

The Philippines' IT-Enabled Services Industry

Ted Tschang¹

INTRODUCTION

1.1. Paths to Development

Economic literature has identified a number of different industrial development paths. Possibly the most important is the East Asian path to industrialization followed by the four Tigers as well as other emerging countries, described in voluminous literature on the role of the state (Amsden 1989, Wade 1990, World Bank 1993), on the rise of the electronics industries (Amsden 2001, Hobday 1995), and on the emergence of a more innovative industrial path in Korea and Japan (Kim 1995, Kodama 1997).

More recently, a second path based on software has emerged, exemplified by India's rise as a software producing power. India's software industry and its capability have been described extensively in the literature (Arora et al 2001, Heeks 1996, and Evans 1995). Numerous developing countries have also attempted a similar strategy to India's, typically with lesser degrees of success (Arora and Garimardella, 2005).

With the rise of information technology (IT), a third form of development has now appeared: the export of services. While the development of service sectors was traditionally assumed to be confined to developed countries that have mature markets and industrial sectors (Foray and Lundvall, 1996), it has recently been found that with the appropriate educational and other supporting bases, developing countries like India and the Philippines can also take this path. Specifically, the rise of IT-enabled services (ITES) outsourcing or business process outsourcing (BPO) has allowed these countries to develop a new kind of export sector focused on business services.

The factors that support these new service export industries are becoming better understood. A number of consulting and government reports have been written on the ITES sectors in various countries, especially for the cases of India and the Philippines. Most of the reports combine government data with some primary source material, but they tend to focus on what is happening, and the general competitive advantages of the countries, rather than on the specific conditions of why the firms grew or located in those countries, the structural conditions facing those industries, and what can be done to improve those conditions. In particular, behind an industrial development path – be it manufacturing, software, or services – lies specific enabling economic mechanisms and policies, including supplier networks, industrial or agglomerative clusters, resource pools, and institutions. This report focuses on how these various kinds of linkages play a role in facilitating the Philippines' ITES industry's growth, and how it compares to other countries' experiences with service exports. The report will also focus on what policies might be enacted to improve the industry. The report relies on both primary and secondary evidence to substantiate the discussion of the main issues and mechanisms at work.

¹ Drafted by Ted Tschang, Assistant Professor of Economics and Technology, Lee Kong Chian School of Business, Singapore Management University. The author is greatly appreciative of Gokhan Akinci, Milan Brahmhatt, Raja Mitra, Andrea Goldstein, and Jana Malinska for their comments.

Outline of the Report

The report consists of six sections. The remainder of this first section discusses basic concepts of linkages, definitions of ITES, and the worldwide markets for ITES. Section 2 discusses each of the five selected Philippine ITES sectors, including their history, highlights of their current status, and prospects for growth. We follow this in section 3 with an examination of the strengths, weaknesses, opportunities and threats (i.e., a conventional business strategy framework). Section 4 provides an analysis of specific strategies that are needed in order to help the industry with its weaknesses and the competition, as well as to take advantage of its position. Section 5 lists a number of government policies that can help support or enable these strategies.

1.2. Linkages

The literature has identified a number of types of linkages that occur in development processes. Among the more common (but not necessarily mutually exclusive) forms of linkages discussed in the various literatures are:

- *Backward and forward linkages* that connect firms and other institutions across different sectors. A more specific instance of backward linkages are the *supply chains and supporting industries* that supply intermediate inputs such as components to industries. Supply chains are a common aspect of modern industrial organization, since the manufacturing and other industries need to effectively develop and control external sources of inputs to their production process. Suppliers and supply chains could be local or transnational in nature. In the transnational case, multinationals (MNCs) can source inputs through wide regional or global production networks that take advantage of different countries' resource pools. The MNC outsourcing of business processes to Indian software services firms is also an example of this (McKinsey and Company, 2003).²
- Other inter-firm linkages include the whole range of *business alliances*, such as foreign investments, strategic alliances, cooperative research organizations, joint ventures, mergers and acquisitions, and increasingly, co-production agreements (i.e. agreements between animation and TV studios to jointly produce content). More and more, as outsourcing starts to become more prevalent, many MNCs are also choosing to ally with or to acquire domestic outsourcing service providers.
- *Agglomeration effects* are the effects that concentrations of firms within a particular locale or region have on one another. A concentration can possess larger economies of scale, e.g. having a large enough local market provides greater opportunities for local suppliers and specialized support industries. Other advantages to having a concentration of firms are the larger local labor pool, and the possible knowledge spillovers, which are the possibilities for knowledge to be transferred across different organizations via communities and networks of employees. Modern industrial regions such as Silicon Valley are known for having all of these advantages (Kenney, 2000).

² Whereas supply chain analysis focuses more on the capabilities of each node in the chain, global production networks focus more on the controlling actor's (i.e. the MNC's) point of view.

- *Clusters* are the special case of concentrations in which various inter-firm linkages (e.g. supply chains and business alliances) tie the firms together within a geographic region. Clusters or concentrations can also provide other benefits, such as the signaling of a region's capabilities to other markets (Koh, Koh and Tschang).
- *Transnational communities* are also increasingly important in facilitating knowledge and resource flows across countries. For example, the Taiwanese entrepreneurs who lived in both Silicon Valley and Taiwan helped tie the two regions together (Saxenian 2001, 2002)).
- Other kinds of linkages include *multiplier and spillover* effects, which are the effects that firms have on wages, investments and procurement in other businesses and services in the local economy.

The ITES sectors may not have the same kind or degree of linkages as other industries. The types of institutional linkages that exist in the Philippines' ITES industry tend to be the types representative of clusters, or specific linkages between firms (e.g. foreign investments), and between firms and supporting institutions. Thus, the general types outlined above have to be interpreted more carefully in the case of the Philippines ITES industry. In particular, it should also be kept in mind that the ability to generalize is limited, even across firms or sectors.

Because of this situation, we will first use the value chain framework as a way of organizing our understanding of where the Philippines' ITES sectors fit as "links" into an overall corporation's activities. In Table I.1, we illustrate the value chain for a typical end-to-end own brand manufacturer, which is required to design, manufacture and sell its own products.³ The outsourced activities for each type of activity and stage which various firms in the Philippine ITES sectors perform are shown underlined in the shaded rows. Each of these functions in effect represents an ITES sector within the Philippines.

Table I.1 The Value Chain for MNC Manufacturers and Potential Areas to be Outsourced

<i>Function</i>	<i>Supporting office and IT services (business processes)*</i>	<i>Manufacturing</i>	<i>Research and development *</i>	<i>Market Interaction</i>	<i>Customer interaction (Customer support before/after purchase) *</i>
Outsourced activities	Providing IT support, e.g. programming etc.	(Manufacturing supply chain, e.g. component supply etc.)	Providing R&D services	-	Providing call center support
	Providing finance, accounting, human resources etc. support.	(Providing logistics support ,e.g. inventory)	-	-	

* areas that the Philippines participates in

³ These loosely correspond to the stages in Porter's version of the value chain further. Porter further classifies the functions into primary and support activities.

1.3. Types of ITES

In this report, we will focus on the five types of ITES that the Philippine government has focused on: software development, call centers (also called contact centers), BPO, animation, and medical transcription (MT). These are primarily “verticals” or sectors which IT has been applied to. However, it is worth noting that there are other ways of classifying these activities. For instance, organizations such as Gartner Research and India’s National Association of Software and Service Companies (NASSCOM) consider ITES and BPO to be much the same. In such a definition, ITES consists broadly of the whole gamut of business and technical services that can be outsourced, including⁴:

- customer interaction services, including call centers
- back office operations, plus revenue accounting, data entry (including finance and accounting) and human resource services such as payroll processing
- transcription and translation services
- content development, including animation, design and geographic information systems
- other services, including engineering services, and research and development

Thus, the main differences between the Philippine and Gartner definitions are that the Philippine definition of ITES includes BPO, and Gartner’s definition of ITES excludes software services.

Multinational companies may operate their own call centers and business processes in offshore centers, rather than outsource them to service providers. When MNCs handle their own business processes, the work is known as *shared services*, and the facilities could be known as *captive centers*. The type of work can vary, depending on the domain of expertise, and the nature of the organization. For instance, call center work is generally classified into *outbound* calls (involving telemarketing to new clients of the MNCs), and *inbound* calls (which could involve anything from basic customer service to more specialized technical assistance, with the latter being considered as higher end work).

1.4. Worldwide ITES Growth

The worldwide demand for ITES services is growing, as shown in Table 1. Gartner predicts that by 2007, spending on the various “BPO” sectors (by Gartner’s definition, which includes call centers, but excludes software services) will grow to \$173 billion (Gartner, 2004). Of the latter, 8% could be done in India, 6% could be done in other non-client locations, and the rest in the countries of the work’s origin. The spending also varies by region, with the Asia-Pacific region growing much faster than the other regions, as shown in Table I.2 below.

