

Outsourcing IT: challenges and opportunities

The next India

In developing countries, the current economic crisis has led to a decline in exports of goods such as textiles and to a reduction in foreign investments. However, exports of IT-related services could be on the increase.

Firms in industrialized countries are now struggling to find ways to reduce costs. Therefore, outsourcing IT services to countries where labour is cheaper ('offshore sourcing') is an increasingly attractive option. Many developing countries are already engaged in IT services, including some of the poorest nations, such as Bangladesh, Kenya, Nepal and Uganda. Others, such as Afghanistan, Liberia, Myanmar and Rwanda, are preparing to enter this industry.

Software exports are a cause for excitement in developing nations that are hoping to become the next India. Once seen as a land of extreme poverty, India has now become an IT superpower. 🇮🇳 Large software companies, including Microsoft, Oracle and IBM, are using Indian software centres to develop their products. India's independent firms now compete successfully with the largest companies based in industrialized nations. The low capital and high labour intensity of an IT-export industry is attractive for low-wage, labour-surplus economies. It demonstrates the advantages of globalization without most of its negatives, such as:

Job creation. Unemployment is a major problem in all developing countries. In Kenya, 75% of all university graduates in IT are not able to find appropriate jobs. This leads to labour migration, resulting in the 'brain drain'. One promise of the IT-export industry is job creation. In India, the industry provided direct employment for more than a million people in 2008, and indirect jobs are at least double that. In Bangladesh, the industry employs 20,000 staff.

Revenue generation. Exporting IT services is a source of foreign currency revenue. In 1983, Indian software exports were estimated at a modest US\$18.2 million, but by 2008 these had increased to US\$43.3 billion. IT services currently account for 20% of India's exports and are projected to become India's single largest export within the next few years. However, net earnings from exports are low. This is due to expenses related to international travel, living allowances of software testers and programmers who work overseas, foreign marketing, multinational profit repatriation and imports of hardware and software. India's net earnings are estimated to be around 55% of the gross figures.

National business culture improvements. Within India's software industry, larger companies offer good working

Summary

- The current economic crisis has caused a decline in exports in many developing countries.
- Exports of IT-related services, however, could increase as a result of the crisis.
- Exported IT-related activities such as data entry, and IT-enabled services such as testing software, are creating opportunities for many developing countries.
- Developing countries should use these new business opportunities, but finding foreign clients is a challenge.

conditions in modern, air-conditioned offices. Employees receive benefits such as subsidized meals and transportation. In a country such as India, traditional distinctions based on religion, sex or caste are less important in the merit-based software industry than in other industries. The rapid growth in call centre jobs has given Indian women new confidence and social empowerment. For many young women, the relatively high salaries provide a much higher quality of life than they could have had expected in traditional occupations.

Other economic and social impacts. The success of the IT export industry has a positive effect on the domestic IT sector. Working on offshore projects is a form of knowledge transfer from the wealthy nations to the developing world. The technical and domain knowledge gained through working for foreign clients can be re-channelled and used for domestic projects. The IT export industry also boosts investment in infrastructure, such as telecommunications. In addition, it creates demand for various other services, such as training, transportation, construction, accounting, hotels and legal services.

However, IT outsourcing by definition mainly benefits urban areas and the middle classes, thus potentially



By **Paul Tjia**, the founder of GPI Consultancy, a Dutch offshore sourcing consultancy firm.

increasing inequalities within countries. Even in India, most software development companies operate in only a handful of metropolitan areas and therefore do not benefit the country's vast underclass. The impact of the IT-export industry is often limited to a small area of the economy. In poor societies, millions of citizens are marginalized by their lack of access to information and communications technologies (ICTs), and a successful IT-export industry will not automatically diminish this digital divide.

