

China: an Upcoming IT Offshore Destination

For more than 20 years, companies in The Netherlands have been outsourcing to IT-suppliers in low-cost countries. There are two major reasons for global sourcing: the possibility to reduce costs and the availability of specialized IT-skills abroad. So far, hundreds of Dutch organizations have executed offshore software projects, including small and medium sized firms. Dutch financial and banking enterprises are active offshore users, including ABN Amro Bank, Aegon, ING, Postbank, Nationale Nederlanden and Rabobank. Whereas The Netherlands is not particularly large as a country, the deals that the Dutch companies have made have often been major.

The recent ABN Amro Bank contract with several Indian offshore vendors was the largest contract ever won by any Indian IT company. It was recently estimated that approximately 5000 offshore staff were working for various Dutch projects. It was also estimated that this number could grow ten-fold in the coming decade, which would represent a significant volume for such a small country.

Three main types of offshore ITcollaboration can be distinguished:

- The client works temporarily together with a foreign software house for the duration of one or more projects. This is relatively uncomplicated and is the most popular way. Dutch based companies such as KLM, Shell, Ordina and Finalist are working like this. In these cases, some parts of the work, especially programming work, is being done offshore. Other activities, such as software design, or the contacts with users, still need to be done locally.
- Joint ventures with foreign IT companies. This will intensify the relationship



between the two organizations. An example of this is OTS (Orange Telecom Software), a joint venture that was started in 1991 between the Dutch KPN Telecom and TCIL of India. Joint ventures in the field of software development are still very rare.

• Dutch companies establish subsidiaries abroad. This is useful if large amounts of software need to be created. For this purpose, enterprises such as Philips and Cordys (a new company of Jan Baan) have set up subsidiaries in India. The ABN Amro Bank operated a software facility in Lahore (Pakistan). Another ITfirm recently set up an office in Kathmandu (Nepal).

Indian software companies started offering their services to Dutch clients more than twenty years ago. This country is now the most popular offshore destination and more than 200 Dutch firms have outsourced IT work to India. On a more incidental basis, software orders have also gone to many other offshore destinations. Nearshore countries include the Czech Republic, Slovakia, Poland, Romania, Bulgaria, and Serbia en Russia. Examples of Dutch farshore destinations are Brazil, Turkey, Iran, Sri Lanka, Nepal,

Vietnam, Malaysia, Thailand, the Philippines, Indonesia (a former Dutch colony), China and North Korea (also attractive for its advanced animation sector).

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The Chinese software industry was not on anyone's radar screen as recently as 1999. Like the modern Chinese cities that seem to sprout up almost overnight, China's software industry has emerged to become a global player in just 5 years. In China, more than any other nation today, structural changes happen quickly.

Chinese human capital indicators are as impressive in quality and quantity as those of India, with the exception of language skills (although there has been improvement in recent years). Chinese universities produce roughly 300,000 engineering graduates per year. While science and technology in universities has traditionally been too theoretical, this too has been changing rapidly. Approximately 30-45 universities have launched new, specialized software schools. Such rapid adjustments show the ability of the government to redirect resources on a massive scale.

Compared to India, China lacks experienced middle managers and project managers. The country is making efforts to bridge this gap by attracting overseas talent and training their employees. China's human capital has been augmented by a reverse brain drain. Approximately 160. 000 Chinese have returned with foreign education. Many start their own companies

or choose to work for foreign multinationals and bring with them considerable know-how in technology, managerial project and process experience, experience in Western business, and fluency in English.

The Chinese software industry is not as distinct as the Indian industry in two respects. First, the Indian industry does relatively little work domestically, while the Chinese industry does a great deal. 70% of the revenues of the Indian ITsector are from export work; in China this is only 10%. While India expects an ITexport of US\$50 billion in 2008, China just achieved US\$1 billion in 2003. Indian companies are working for clients all over the world, while the focus of China is mainly on Japan. Second, the Chinese industry is more closely tied to computer hardware and other manufacturing industries. China's software strengths have specifically been in embedded software at the interface between hardware and software: in telecommunications equipment, data communications, and wireless. Yet growth has taken place in all major software segments: in services, product R&D and embedded software, as well as in BPO (Business Process Outsourcing).

Most large technology firms from the USA, Japan, Europe, and India have software centres in China. But unlike India, in which the USA and Europe are the dominant investors and clients, Japan is a key investor and client in China. The majority of large American technology firms, including Cisco, Intel, Microsoft, and Motorola, do some R&D work in China, including some innovative R&D. In total, R&D centres have risen from 150 in 2002 to 400 by 2004. While Chinese software units have not attained the large number of world-class quality marks (Capability Maturity Model) that Indian firms have attained, this is less significant for R&D activities.

"Noteworthy in size is Huawei..."

Of the indigenous Chinese IT firms, only a small number export software services or products, and none of China's pure software firms have attained the size of the major Indian firms. Noteworthy in size is Huawei, at the hardware-software interface. This is perhaps the most interesting Chinese player, as a major competitor to Cisco, with 2002 revenues of 2.7 billion USD (with almost one-third derived from exports). Most exports



are to developing/emerging markets rather than the rich markets of Europe and America. Huawei has built a network of R&D centres outside China in India; Texas and California in the USA; Sweden; and Hong Kong.

The Chinese software industry benefits from four complementary growth drivers which will all interplay in its offshore software industry in the coming years. The first driver is government-led development. Government support is quite strong: through procurement policies and through its influence at the national and local level. In China this makes an impact quickly. The second driver is to follow the India model by providing IT services to foreign firms. The third is to continue to attract FDI driven by the desire for market access by global firms. The fourth and last driver is to continue to be nourished by brain

circulation: the return of thousands of Chinese bringing with them critical know-how.

"Software piracy is still a problem."

Software piracy is still a problem to the development of the Chinese market. Although laws exist in China to curb infringement, enforcement has not been effective. Government and computer associations have taken steps to curtail IPR infringement but IPR issues will

persist for the next years. This means that users of offshore services require a range of IPR protection practices, such as a rigorous provider selection process, including due diligence and screening and detailed contractual discussions. It might also mean that not all work is suitable for offshoring: perhaps only non-core components of a project can be outsourced.

The possibility to reduce costs and the availability of IT-skills abroad makes offshore sourcing an attractive option. Every Dutch company, large or small, should investigate this option. Currently, India is the most important destination, but this is quickly changing. China still faces major obstacles, but is attracting a growing number of foreign clients. A major additional advantage is the attractiveness of the Chinese market for both foreign software companies and IT services providers.

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