⁴ Gartner defines BPO as the “delegation of one or more IT-enabled business processes to a third party that owns, administers and manages the business processes according to a defined set of metrics.” This includes call centers, transcription work, and payment or payroll processing, as well as research, animation, engineering design and bio-informatic services (Gartner 2002). This would also make Gartner’s notion of BPO equivalent to that of NASSCOM’s BPO/ITES.

Table I.2. Worldwide ITES-BPO Spending by Region 2001-2006

Region	2001 (US\$ Million)	2001-2006 CAGR (%)
Americas*	450,947	9.9
EMEA*	154,423	11.5
Asia- Pacific	106,775	14.7
Worldwide	712,145	11

Source: NASSCOM

* Americas includes the United States, Canada, Latin America; EMEA includes Western Europe and the rest of the world

Many countries are starting to develop their ITES industries. The leader in supplying services has been India, partly because many of its early software services firms have managed to leverage their earlier head start in software services into capabilities for other ITES sectors such as BPO and call centers. However, more and more countries are showing growth in ITES, including Ireland, Jamaica, Mexico and China. Jamaica now has 13 call centers, with more than 3,000 agents and seats. In addition to these, many countries have had some early successes in attracting such work, or have the potential to do such work. These include South Africa, Malaysia, Ghana and Costa Rica. Table I.3 below shows the top countries as ranked by the IDC Corporation on their advantages in assets and cost. Additional data on the total size of selected countries' IT/ITES production is shown in the Annex.

Table I.3. Competitors in ITES-BPO Market

Asset Advantage (know-how, technology) Ranked from strongest to weakest	Relative Cost Advantage Ranked from lowest cost to highest cost
1. Canada	1. India
2. India	2. Jamaica
3. Ireland	3. Philippines
4. Philippines	4. China
5. Israel	5. Mexico
6. Mexico	6. Czech Republic
7. China	7. Barbados
8. Czech Republic	8. Israel
9. Jamaica	9. Ireland
10. Barbados	10. Canada

Source: International Data Corporation (IDC)

Another report by AT Kearney surveyed companies on the attractiveness of 25 countries for offshoring, on a variety of factors. In terms of people skill (comprised of employee retention, language, education, size and availability of labor and BPO experience), India ranked 1st, and the Philippines 11th. In terms of business environment (comprised of intellectual property, culture adaptability, country infrastructure and country risk), the Philippines ranked 22nd while Singapore ranked 1st and India ranked 15th. The Philippines ranked third on financial structure (comprised of tax and regulatory environment, infrastructure costs and compensation), behind India and Vietnam. When these are averaged out to an overall index, the Philippines is ranked 6th overall, behind India, China, Malaysia, the Czech Republic and Singapore (AT Kearney, 2005).

CHAPTER II

THE PHILIPPINE ITES SECTORS: CURRENT STATE AND PROSPECTS

For the most part, the growth of ITES in the Philippines has been strong over the last few years. The Philippine government has focused on the five ITES sectors shown in the table below. While the sectors vary in their total global market size, domestic output, or industry size, each plays a significant role in developing an already significant native advantage that the Philippines has in a particular area of human resources. For instance, call centers depends on the good English language skills of many Filipinos, software development and BPO depends on the good supply of college graduates in those fields, medical transcription draws upon the pool of well trained medical personnel in the Philippines, and animation draws upon the well established artistic capabilities of the Philippine people.

Table II.1. Philippines ITES Sectors

	Global market size in 2002 (billion \$)	Philippines 2001 revenue (million \$)	Employees (2004)	No. of companies (2004)	Growth rate (2004-05)
Software development	56	115		1739 (52 firms BOI- registered)	
Call centers	6.5	173	60,000 est.	92 (latest)	100%
BPO	20 – 25	5-6 (finance and accounting only)		15 (5-6 F&A only, (2002))	
Animation	1.3	21	2500 – 3000	24	
Medical transcription	10 – 35	40	1,500	22	

Source: Board of Investments

A description of each ITES sector and selected major firms within it follows. Some of this description also illustrates how a particular sector got its start. For purposes of limiting the scope of the study, we have not examined the medical transcription sector in as much detail (it is summarized briefly in the section on business process outsourcing).

2.1. Software Development

The software development sector has not grown as fast as call centers or BPO, and a number of firms have also closed down. One estimate puts the number of software firms at 300⁵, of which only about 19 companies have over 100 employees (though a broader definition such as the one used by the Philippine software association shows that there are about 1739 “IT” firms). Most of the firms are located in Manila and Cebu. Our study interviewed four of the most established software development firms:

- Accenture, the US multinational IT consulting firm, is one of the largest software developers and IT consulting firms in the Philippines. They have been operating in Manila for 15 years, and now have about 3,500 employees, the bulk being IT professionals. They handle a range of work, including IT system design and software application development (involving the building of systems), and application management and maintenance.

⁵ *Briefer on the 5 ICT Priority Sectors*, ICT Division, Board of Investments (BOI).

- RCG Information Technology is a US-based software services firm. It located in Makati City in 1997, primarily because the wages, English skills of the Philippines, and strong infrastructure, could effectively support their Y2K work worldwide. RCG has about 1000 staff in total, but most are in the US, and many of their Filipino staff have been sent there to work onsite.
- SVI was set up as an employee-owned software development house in 1987. Its 50 founders had all worked for Manila's main electric power company. SVI has recently diversified into call center and BPO work, and spans different countries. As with other call centers, SVI believes that the Philippines' potential for call center work is significant, because of the Filipinos' "neutral" spoken English accent. Having call centers and BPO together with software development may be an advantage, as some clients look for firms which can do all three lines of work. SVI's clients are mainly from the US. They have about 2000 to 2100 employees with about 480 in software development, 1200 in call centers and 300 to 400 in BPO.
- SPI, another large local conglomerate, was started by Alan Fraser from New Zealand 24 years ago. It only performed simple data entry work up until 1997, which was when the new CEO – Ernest Cu – starting making some acquisitions and increasing its capability to do other kinds of work. The firm now does five lines of work through its subsidiaries or holdings: BPO, call center work, medical transcription, academic transcription, litigation support, and software development. SPI's software development arm is dedicated to the development of common platforms for SPI's other 4 units.

There are numerous other local companies and subsidiaries of foreign software development houses which perform work ranging from testing and software maintenance to application system development and systems analysis and design. At least two companies are certified at level 5 of the software Capability Maturity Model (the typical industry benchmark used to evaluate an organization's software development capability): RCG IT and Azeus Systems Philippines.⁶

2.2. Call Centers

The growth in call centers (also called customer contact centers) in the Philippines has been very fast. The call center sector has the largest share of revenues in the Philippine ITES industry, with a share of over 30% (or US \$0.22 billion generated) in 2001. Most sources estimate that there were about 30,000 "seats" in Philippines call centers by the end of the first quarter of 2004, and that this number is expected to double to about 60,000 in a year's time.⁷ The table below suggests slightly different numbers in terms of the numbers of people, but the trend is the same, with a year over year growth rate (in terms of numbers of people) of nearly 100% for the last 4 years. (The number of firms shown in the table is also higher than government and other estimates.)

⁶ *ibid.*

⁷ The number of seats refers to the physical booth that a representative may occupy, so given that there is usually more than one shift, the actual number of employees employed could be more than the number of seats. However, the rapid increase in recent years has also led to larger numbers of seats being built in advance of the recruitment of personnel.

Text Box II.1

The Philippines' Advantages May Be Partial and Temporal: Case of RCG

RCG has approximately one to two hundred Filipino employees, which makes it one of the larger software development firms. RCG's biggest advantage is that they have a (US) parent with "deep pockets". There is no venture capital available to local companies in the Philippines. As is common in the software industry, the larger firms can attract larger projects or clients. This was a problem with RCG, as they had clients who needed up to a thousand contract employees to work on a project. Such clients were often RCG's "worst competitor" in that they may choose to set up a shared services IT facility of their own, thereby depriving RCG of business.

Being smaller than some of its established international competitors, RCG does not have expertise in all areas (e.g. SAP database expertise is missing), and so they must network with various other companies to put that expertise at their disposal, especially for larger projects. The pool of experienced IT people in the Philippines is small, so they would literally have to compete with their partner if they were to build up an SAP group. Unfortunately, many local firms are not financially stable, and can be risky to work with as partners. These firms may need to learn how to work with MNC clients in a professional manner, and to have a longer term horizon. Many local firms also focus on rates (i.e. charging by the hour and counting numbers of employees) rather than focus on "value". This was in fact also a problem facing India's software industry when it was doing lower value added work.