ICTs have become an important area for international development (ICT4D), while the focus of programmes in sectors such as education, agriculture, governance, microfinance and health is on the use of IT, such as access to information and communication networks. The key actors in ICT4D programmes – international development organizations and NGOs – focus on rural areas and target the people at the 'bottom of the pyramid' who live on less than two dollars a day. Assisting the creation of an IT-export industry has not yet been a target in most ICT4D initiatives, but the promise of job creation cannot be ignored. The new concept of 'social outsourcing' could create a connection between these two separate worlds. In this model, IT services would be outsourced to the poorest countries, or to subcontractor enterprises based in poor communities that specifically hire from marginalized groups. An example of this 'fair trade' in IT services can be found in India, where

the Kerala state government has facilitated the creation of IT enterprises that are owned cooperatively by groups of previously unemployed women from below-poverty-line families. By 2006, 151 such enterprises were undertaking outsourced IT training work, mainly for public schools, and another 80 were carrying out outsourced data entry work, such as the digitization of government records. 📄

IT activities

There are two main categories of IT-related activities in developing countries: IT-outsourcing services and IT-enabled services. IT-outsourcing services include software development such as programming or testing, and building websites. The specifications for the software are established by the Western clients such as airlines, banks, insurance companies and software producers.

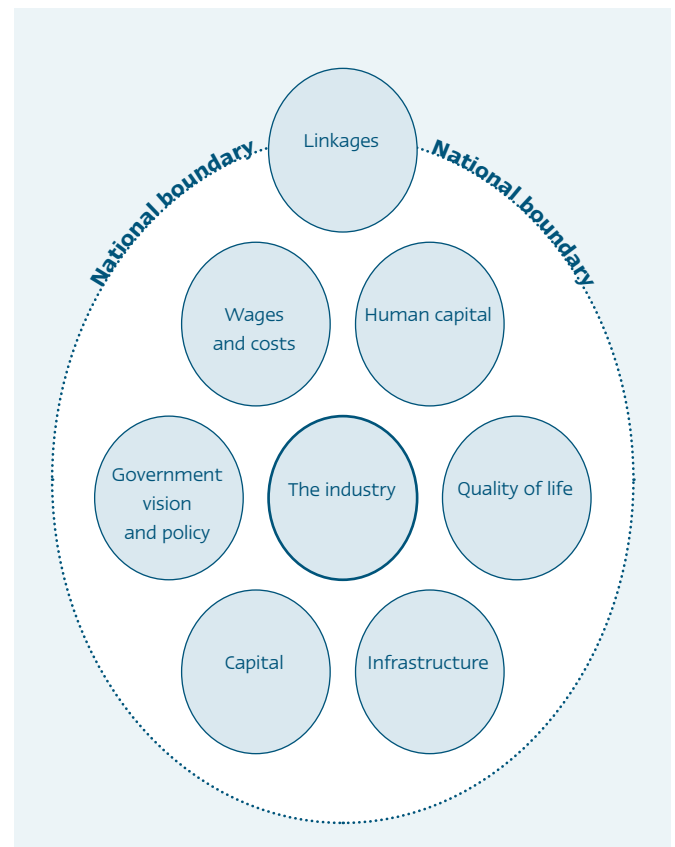
IT-enabled services, also known as business process outsourcing (BPO), include:

- *Manual data entry* is required when data that is stored on paper needs to be converted into digital form and scanning is not an option. For example, a 40-volume dictionary was recently sent to India to be retyped.
- *Contact centre services*, mostly voice-based, are provided by call centres and help desks. Many thousands of call centre jobs have been transferred to countries such as India, the Philippines and Kenya. Call centres in Mexico now serve

Kenya as a new offshore destination?

The Kenyan government has identified business process offshoring (BPO) as a critical driver of the country's future economic growth. In its strategic plan 'Vision 2030', BPO has been selected as one of the six main economic pillars. Kenya should become quickly one of the top three BPO destinations in Africa. The government's goals for 2012 are to create 7500 direct jobs in the BPO industry, of which 5000 are to be located in new 'BPO parks'.

