The Role of Multinationals in Recent IT Developments in China

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INTRODUCTION

Many multinational firms have located in developing countries to develop their overseas and industrial markets and to take advantage of the low cost environments that exist there. In addition to locating internationally, companies like Philips, Microsoft, Siemens and others also are outsourcing globally and have chosen China as an attractive base for the Asian market and as a growing market in its own right.

Outsourcing implies obtaining goods or services by contract from an external source.

U.S. firms find it profitable to contract IT software and services in developing countries such as China. A recent study by McKinsey estimated that every dollar spent in outsourcing offshore represents a cost saving of 58c to U.S. businesses (Datt, 2004).

China's reform and opening up in the late 1970's gave the impetus to rapid economic growth. This reflects such outsourcing as well as its source of cheap labour, high-skilled workers, modern factories. Increasingly domestic demand and the size of the Chinese market provide a growth mechanism for the economy. However, limited resources and employment opportunities may impede sustainability of economic development.

CHINA: AN OVERVIEW

In 2003, China's GDP was around 11.7 trillion yuan (US\$1.325 trillion) and, with a population of over 1.3 billion, its GDP per capita for the first time exceeded US\$1,000 (Han, 2004). The economy therefore ranks sixth behind the US \$10.2 trillion. The Chinese economy grew at an average of 10% pa during the 1990's–faster than the 3.4% average annual growth in the U.S. for the same period.

IT has been a significant industry underlying this growth. IT spending in China is expected to total \$30 billion in 2004, which accounts for 3.3% of the world

market. The Chinese expenditure in IT is expected to grow by around 20% in 2004-four times the rate of growth for the rest of the world (Nee, 2004).

Other statistics that demonstrate the rate of growth in China, especially IT, are as follows:

- China's electronic and IT industry ranked third in the world in 2003 with sales reaching approximately US\$230 billion (an increase of 34% in 2002). Profits from this revenue approximated US\$13 billion.
- There were 17,500 Chinese electronic enterprises employing 4.08 million people in 2003.
- Some Chinese enterprises were placed at the top in relation to worldwide semiconductor manufacturing and investment. For example, China Semiconductor Manufacturing International Corporation was ranked seventh out of the top 10, ahead of IBM
- There are 8,582 software manufacturers in China with 18,000 product offerings. (Emerging Market Economy Reporters, 2004).

Total imports and exports reached US\$800 billion accounting for two-thirds of GDP (Han, 2004, p.6) in 2003. Despite this, it could be argued greater emphasis in exporting value-added products is required. Certainly this in part is behind the government's support of the IT sector. China's Ministry of Information recently announced its vision to make the country a great power in IT. This vision is embodied in "the 11th five-year plan, commencing in October 2003" (World IT Report, 2004).

China is emerging as one of the major manufacturers of digital products-it is the leading manufacturer of laptops (making around half of the world's supply) and mobile phones (making around 35% of the present world supply). Yet many of these manufacturing firms are not Chinese firms but rather Taiwanese or multinationals who have located offshore.

China is poised to be the world's number two manufacturer of semiconductors in the next few years.

EXAMPLES OF RECENT IT ACTIVITY IN CHINA

Atos Origin, Europe's biggest IT consulting company and number five in the world, aims to quadruple its business in China over the next two years, thereby doubling its Asia Pacific business.

To achieve this, Atos Origin acquired Schlumberger Sema which in China serviced four state owned banks as well as provided IT services to six China bank credit card businesses (Liu, 2004). This acquisition will enable Atos Origin to infiltrate China's finance and high-tech manufacturing sectors. In addition as the IT partner to the International Olympic Committee, Atos Origin will take an active role in the 2008 Olympics.

Recently, Microsoft signed an agreement with Powerise Information Technology Co. Ltd., its second global strategic partner in China, in its quest to develop its overseas and industrial markets (Liu, 2004). This agreement facilitates training and co-operation, software development, sales and marketing and international projects.

Microsoft, through its agreement with Powerise, will seek to access telecom, finance, social security and government sectors. Through its initial partner, Beijing's China National Computer Software and Technology Service Corp. (CS&S), it seeks to access e-government and industrial application markets (Liu, 2004).

Microsoft is looking to align shortly with a third global strategic partner, Neusoft Group Ltd., one of China's leading software solution providers, based in Shenyang, a large industrialised city in north-eastern China.

Intel Corporation in April 2004 signed a Memorandum of Understanding (MOU) with Neusoft Group Ltd. with a view to establishing a Beijing Solution Innovation Centre and a Product Research Laboratory in Shenyang. The purpose of the latter will be to develop key technologies for the next-generation Internet and support the modernisation of the rapid industrialisation taking place in that city (M2Presswire, 2004).

General Electric (GE) to date has invested US\$1.5 billion into the China market expanding into aircraft generators, power generators, finance, medical equipment, plastics and television (Xie, 2004) alone and in concert with Chinese enterprises. China is GE's fastest growing market with revenues growing in excess of 20% over the past decade (Xie, 2004). Sourcing from China is also expected to increase dramatically to around US\$5 billion in 2005 (Xie, 2004). GE hopes to maintain this growth after the 2008 Olympics as it is a major sponsor.

FUTURE DEVELOPMENT

IT in China needs to be better integrated into the nation's industrialization. While IT adoption has greatly improved productivity and lowered costs of production (Han, 2004), improved infrastructure is required.

A number of developments and investments are being made as the country seeks to support industry, especially the IT industry:

- Industrialization of core information technology, for example, large-scale integrated circuits and new generation mobile ICT;
- Equipping traditional industries with IT;
- Adoption of science and management education to better utilise knowledge and skills; and
- Development of a supply chain to facilitate movement of goods to market.

Notwithstanding these, acceleration of these initiatives are seen by many to be required. In addition the role of the market in facilitating such development is recognised and is evident in many of the examples of IT activity outlined earlier.

A recent U.S.-China Business Council survey found that U.S. companies considered supply chain issues to be problematic for their business. Some of the reasons for this are as follows (Bin, 2002):

- Foreign firms required to import products through officially sanctioned trading companies. Third party foreign trading companies are not able to enter the market or provide a complete range of distribution services;
- Difficulty in finding qualified suppliers;
- Underdeveloped IT and ICT infrastructure;
- Unreliable transportation infrastructure; and
- Damage/loss in transit.

It would appear that IT improvements especially in terms of infrastructure would help to overcome a number of these issues. To this end, initiatives are occurring in industrial cities such as Shenyang-outlined later in this article. In Beijing, a consortium of Chinese corporations has been set up and is laying an urban communication pipeline network (SinoCast China Business Daily News, 2004) to facilitate ICT use in that city.

While many firms are outsourcing or locating in China to take advantage of the low costs of production and to enable easier access to the large market especially in IT, supply chains need to be set up and managed (Bin, 2002). However, logistics is only recently emerging, with supply chains in China being relatively immature.

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