RCG's decision to stay in the Philippines is evaluated on an annual basis, but their current feeling is that India is "too big", and that a firm of their size can be more visible in the Philippines (to clients as well as to the labor market). Philippine wages are still 5 to 10 times lower than the US, which helps RCG to rationalize its decision to stay. One of the biggest problems in the Philippines is that there is no middle management, and that everyone who "comes of age" in the industry leaves, but this was also a problem identified in India (Tschang, 2001). Other problems are information security, and various issues pertaining to labor supply and quality. For instance, entry level software development wages are higher than call centers by about 2.5 to 3 times. However, at least some of the 25,000 IT graduates also end up working in call centers or BPO operations.

In the Philippines, as in many countries, there are no schools that teach "how to develop software". Software engineering is not a strong part of the curriculum, nor is the building of business software. Many young people want to code, but they do not realize that only 25% of a project consists of coding (programming), and a further 25% each by management, design and testing.

Table II.2. Number of Firms, Seats and People in Philippine call center industry

	2000	2001	2002	2003	2004 (est.)
No. firms	31	55	70	92	
No. of seats	2,500	3,600	10,000	20,000	40,000
No. of people	4,800	8,000	15,000	30,000	65,000

Source: OPTEL⁸

There are a number of trends in the call center industry of which the main ones are the following:

- The main US call center operators, including Sitel, ICT, West, Convergys, Logic, People Support, Sykes, and Source One, have located to the Philippines.
- While the growth rate was 100% between 2003 and 2004, much of the growth has been in the better financed multinational call centers. Many companies report 100%

⁸ Overview of the ICT Industry in the Philippines, OPTEL.

growth this year, for example, PeopleSupport is reporting 100% growth, and is hiring 80 to 100 people per week.

- The industry is one of the fastest-growing areas of employment in the country. However, for various reasons discussed later, growth is not expected to continue at this rate.
- As befits a new industry, the margins in the Philippines are also very large, and 50 to 60% gross margins (i.e., 20 to 30% net margins) are common.
- India's call center sector is still much larger than the Philippines'. The number of call center seats in India is estimated to be about 300,000 this year.

The Philippines has proven its capabilities for call center work. The call centers that we interviewed most commonly cited the following advantages:

- The labor pool is large, and has a good knowledge of American English and a long history of cultural affinity with the US. This means there is minimal need for voice or cultural training, but also means that the Philippines may be at a disadvantage when working with other countries like the UK.
- The Filipinos' cultural advantages such as strong interpersonal skills and a strong affinity with the US culture are also cited as relevant for customer service. Many interviewees and other observers assert that such skills can help the country with its call center work.
- Manila's livability and reasonable quality of life appears to appeal to expatriates. This was mentioned by local company heads and expatriates, as well as in consulting reports.
- The strong telecoms infrastructure, the availability of real estate, government incentives such as Philippine Economic Zone Authority (PEZA) (low taxation) zones, and low employee turnover rates are also advantages (Gardner, 2002).

The table below shows some of the better-known domestic and multinational call centers in the Philippines.

Table II.3. Leading Call Center Companies

Company	Type	Size
eTelecare	Local*	1850 seats
People Support	MNC	1400 in 3 centers (2000 expected in 2 new centers)
Source One Asia**	JV	850 seats
SVI Connect	Local	600 seats (earlier est.: 288)
Sykes	MNC	3100 seats in 4 locations
ePLDT*** (Parlance, Vocativ)	Local	522, 720 seats respectively
Apac Teleservices	MNC	200 seats
Sitel	MNC	1000 seats
ICT Group	MNC	250(expanding to 700, 2 nd center to be set up)
Convergys	MNC	880 seats (third center to be set up)
West Corp	MNC	400 seats
ClientLogic****	MNC	1500 seats

Sources: Various news reports

* By acquisition (initially a joint venture).

** A joint venture between Source One (MNC) with C-Cubed (a local firm)

*** 51% stake in Contact World, which has about 1000 seats. Also, 2500 seats for internal needs.
 Third location being set up

**** By acquisition of another US company

Domestic Companies

Some of the largest call centers are domestic firms:

- SVI's call center employed more than 600 professionals in the Manila region in 2002, and another 400 professionals in the US (gained by acquiring TCI – a telemarketing firm located in Yorktown Heights, New York).
- The main domestic telecoms company PLDT has two call center businesses as part of their multimedia arm – ePLDT Vocativ/Teletech Holdings with 720 seats, and Parlance with 522 seats. They are now expanding into BPO work as well.
- SPI had a joint venture in a US-based Manila-operated call center called eTelecare, which it later absorbed as a subsidiary, then subsequently spun off in April 2004 as a publicly listed company (with SPI holding a majority share).

MNC Companies

MNC call centers have grown rapidly. Many major US companies and companies from other countries such as India and Australia have entered the Philippines:

- Source One, a US firm, started its local Philippine operations in 2003 with over 500 people. They are opening a second center in Metro Manila with 750 seats. They “have not been able to hire (workers) fast enough”, and have found that it is not that easy to find new workers. Most other call centers have set up their second or third sites in Cebu. Source One has worked with C-Cube, a successful local firm, to jointly set up a large call center facility that takes advantage of C-Cube's early local start and Source One's account management expertise. Source One noted that the bulk of the work is coming from the US, and 90% of their work is inbound work. Most of the work is night work, given the time differences between the US and Asia. While a premium is paid for work at night, there are some potential employees who do not care for this type of work.
- PeopleSupport, a Los Angeles-based firm, has also scaled up very fast in the Philippines. Because of this, it chose to set up its centers in “labor rich” areas. Its second center is in Cebu, which is rich in human resources, and has a number of universities. While call centers in the US do not have to deal with language or communication issues, MNC call centers in the Philippines have to learn how to adapt to the local business environment and to the local labor pool.
- Sykes, a Tampa, Florida-based firm, was the first call center in the Philippines. They opened in 1997 with 20 seats, and now have 5000 seats. They were the first MNC in the Philippines, followed by Sitel and Apac. They had 900 clients in 2001, 2000 clients in 2002, and 4000 clients in 2003. Most of their clients are American. Sykes focuses mainly on call centers, with some BPO and IT consulting in the US. Their strength was mainly in technical support and servers, but they are now moving towards financial services, travel, and telecom. Their technical support business for consumer products is also diversifying. Sykes is focused on the higher end of services, such as “level 3 call centers”, and services for enterprise end-users. They have more plans for expansion. When Sykes started out, profit margins were very large, but with increasing competition, these have come down. They are also

concerned about how to keep clients as new call centers and other countries enter the market. They are now seeing new competitors from India, Malaysia, Eastern Europe, and China.

The call center industry should be able to scale well both at a firm and industry level for the next couple of years, but going forward, it will primarily have to deal with labor issues such as quality and availability (discussed in a later section).

2.3. BPO

The Philippines has a number of advantages that are attractive for BPO work, including a large number of university graduates in the business disciplines, a similarity with US business standards (in particular, the commonality between Philippine and US accounting standards), low wages, and good telecoms infrastructure. The Philippine government has focused on attracting BPO and shared services relating to finance and accounting, but the type of work being done has broadened to include other areas such as insurance and training.

There are a few fairly strong domestic companies in the BPO sector, most of whom focus on addressing specific industries:

- SVI has a BPO unit of 1,500 professionals (2002) involved in data entry, data base conversion, document imaging and indexing, image archival, as well as select tasks in the areas of supply chain management, accounts, billing and orders (Gardner 2002). Most of SVI's clients are domestic firms, but they have also done document management for a large US litigation services company, electronic archiving for the Asian Development Bank's documents, as well as work for other large global companies in a variety of sectors.
- SPI has BPO units focused on content conversion and transcription services for the legal, medical (discussed later), and educational sectors. They are moving strongly into the insurance and financial services market, and in December 2003, they won their first contract in the financial transactions processing sector. They also solidified their work in other sectors, including the scientific-technical-medical (STM) sectors of BPO (e.g., through the purchase of an Indian firm doing similar work).
- ePLDT was planning its first BPO facility for 2004. Their initial focus was on processing loan applications.

While medical transcription is not classified as BPO by the government, it is still a "back office" process as far as the medical profession is concerned. The Philippine medical transcription industry is currently at the brink of a significant growth phase. (We summarize it here because of its importance.) The 22 companies employ just 1500 professionals, and possess 1% of the world market for MT services.⁹ However, the country produces about 30,000 medical professionals from 313 medical and allied health sciences schools, and since MT professionals typically have a background in nursing, pharmacy or some other aspect of healthcare, this represents a significant resource. The compensation is also similar to call center operators, with entry level salaries ranging from 10,000 to 12,000 pesos per month. Medical transcription companies can range from just dozens of transcribers to companies like

⁹ "Industry needs more qualified medical transcriptionists," BizNews Asia, 2004, 2(7): pp 28-29.