Kenya has a number of strengths, such as competent local companies, a large, educated English-speaking population and an appropriate time zone for European clients. In addition, mobile phones have already penetrated the country and glass fibre broadband cables will be installed soon, thus reducing telecommunication costs. The Kenya ICT Board is responsible for positioning and promoting Kenya as an IT destination. Delegations from Kenya are already attending events such as the annual African 'Bridges Across Borders' outsourcing conference, organized by International Trade Centre (ITC) of the United Nations Conference on Trade and Development/World Trade Organization (UNCTAD/WTO). Nevertheless, a recent study by Hivos, a Netherlands-based NGO, identified several major challenges. IT-related companies in Kenya are often small and have limited access to funding. Considerable efforts are needed to develop entrepreneurial and professional business skills, and to improve access to relevant business networks and foreign markets. In particular, because Kenya is not yet established as an offshore destination, there is an urgent need for external assistance in areas such as country branding and company promotion.



The 'Oval model': success factors for a national IT-export industry.



Hollandse Hoogte / Polaris

KenCall, Kenya's first outsourcing call centre, Nairobi.

Spanish-speaking customers throughout the Americas, and those in China employ Japanese-speaking staff to serve Japanese firms.

- *Various administrative tasks*, including such work as handling airline or hotel reservations, or other services that require specific knowledge, such as claims processing for medical insurance companies. Document imaging also allows offshore locations to perform financial and accounting services. Dutch accountants are turning to India, South Africa and Suriname to perform these routine tasks.
- *Animated film production* is very labour-intensive and is therefore ideal for offshoring. In North Korea, SEK Studio in Pyongyang is now one of the world's largest animation studios, producing films for French, Italian and Spanish film and television companies. 📺

Both forms of IT-related outsourcing create opportunities for developing countries. But at the same time many of the obstacles for productive development that exist in a general sense for those countries also apply to the IT industry. Apart from technical skills, functional and business knowledge is also required in order to understand the demands of the clients. In many developing countries, this knowledge is lacking and training is needed.

The complexity of offshore projects demands the skills to manage distributed tasks with time and language differences. Differences in national culture can have major impacts as well, although these are often overestimated.

Erran Carmel of the American University in Washington, DC, has identified eight principal factors that explain national success in exporting IT services, together known as the 'Oval model' (see figure). These eight factors tend to interact with one another. Not all the Oval model factors need to be present to achieve some success; in fact in India, during its industry's formative period of growth, several of these factors were absent or weak.

With the current financial and economic situation, it is expected that outsourcing to low-cost countries will grow.

Developing countries should use these new business opportunities, but finding foreign clients is a challenge. While IT professionals in most industrialized nations are now well aware of the 'India brand,' providers in other developing nations are at a disadvantage. Intensive country branding needs to be done, which is a responsibility of governments and local IT associations. In addition, it is very difficult for service providers from developing countries to find clients if they are located on other continents. The many Indians working in the United States have been instrumental in creating business linkages with India, for example, and the Chinese software industry is now benefiting from the knowledge of returning migrants, or 'brain circulation'. Without such personal linkages, the most effective way for companies to gain access to new markets is to open their own sales offices abroad. If this is not financially feasible, offshore providers need to consider other means of representation, such as working with local representatives or agents. Finding new clients abroad is impossible without a proper local presence. ■

-
- Carmel, E. (2003) The new software exporting nations: Success factors. *Electronic Journal on Information Systems in Developing Countries*, 13(4): 1–12.
 - Heeks, R. (2008) ICT4D 2.0: The next phase of applying ICT for international development. *Computer*, 41(6).
 - Parthasarathi, A. and Joseph, K.J. (2004) Innovation under export orientation. In: A.P. D'Costa and E. Sridharan (eds) *India in the Global Software Industry*. Palgrave Macmillan.
 - Tjia, P. (2003) The software industry in Bangladesh and its links to the Netherlands. *Electronic Journal on Information Systems in Developing Countries*, 13(5): 1–8.
 - Watkins, K. (2008) *The Millennium Development Goals*. UNESCO

📖 A longer version of this article, with notes and references, can be found at www.thebrokeronline.eu.