is key to the success of these knowledge-intensive industries, there are also incentives to encourage spending on manpower training. The government also provides subsidies through the network of science high schools that promise potential engineers and IT professionals.

The Arroyo government just announced that the ICT sector, including software development, IT-enabled services, support and knowledge-based services, and business process out-sourcing, will receive special incentives under the 2001 Investment Priorities Plan. From 1 January to 9 April, the Board of Investments (BOI) approved a total of P6.4 billion in ICT projects generating 6,500 new jobs. These projects include Internet data centers, application service providers, software development, and customer interaction centers.

The ICT sector can make a major contribution to building a stronger foundation of small and medium-scale enterprises. At a recent IT conference in Cebu, one entrepreneur cited the role of small and micro-it enterprises (SMITEs) in the sector. Mr. Chito S. Ortiz, president of Cyber Innovation and Development Corporation, noted that the majority of the 38 registered software companies in Cebu may be classified as SMITEs. They are composed of groups of IT practitioners such as web programmers and designers, graphic artists, Java programmers, and database programmers. Such firms are especially plentiful in Cebu, which is one of the country's major centers for education.

The Philippines cannot be complacent about its relatively large pool of educated, English-speaking manpower, however. The country consistently ranks poorly compared to other countries in Asia in surveys of the quality of grade school and high school science and math education. There is a need for the government and the private sector to work in partnership to improve the quality of basic education. At a recent meeting of the e-ASEAN Task Force held in Manila, President Arroyo specifically referred to the educational component of the ICT strategy:

"Clearly there is a purely technical imperative for bringing ICT into the classroom, but e-learning promises more than technical competence. The essence of e-learning is developing critical creative and strategic thinking through exchange and collaboration.

The potential of ICT to enhance learner efficiency, effectiveness, and engagement is enormous. E-learning therefore can not only increase the productivity of basic literacy skills but also improve the planning, problem-solving, and analysis skills of the learner.

We have already taken the initial steps in bringing technology to the classroom and e-learning in Philippine schools. The government's PC for Public High School Program will bring computers to a thousand public high schools in the country. This modest step is being complemented by various private-sector and civil society initiatives aimed at bringing the power of the Internet into Philippine schools."