SPI health care documentation which have hundreds. The problem is that the MT sector will also compete with other job opportunities for health care professionals, including nursing and geriatric care in other countries, which are attractive to Filipino health care graduates.

Shared Services Facilities

Much of the Philippine BPO industry consists of captive centers, that is, shared services facilities owned by MNCs which do their corporate-wide work themselves. Captive centers allow MNCs to control their flow of information, to address specialized needs, and to protect sensitive data. MNCs with shared services facilities include:

- Caltex, the US energy firm, which set up a unit doing back-office operations in Manila in 1999. The facility employed over 300 people in 2004 (having grown from 200 people in 2002), focused on finance (including payroll, disbursements and corporate accounting), IT, human resource and internal auditing. There is also a small team of internal consultants which does complex business process re-engineering projects. Many of the employees have several years' worth of experience in related work such as banking or auditing, and about three quarters of the staff have their CPA (certified public accountant) certifications.
- Procter and Gamble (P&G), which established a back-office operation in Manila in 1999. The human resources group was one of P&G's three worldwide shared service centers (the other two being at Costa Rica and Newcastle). In 2002, the Manila center employed about 440 staff in finance, accounting, human resource and IT, mainly to service the offices in the Asia-Pacific region. However, in 2004, the unit containing much of the services and staff that provided employee services support was sold to IBM, and the unit handling IT support was sold to Hewlett Packard (HP). This effectively "outsourced" the work to IBM and HP as BPO providers, although both companies continued to handle the work for P&G locally.
- Maersk Sealand, the Danish shipping firm (which is part of AP Moller) has also located some of its shared services operations in Manila, along with its other shared services operations in Costa Rica, Mumbai, and Guangzhou. The Manila operation handles integrated back office work (i.e. not customer-facing work) on transport contracts, which functions much the same way as the legal department in a commercial trading house does.
- AIG opened its facility in 2002, and will have 600 employees by the end of 2004. The facility works on insurance claims and processing, as well as call center work. The facility has plans to spin off a separate unit that can broaden its client base to other insurance companies. This can develop a larger BPO sector than what a single MNC client can sustain. It is a strategy similar to that pursued by MNCs such as IBM, HP and Accenture in their efforts to become service providing companies.

Other MNCs which do BPO work in the Philippines include Fluor Daniels, which has about 500 people in Alibon doing engineering design; JGC, a Japanese gas company which does engineering work; Citibank, which does training, and Alitalia, which handles air ticket processing.

As the box indicates, there are a few important signs which the government should bear in mind. Firstly, many companies noted that they chose the Philippines over other locations because of the difference of just one or two factors over other locations. This implies that losing competitiveness in any one of those factors could be dangerous. Secondly, the early “success stories” like Caltex and AIG located their facilities in the Philippines partly because of their early roots, but future newcomers will not be so easy to bring in on this basis, as they will not have the same long history and familiarity of operating in the Philippines. At the same time, the creative efforts of these early pioneer companies are already helping to create a larger sector by encouraging other firms to enter the country. Thus, there is an opportunity to further capitalize on having pioneers in each of these areas so as to bring in these companies’ competitors.

While the BPO sector is unlikely to grow as fast as the call center sector, and while each industry’s BPO may require different skills from others’, BPO in general may offer greater opportunity to build deeper knowledge and processes.

Text Box II.2

Why Do MNCs Choose the Philippines for Their Shared Services?

Maersk utilizes shared services partly to save money, and partly to control the process in a better way. The logic behind shared services is that they can better support the corporations moving into and out of new locations. The Manila office for instance, takes on the documentation from the Eastern Mediterranean region, as Maersk cannot afford to have specialists in those offices, and cannot send specialists there. It is “easy to move mechanical operations into a country” (i.e. shipping and logistics), since they are “masters” of that part of the shipping business. On the other hand, the legal aspects of the business take specialized knowledge which would take too long or be too costly to build up in each new location. Their Manila staff has gone from over 90 in 2003 to 225 in 2004, and is expected to continue to increase at a fast pace for the next two or three years. When Maersk conducted a feasibility study in Asia in 2000, part of it was a cost benefit analysis. However, the factor that determined their locating in the Philippines was not so much the cost as much as infrastructure and facilities such as communication lines, the mastery of English, and the fact that they could not acquire staff elsewhere (costs were important so far as making the decision to outsource). They have their own private network, which is based on a fixed network leased from the national telephone company, PLDT, with satellite backup. Despite the belief that the Philippines has a “cultural advantage”, or that India has an advantage in process, at least for Maersk’s type of work, the differences between India, China, and the Philippines do not appear to be major.

Other MNCs have similar stories about how they came to locate in the Philippines. The Caltex facility was one of the first shared services facilities in the Philippines. Caltex has had a long tenure in the Philippines. It essentially chose the Philippines over several other countries because it ranked higher on the factors that were most important to them: lower costs, English-speaking capability, the availability of accounting graduates, and good infrastructure. Other locations were ruled out because they could not compete on one or more of the same factors.

AIG’s facility was located in Manila because AIG had an earlier presence. AIG’s subsidiary – Philamlife – was in the Philippines for 56 years, and had built up a strong pool of insurance expertise. It had also proven the Philippines’ general ability for insurance work. AIG’s decision was also helped by the BOI’s coordination with the study team. As with other companies, the familiarity with US business standards, English and good telecoms infrastructure helped them to decide on the Philippines.

P&G chose the Philippines over several competing locations for its initial facility (which has since been sold off to IBM and HP) because of the availability of talent, good infrastructure, supportive government policies, low costs, hospitality to expatriates, and accessible language and culture.

Background

The global animation industry is expected to become very large, with India's NASSCOM estimating it to be worth about \$50-70 billion US by 2005. At present, there are over 20 firms and 2500 to 3000 artists in the industry, many of whom are in a floating labor pool from which they are called in for temporary work assignments. The Board of Investments (BOI) estimates that with this effort, the Philippine animation industry is capable of annually producing 300 animated episodes about 22 minutes long.¹⁰

The Philippine animation industry began about 20 years ago, with one of the first firms being a studio that the Australian company Burbank Animation started. This was done partly because of the tax and other investment incentives, partly because of the low cost of production, and partly to gain closer proximity to the US market. Two Australians came to the Philippines and started the test site. In 1991, the renowned US animation company Hanna-Barbara also set up a studio in the Philippines called Fil Cartoons.¹¹ These early efforts helped the industry considerably by contributing to the training of artists, the growth of the industry, and eventually, the creation of new companies. However, many of these eventually folded. For instance, Burbank's local studio closed in the late 1980s. This had the side benefit of dispersing a number of the early Burbank people to other firms.

Starting in the early 1990s, work became plentiful, which allowed the industry to expand rapidly. However, the global economic downturn, coupled with animation industry-specific problems such as a worldwide crash in the industry and a subsequent reduction in the amount of work, triggered by the failure of the German media firm EMTZ, hit the local industry badly. At the same time, wage inflation, coupled with new foreign competition, made it difficult to attract new work to replace the lost business. The downturn in the industry has also been accompanied by a series of brain drains. The first brain drain occurred in the early 1980s, when US firms would regularly send talent scouts to raid the Filipino studios. Fox animation studios in the US took 200 to 400 Filipino artists from Fil Cartoons and 10 animators from PASI. With the more recent downturn in the industry, hundreds more artists moved to India or went to work in Indian firms that had opened offices in the Philippines.

Animation Capability

The Philippines mainly focuses on the production of two-dimensional (2D) animation work. Much of the art work is done on computers. Three-dimensional (3D) animation capability is a much costlier investment, although there are some efforts to develop this capability, starting with training, and at least one firm has now started to do full length 3D animated feature films. The computers and software programs for 3D animation are very costly, and many 3D artists have left the country. More investments in training and equipment would be needed in order for the industry to compete with resource-rich countries such as India or Singapore.

Animation involves essentially four stages of creation: conceptualization, pre-production, production (where a lot of the painting work is done to provide the finished sequences) and post-production. Toei's Philippine studio currently does everything in the production stage from painting to digital layout and the key animation part of pre-production.

¹⁰ BizNews Asia, Vol 7(2). Note that given one estimated cost of about \$100,000 USD per episode, this works out to a \$30 million USD industry, which is in line with the 2002 estimate given by the BOI.

¹¹ *ibid*

However, most foreign customers prefer to keep the pre-production (including the conceptual art and story reels) as well as post-production (editing work) to themselves, in order to control the development and ownership of the concepts and other intellectual property. The concepts and production process are so well specified such that a considerable amount of it, including the painting, does not involve much creativity. While Toei-Philippines is doing fairly high end work, there is understandably less room for creative input, except if the local subsidiary were to take part in the conceptualizing stage. At present, on Japanese-conceived series, the Philippine subsidiary is not allowed to change the characters' colors, let alone the characters themselves, and would have to use the storyboards and color models that they receive (a situation that most Filipino firms also face with their clients). However, Toei has also told the Philippine subsidiary that ink and paint work was unprofitable, and has given them drawing, background painting and other higher value added work.

Some of the major studios are:

- Toei: The Japanese film studio Toei has a 100 person subsidiary which has been in operation for 18 years now. (The parent company has about 300 employees, including support and creative staff in Japan). Toei also maintains relationships with other studios in China, Korea and Japan for digital painting etc. The Philippine subsidiary started in 1990 as a joint venture between Toei and a Philippine construction company, which wanted to provide work for its employees' spouses. Eventually, Toei bought out the company and started to develop it into a full fledged subsidiary that now works on about three titles (and which will add another one soon) for Toei. They have put their staff through substantial training, which adapted them to the Japanese style of animation, adding more value to Toei. Japanese animation is very different from Western animation, with the former being very stylized and fast moving. The Japanese style also requires fewer drawings per second of animation than the Western style.
- Tooncity Animation: This used to be a "captive" Disney studio which did work strictly for Disney, but recently, following the decline in performance of Disney's animation group, and its subsequent restructuring, Tooncity has been "released" to also do work on the open market. It continues to prosper, and has built up a very strong staff and capability – being considered one of the top outsourcing studios in the world.
- Top Draw: Top Draw was set up in 1999, partly by ex-Burbank and PASI staff. Top Draw has now secured work from clients in the US, Canada and Europe. Their growth rate has been extremely high, with growth of 300% and the production of 42 animation films or episodes in 2003. They employed 600 fulltime and temporary people in 2003, although the number of fulltime permanent staff is much smaller, and the number of artists tends to fluctuate a lot.
- Philippine Animation Studios Inc. (PASI): PASI has an unusual background because it is Philippines-based and Filipino-managed, has an American creative director, and is financed by Malaysia's Astro Group. Its parent company is in the oil business, and is listed on the Kuala Lumpur stock exchange. PASI started in 1990 with 350 staff, and reached 500 at its peak. However in the wake of the weaker animation market and the seasonal nature of its work, it was restructured in 2000, and is now down to 50 fulltime staff. The rest of the work force is called in on an as needed basis. Most of its

work is from Canada, and it is also working on a feature film from the UK called Heidi, as well as some work for Germany. PASI has been listed for two years as one of the top 10 outsourcing studios in the world. However, profit margins are very low, and artist salaries – a major component of the cost – are difficult to bring down. Financing is still a worry, and they continue to live from project to project. They are mindful of the Chinese and Indian competition, and are seeking to do more creative work, e.g. preproduction, co-production and work requiring more sensitivity to cultural context, where they have some advantage over countries that are not native English speakers.

Almost all of the other studios are smaller, and tend to be doing commercial work such as TV commercials or graphic design, rather than work on animation series or feature films. At present, the bigger studios are either affiliates of foreign studios, or are managed by Western professionals who had set them up in the first place.

The Philippine Animation Industry: Boom, Bust and Take-Off Again

The general history of the animation sector is worth examining for a moment, as it illustrates the difficult business conditions that face industries prone to cycles or downturns. The organization of the industry has also adapted to reflect the changing nature of the work, as well as its cyclical nature. The boom years of the 1990s saw major studios emerge, with Hanna Barbara's subsidiary employing about 1000 employees at the industry's peak in 1998. However, a downturn in the industry in the late 1990s, brought on by the failure of a German conglomerate, coupled with the general economic problems resulting from the 911 terrorism act in the US, caused a near collapse in the industry. The impact of automation further aggravated the situation, and caused many of the larger studios to go under, or to lay off large numbers of permanent staff. According to TopDraw, through the 1990s, the animation industry had a factory production line mentality, requiring large staffs of artists. Similarly, according to Toei, painting used to be more labor intensive. When the work was done manually, an artist used to average about 30 sheets of work per day, but today, computers and digital painting have raised the productivity to 600 sheets per day. Similarly, the number of "ink and paint" painters was estimated at one studio to have gone from about 130 to 150 painters, down to about 21 painters. At another studio, the increase in productivity was even more dramatic, with only 25 people now doing what 200 to 300 artists used to do.

The remaining studios like Top Draw have now veered away from the factory model. Top Draw now uses freelance artists for 90 to 95% of its workforce, and only has about 15 fulltime artists. It uses 400 to 500 people when it is fully laden with work. They do a range of animation work, ranging from TV series production, to "direct to video" and possibility, feature films. They started by working on three projects in 2000, but the number of projects went up to 11 in 2001, 22 in 2002, and 43 in 2003. Under a co-production treaty between the Philippines and Canada, they have also co-produced a series – *Yvonne of the Yukon* – with a Canadian TV studio. However, even for this co-production, all of the creative (conceptual and preproduction) work and post-production is done in Canada, in their case, partly because of the Canadian government's requirements for Canadian content. While the Canadian side will dictate details such as the timing of each frame, the Philippine side is allowed to call minor changes, or to suggest major ones.

Despite the industry's downturn over the past few years, a recent improvement in the industry is now bringing back work slowly to the Philippines. Some of the work that went to

India is also reportedly coming back to the Philippines, reportedly because of quality problems. This has also been helped by a fall in artists' wages, down from a high of 150,000 pesos a month (or over 10 times the wage of the entry level BPO or call center agent) to about 40,000 to 80,000 pesos, a drop of 47 to 73 percent.¹² The Philippines still has an advantage in technical and process expertise in animation. They have people who can direct, do special effects, and cover the whole range of production work. While India has not been matching the Philippines in capability, it is certainly lower in cost (quality is a matter of definition, as there have been reports that Indian firms have not satisfied some of their clients). Furthermore, in the last few years, as work opportunities shrank, many Filipinos moved to India and started teaching Indian staff. This is gradually helping India's capability to catch up, such that there is speculation that in terms of matching to the cultural preferences of the market, India will be able to compete much more effectively in a few years' time.

The greatest challenge to Philippine animation will perhaps be the need to confront lower cost competitors and to provide greater value added to clients. Given the cyclical nature of animation work as witnessed in recent years, it has been considered by some to be a more unstable sector than the BPO and call center sectors. Clients in the latter two sectors tend to provide work contracts that last up to 2 to 10 years, while animation projects may end within a year. One firm believes that the main way forward is for it to avoid simply staying as a service provider, and to be more involved in developing its own intellectual property, be it for foreign markets, or domestic ones (see text box). As for surviving major downturns, one possible way for the industry to sustain itself through these is to have the backing of larger conglomerate owners willing to hold fast throughout the troughs of the cycles.

While animation jobs appear to provide a higher paying, and therefore, more comfortable living to their employees than call centers, the proportion of fulltime artist positions is small, and the part-time nature of much of the workforce means that the annualized salary actually appears higher than what many artists might earn over the long-run.

Text Box II.3

The Domestic Market and Original Work

One opinion is that for the animation industry to take off, it should not depend solely on subcontracting work, and it is important to seek out work involving co-production and the co-creation of original content. Having said that, Toei Japan had asked their Philippine affiliate to offer original ideas, but for various reasons, including a lack of time, the latter has not done that. Despite the industry's length of time in the Philippines, there have been no more than five original works to have come out, and credit is never given to it for the contracted work that it does. Besides the funding issue, it is difficult to find Filipino material which has universal appeal. There has not even been one successful production for the local market, due to piracy concerns and the belief that it is not possible to do so. One local artist - Norman de la Cruz – managed to produce a series called *Lapu Boy* for local consumption, but this only lasted a while, eventually dying out. Malaysia was however, fairly successful with Lat's *Kampung Boy*, for which PASI did the animation. PASI is also working on a local TV series which is the brainchild of one of their animators.

All this requires not only a major upgrading of studios' capabilities, but also the development of better networks to source higher value added opportunities and business models and capabilities to take advantage of them. The Philippines will also have to invest in the corresponding skills of its artists. The Indian animation industry already has many of the technical capabilities and the advanced technological equipment to compete at the high end

¹² Lawrence Chin, "Animation industry recovers with little support," the Manila Times, 20 August, 2003.

of special effects and computer graphics (for both 2D and 3D), and it is acquiring the skills to be able to meet the market's preferences. Without further financial support or linkages between firms and other supporting institutions, the Philippine animation industry is unlikely to be able to compete with other countries. While much of the 2D industry has already matured, the still immature state of the 3D industry may leave open some opportunity for new firms.

CHAPTER III

STRENGTHS, WEAKNESSES, OPPORTUNITIES, AND THREATS ANALYSIS FOR THE PHILIPPINES' ITES SECTORS

3.1. Strengths (The Philippines' Advantages in ITES)

Although it has been said that the Philippines lacks the political and social stability to attract significant foreign investment, the rapid development of the ITES sectors, and especially the inflow of multinational firms, has repudiated some of this belief. Many international consulting firms have noted that the Philippines has significant advantages for handling ITES work. The Meta Group ranked the Philippines fourth in the world in terms of knowledge workers, and Gartner (2002) has also recognized the Philippines' strengths for performing call center and BPO work.

Human Resources: Quantity, Quality and Cost

The most important factor that affects ITES work is the availability of sufficient amounts of trained manpower. It is comparatively easier to set up a call center than a manufacturing plant, but it is also equally easy to close the former down. That said, the international economic climate and the Philippines' native human resource characteristics and cultural advantages (e.g. English language ability and affinity for American culture), all at low wages, have been said to play a major role in attracting many investors to the call center industry.

The Philippines has the necessary human resources to develop a strong ITES industry.

A major portion of the population is under 18, the literacy rate is high (92.3%), and the public schooling system is well established (based on the US public school system), with about 380,000 college graduates a year, of which¹³:

- 80,000-100,000 are graduates of accounting, finance, management and other related subjects
- 2,500-3,000 are newly certified public accountants (CPAs) every year
- 50,000-70,000 are IT/computer science or mathematics graduates.

The prevailing unemployment and underemployment within the country also means that the ITES sectors can expand more rapidly (although as we show later, this is compounded by the lack of depth of a strongly-skilled workforce).

¹³ Briefer on the 5 ICT Priority Sectors, ICT Division, Board of Investments (BOI).

The government has shown particular interest in the ITES sectors, and the Information Technology E-Commerce Council (ITECC) of the Department of Trade and Industry (DTI) has been quite forward-looking in its efforts to promote the five key ITES sectors that the Philippines was believed to have a competitive advantage in: call centers, business process outsourcing, software development, animation, and medical transcription. Another important organ that promotes the IT industries is the BOI, which plays a unifying role by regularly bringing firms together for trade missions and exhibitions, by coordinating efforts across each industry, and providing tax breaks. The designation of PEZA zones for tax breaks and other advantages has also benefited the companies.

Telecoms Infrastructure and Its Reform

One of the most important enablers of the ITES sectors' development, especially the call centers whose operations are voice-based, has been the reform of the local telecoms industry. It has been very important for call centers to have good, low-cost telecom connectivity. According to one source, the fall in the cost of telecom connectivity after 2000 was the factor that made it possible to do BPO work effectively in the Philippines. While the telecoms sector had historically not been well developed in the Philippines, President Ramos' deregulation of the PLDT telecoms monopoly in 1994, and the entry of new players, including Singapore's SingTel (which was the first foreign investor/player in the Philippines market, partnering with the local conglomerate Ayala and telecoms company Globe), significantly increased the competition in the telecoms market. The last 10 years of deregulation have put the Philippines ahead of some countries in Asia, and perhaps even in the first tier of telecom markets.

In 2002-2003, the Philippines had significant telecom advantages over India, such as readily available international direct dial services, lower prices, and diversity in the number of major or trunk lines. There are three transpacific undersea cable connections from the Philippines to the US, which provides significant redundancy and reliability for BPO firms. By now, a significant proportion of the wiring is also comprised of fiber optics. A standard E1 (high bandwidth) telephone line is about two to three times cheaper in the Philippines than in India. The cost of E1 lines has come down considerably, from \$25,000 USD per month to \$4,000 to 5,000 USD per month. With compression rates of 8:1 for an international phone call, the cost of a call to North America is almost the same as a domestic call. To further improve its competitive position, the Philippine government is now also pushing for further reforms, specifically, to open up the voice over Internet protocol (VOIP) market. In contrast, Indian call centers have had to put in private lines to improve their connectivity, at least in the past. However, the rise of local long distance carriers like Reliance is also helping to wire India and to reduce long distance connectivity costs. A certain degree of convergence in costs and connectivity is to be expected as both countries' telecom markets mature.

3.2. Weaknesses: Competition and Constraints on Growth

While ITES growth in the Philippines has been strong, the Philippines' two greatest problems are the constraints in resources that may hold back the industry from sustaining its current growth rate, and the increasing pressure from external competitors. The first requires it to address basic issues such as education and institutional reforms, and the second requires the firms to consider how to upgrade their capabilities.

Labor Constraints

The main constraints facing the expansion of the ITES industry are human resources and capital. Generally, the government has other problems such as political and social instability, and widespread poverty, which have greater potential to affect economic growth and investment in the long run. Firms in each ITES sector also face unique problems. For instance, firms in the animation and software development sectors tend to be weaker, and face more complicated situations for business development, as well as high or increasing competition from other countries. Filipino software development is at a big disadvantage to India, since many Indian firms are already of a significant size and capability to service the best customers. Other countries like China are also seeking to enter the software services market. Animation is likewise an area with increasing competition from various countries, and with animation being a cultural product, it may be difficult to increase the value added in the industry. Similarly, in call center work, while there may be an advantage to countries that speak English, there may not be much value added to be provided beyond the basic customer services needed.

Labor Constraints on Call Center Growth

Generally, labor is the most serious factor affecting the ITES industry. According to one interviewee, the biggest cost for call centers is labor, followed by facilities and technology (including leased lines) respectively. Out of all the ITES sectors, call centers appear to have the most serious labor problems (although the other ITES sectors also have specific problems with labor):

- The base salary for call centers is quite comparable to some other professional occupations in the Philippines, but it is not extraordinarily high. Call centers have starting salaries at anywhere from 12,000 to 16,000 pesos per month (with BPO salaries being similar to this). The basic level 1 call center customer service position will earn about 12,000 per month. Nighttime work is estimated to be about 10 to 30% higher wages. This basic salary is higher than many other occupations' starting salaries.
- The hiring process is still very highly selective at present. One call center makes 5-7 offers for every 100 applicants (mainly college degree holders). Hiring is harder for specialized work. The turnover rate is about 10-22%. Another call center tends to hire 1 in 10 applicants at the final level. There is a wide screening process, in which out of every 100 applicants, maybe only 1 gets in. Another shared services firm takes in about 2 percent of their applicants. However, the ones that actually make better employees are the IT trained workers, who score higher on the logical tests, rather than legal or other trained workers. Despite the legal nature of the work, there is actually no need for specialized legal training, since much of it involves standard operating procedures.
- Employee turnover is expected to be higher in the call center industry than other sectors due to its somewhat difficult working conditions. However, employee retention in the Philippines is still somewhat better than in India. One call center reported a turnover of about three percent per month – both voluntary and involuntary – which is very low by industry standards. (Turnover at one shared services facility was about 10 to 12 percent last year.) Retention at another call center is also “quite good”, with managers being selected from within.

- The talent pool is getting smaller. Because of their rapid growth rate, call centers may have the most pressing situation with regard to labor. Other sectors have their own problems with labor supply, though the seriousness varies according to the sector.
- The call center industry requires various training and human resource mechanisms in order to maintain standards of service. In this sense, the industry appears to require strong processes. One company rotates their people through different product groups, which builds their general stock of knowledge. Coaching and mentoring is also used, and this effectively also helps to transfer knowledge. Formal training is typically done in-house, but varies in duration from a few weeks to longer periods.

Text Box III.1

Smaller Talent Pool

The talent pool is becoming noticeably smaller, especially for call centers. Call centers have thus far been successful in attracting quality personnel by only taking in 1 to 5% of their applicants, but if the call centers are to expand to meet their needs beyond the next year or two, according to one report, they will have to take in the top 20% of applicants.¹ According to one call center representative, the supply of good quality call center operators is limited, and their take-up rate is about 5%; that is, for every 100 applicants, they get about 5 employees. They have already exhausted the pool of “tier 1 graduates”. A second interviewee also expressed concern with the labor pool. Although there are enough graduates, the client may require them to ramp up very quickly. Another related issue is employee poaching. The call center association now has an agreement amongst the established firms to stop poaching, but the newer firms have not joined, as their need to ramp up may cause them to focus on getting employees any way they can. There is a concern that without these wage or quantity “controls”, the industry’s competitiveness will be reduced.

Labor Constraints in Other ITES Sectors

Labor issues are critical in all ITES sectors, but they differ substantially in their character. For instance,

- Software development firms are more concerned about whether the labor pool can deal with real world issues such as software processes more effectively. The educational system needs to be reformed.
- The BPO sector itself consists of firms specialized in very different processes and domains from one another. This makes it more challenging to improve the labor pool. In contrast to call centers, the more gradual growth rate of BPO and the lesser importance assigned to verbal language skills means that the BPO human resource pool is under less pressure than that of the call centers. One possible problem may arise if BPO centers tap into the supply of IT professionals (much as the medical transcription does with the supply of trained healthcare personnel). Thus, in the long run, the Philippines should make more efficient use of its educational system.

Text Box III.2

Examples of Call Center Training

Training at one call center involves two to three weeks on how to handle calls, including listening, navigation of the software systems, general knowledge, including American geography and culture, and brushing up on language. They also do product training, which ranges from two weeks to three months. Another firm notes that the good universities don't need additional technical assistance, but graduates from first tier universities are unlikely to enter the call center industry. The second and third tier universities are "brushing up on their English" in anticipation of these jobs. Training at another call center was also done in-house. Since they have already screened for communication ability, their first level of training is a week's orientation on customers, sales talk, and accent training. Training on client products lasts from two to four weeks. They also have other educational programs that provide client updates, professional development, and management development. The interviewee believes that firms in India have to spend more time on accents and other generic knowledge, for instance, possibly up to three to eight weeks on accents. This call center was also helping tier two universities to put together elective courses on call centers, and to pitch the industry to students. A third, diversified firm's employees are put through a 6 week boot camp called a learning academy, where the functional skills, values and culture of the organization, are learnt or inculcated. Their training periods last anywhere from a minimum of three weeks up to six months, depending on the type of job and level of capability. For instance, a software engineer would sit through a 60 hour course on Java for software engineering. They do a lot of training using in-house trainers, and also bring in specialized consultants, and hold specialized management training.

- Animation also faces a different situation, in that the lack of employment over the last few years has reduced opportunities, which in turn caused artists to leave the industry, to the point where the recent increase in demand could not be met, especially for graduates versed in advanced technologies.

The shortage of employees in the various ITES sectors could invariably lead to a drop in quality, profits, or worse, a rapid increase in wages, which will make the Philippines uncompetitive relative to the larger, lower wage countries like India and China.

Along with labor shortages is the challenge of keeping wage inflation to a minimum. The animation industry has already encountered this problem before. According to one animation studio interviewee, the biggest problem that the Philippine animation industry faces in competing with other countries has been the high wages. With the flood of work into the country in the early 1990s, wages rose, and the pirating of employees rose. However, when work dried up a few years ago, this partly helped the wages to adjust downwards. The rise of lower-cost competitors from Vietnam and China has also made it more difficult to get work. In fact, the inflation in artists' wages has caused some animation processes in the Philippines to become more costly or the same as even Korea. For instance, Korean costs for some films are about \$10 USD per foot of film – about the same as the Philippines. The lack of funding also hampers the ability of firms to improve their capability, e.g. to do 3D work.

To deal with this will likely need the government's support, and the Philippines must invest in higher education to a degree unparalleled in its recent history. Some of the Filipino animation studios have decided not to wait, and to take a long term view in order to foster new talent, and are taking it upon themselves to train new talent for the pool, regardless of whether those trainees eventually end up working for them. Despite losing its best animators to other studios and to Fox in the past, PASI continues to engage in a lot of such in-house training. Similarly, Top Draw also engages in training. While animation training is more

specialized than call center training, the call centers and other sectors might learn a lesson from these “communal” efforts.

Management and Resource Constraints

According to one firm, SPI, one of the biggest challenges the Philippines faces is that of achieving larger scales of operation. On one hand, this requires a larger labor pool. The educational system is only now starting to support this goal, with efforts to improve English proficiency and to provide the necessary qualifications.

An even worse problem for many small and medium sized firms, particularly in software development and animation, is that the business environment is poorly structured and favors clients over providers. Firms have to provide services without payment upfront, and there have been cases of clients failing to make payment. In the words of one firm, this situation “defies sensibility... with foreign partners making promises and no way to pursue (them) legally.”

While the country has also been cited as having very high concentration ratios across its industries (World Bank, 2005), this in itself is not necessarily a direct problem for the ITES sector, especially since most of it is export-driven. It may however be a problem if firms that are in high concentration ratio sectors feel too comfortable to desire investing in spaces such as ITES that are more competitive.

One entrepreneurial constraint is the lack of financial capital. At the level of the economy, the weak economic and governance picture hinders investment, and it is this weak investment that might be a root cause of the weaker productivity growth seen. Conversely, technological and management innovations that increase productivity will also lead to higher investments. The Philippines is unfortunately caught in the first, vicious circle (World Bank, 2005).

Capital does not appear to be a problem in some fast growing sectors such as call centers, or for the better, already faster growing firms. According to SPI, capital is available for good BPO companies with sound business plans. However, capital appears to be a problem for firms in the two sectors with slower growth: software development and animation. It may be that these two sectors are also the weakest or riskiest ones, given the weaker or inconsistent demand from their primary markets. In software, one major local firm noted that local companies small and large were finding it difficult to get enough financing from the private sector. In addition, linkages between the ITES firms and the financial industry are weak, lending processes are held back by bureaucratic procedures, and the institutions with financial capital lack an understanding of the software sector. In particular, local investment institutions with capital are conservative or unfamiliar with lending on the basis of a company’s intellectual and human capital. This is also the case in animation: according to one interviewee, the local animation studios have not been successful in getting funding. This may also be due to various reasons, ranging from companies’ being too weak, to lenders having insufficient knowledge of investment opportunities.

There are very few strong animation studios in the Philippines. The few strong local studios were developed by expatriates, usually ones with international connections. For instance, TopDraw was set up partly by its managing director, Wayne Dearing, an Australian national who started in the industry as an accountant with Hanna Barbera studios. He

originally came to the Philippines in 1991 to manage the earlier pioneer firm Fil Cartoons, and in 1994, was hired by PASI. Two of the other senior management had experience in both Fil Cartoons and PASI. This foreign presence appears to matter a great deal in the industry, as it helps the studios to secure contracts through the network of relationships that have been built up globally. The local Philippine animators themselves were often artists highly skilled in production, but lacked managerial or business skills. This may be one reason why financial institutions have not been willing to lend them capital, as studio heads may need to be able to develop and pitch business strategies and to follow the procedures that financial institutions set up. There are instances of animators who seek to create a television series, but do not have the commitment to see it through. Many would-be company heads in the industry think on a contract or project basis, and not about growing a company.

It is not unusual to find this situation in other creative industries. For instance, American videogame studios face a similar situation, in that the founders somehow have to focus on developing the business as well as developing products at the same time. However, US videogame studios have been able to draw on financial and management expertise from outside of the industry. It may also be that the videogame studios are helped by being geographically closer to their primary market, and that the financial aspects of their industry are more mature, with publishers and other venture capital providers helping to sustain these studios.

General Investment Climate Factors

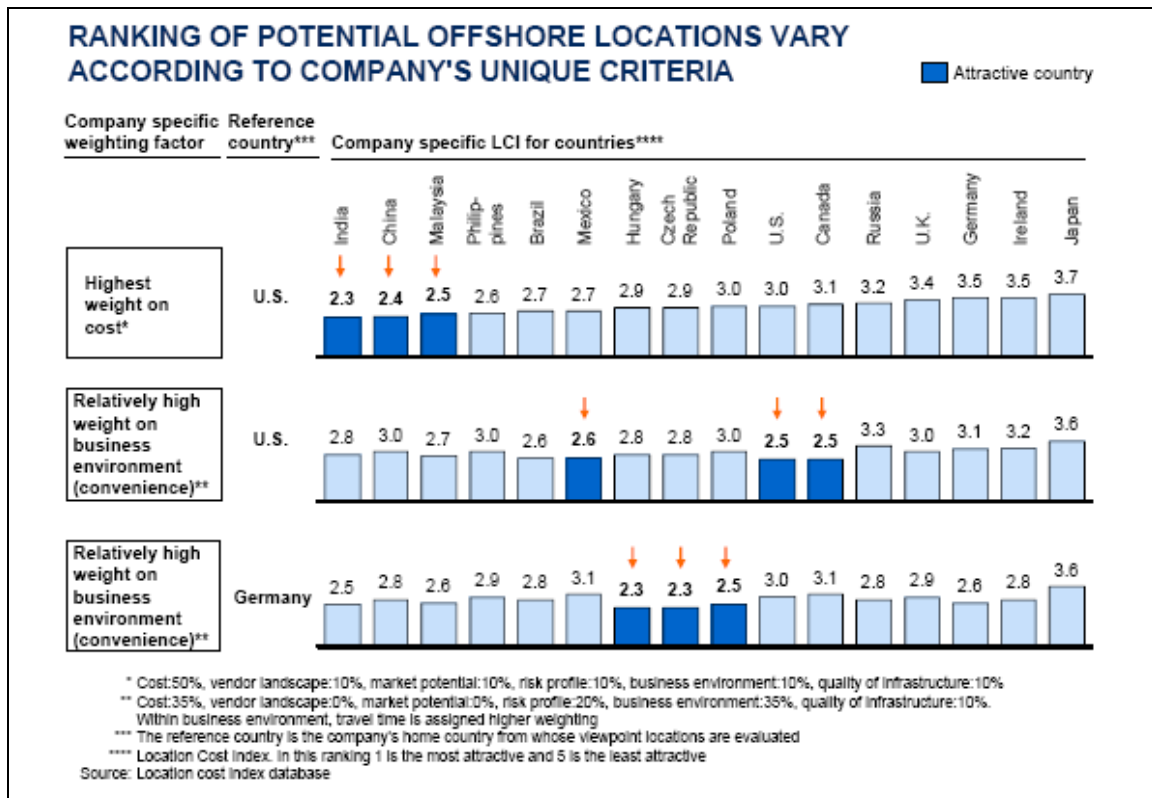
A recent study by McKinsey suggests that companies' selection criteria to offshore their operations comprise of a variety of factors based on company strategy and host country issues. These criteria focus on the talent supply as well as the real costs of employing suitable talent in host countries. Factors of this investment climate may include: labor cost; the quality of local service vendors; market potential; the intrinsic risks of the location; its business environment; and the quality of its infrastructure. The company then weighs these criteria according to its particular goals and requirements.¹⁴

As seen in the detailed figure seen below, the Philippines competes well with India, China, and Malaysia when only the cost of labor is considered as the key element for location decisions. However, when other factors of investment climate enter the equations, The Philippines' competitiveness to attract offshore IT operations declines significantly making it **critical to focus Governments efforts to improve the investment climate** to sustain this growing industry and its spillovers into the local economy.

It is well known that the country has long-standing problems in certain areas that reflect the society and governance. A recent investment climate assessment by the World Bank/ADB that surveyed 700 firms found that the firms perceived the two worst factors (at over 30% of responses) to be corruption and macroeconomic instability (World Bank, 2005). Both investors and lenders are worried about the government's fiscal situation and have imposed high country risk premiums, making the cost or ease of borrowing higher for the government as well as for local private firms. Corruption is also related to the difficulty of enforcing contracts, ensuring regulatory compliance, and ensuring fair treatment from the government. While this did not appear to be a problem for some of the ITES firms

¹⁴ McKinsey Global Institute, *The Emerging Global Labor Market*, 2005

interviewed, it may add to a negative perception of the Philippines on the outside, which will only deter new investors.



Source: McKinsey Global Institute, *The Emerging Global Labor Market*, 2005

Serious problems remain in the general society as well. The biggest issue relating to the labor pool for ITES is the fact that only 10% of the population is college educated (NSO, 2000). Largely because of poverty, 1.7 million children in the 7 to 12 year old range are not in school, actual class sizes are in the 60 to 110 students per class range instead of the ideal of just over 20, college drop out rates are high, and government spending on education is less than one third of Thailand's and one sixth of Malaysia's.¹⁵ In addition, after President Ferdinand Marcos' departure in 1986, the trend has been to emphasize the local language over English. This has led to many Filipinos having an imperfect command of spoken English.

Poverty is also a partial cause of political instability, which causes the issue of country risk – a problem that appears to bedevil the Philippines. According to one interviewee, domestic political problems and the general lack of knowledge of how to compete with other countries for foreign investment is hurting domestic firms. The government appears to be doing the best that it can do under these circumstances, but the level of organized effort still appears to be below what other countries are doing to help their own industries.

Export Market Factors

Finally, the industry faces a certain amount of risk from Organization for Economic Co-operation and Development (OECD) governments holding back the outsourcing of work.

¹⁵ Biz News Asia, vol. 2(7).

While in the case of the US, this appeared to peak during the election, the hype has come down somewhat. Nevertheless, this should be a significant long term concern of the Philippine industry as job loss in the US and other countries will significantly affect their perceptions and responses to the offshoring of work. To alleviate short run problems, it might be advisable to diversify the client base. The issue of client country concern will likely only be alleviated in the long run when countries that develop on the backs of export markets become significant trading partners.

3.3. Threats: Competition from India and the Region

Threats from Two Ends

The Philippines' competitiveness in various ITES sectors has been shown to be partial. They are also fleeting, as the challenges facing the Philippine ITES industry come from two fronts. Firstly, India's upgrading of its capabilities poses a problem to the Philippines, which may fall further behind in its ability to increase its value addition to clients. At the same time, the ease of entry into the low end of BPO work is also allowing new competitors with sufficient human resources to scale quickly and to provide viable competition. Both of these conditions necessitates that the Philippines upgrade its capabilities. The high end of work has higher barriers to entry, i.e. a higher quality workforce and strong processes, which might eventually protect the Philippines against other entrants at the low end, but is also an end that higher income countries like Singapore are targeting. The Singapore government has now assisted in the creation (from almost nothing) of 28 game companies and 22 animation companies (of which about half of the latter are engaged in actual feature film or TV series development and production).¹⁶

In order to upgrade the country's ITES capabilities to a high enough level (i.e. to "catch up" with India or to compete with new comers like Singapore), serious efforts are required. At the same time, the Philippines must still continue to ensure the resources to scale up at the low end, where it still has a comparative advantage, but where it can also face a major challenge from both India and from other countries that are starting ITES industries. It is unlikely that these "two ends" of the work will be separated within a single country, as the existence of both large scale low end work and high end work in India indicates.

The actual nature of confronting both scale and high value added work also depends on the sector in question. In the case of call centers, there is not much of a barrier to entry, let alone a technological frontier, so many countries could eventually end up competing at the same level. In the case of BPO, the deeper that BPO firms can get into their client's processes, the more value added they can provide. In the case of animation, the question is: while the Philippines is ahead on some dimensions, India is starting to catch up with the Philippines' artistic and process advantages, while the Philippines is only now recognizing its deficiency in 3D animation and financing. While some convergence is inevitable, the question is: which country will improve its capabilities first.

While it is not possible to provide a thorough discussion here on each country and its advantages or disadvantages, we will illustrate examples, mainly focusing on India as an example of the high end. Since India is the country with the strongest ITES industry, it will inevitably invite comparisons. However, MNCs that consider the Philippines and India as

¹⁶ Media Development Authority of Singapore, 2005.

locations will also consider advanced economies such as Singapore and Australia, or other emerging economies such as Malaysia and Thailand.

A Comparison of India and the Philippines

While the Philippines has made major strides in shared services and other forms of ITES, India's head start, and in particular its strengths and scale put it far ahead in its ability to perform a comprehensive range of BPO and call center work, as well as in its ability to scale up quickly for new work. India has been growing rapidly even as its organizations and processes mature. In 2005, the growth rate has been 32%, which reflects not only a scaling up of capability, but also a deepening of capability and increased value added. Software and services grew by 27%, reflecting the maturing (i.e., filling out of work opportunities) of the sector, while "ITES-BPO" grew by 49%, reflecting the enormous opportunities in the sector, and the domestic market grew by 25%. Software services exports were \$12 billion, "ITES-BPO" exports was \$5.2 billion, and the domestic market was \$4.8 billion.¹⁷ Indian ITES firms have deeply entrenched themselves with foreign customers, purportedly helping clients even more than some US software services firms and systems integrators. The Indian ITES industry is now focusing or planning to focus on areas that it sees as future competitive advantages for higher value added areas. These include¹⁸:

- Technical areas that include information security, and synergies between hardware and software (e.g. embedded systems)
- Firm-level capabilities including domain knowledge acquisition, R&D capabilities (for internal uses as well as for its contracting proposition), knowledge management, and improvements to labor skills.
- Business models and strategies including consulting, (high value) systems integration, productization, branding, and standards-setting.
- Linkages such as collaborations between academia and firms, with NASSCOM and other actors serving as facilitating bodies, and institutes of higher education serving as meeting grounds for collaboration or as incubators.

The table below provides a qualitative comparison and our assessment of some of the relative strengths (or weaknesses) of India and the Philippines, based on various interviewees' accounts and a summary of other work on India and the Philippines. (Annex A.3 provides additional data on India.)

Table III.1. Comparison between Indian and Philippines' Call Center/BPO Sectors

Issue	India	Philippines
Employee attrition	Appears to be worse than in the Philippines according to anecdotal accounts.	Marginal strength: Reasonable in comparison with India, but expected to get worse as industry matures.
Specialization	Broad strength: India is doing diversified work, especially across BPO verticals. Call centers are also important.	Limited Strength: Philippines is focused primarily on voice-related work (i.e. call centers), but slowly developing BPO in selected areas, e.g. finance and accounting.
Ownership pattern in industry	Broad strength: Domestic and multinational firms, where domestic	Limited strength: Mostly multinational, growing organically,

¹⁷ Statistics from NASSCOM. This is measured using NASSCOM's definition of ITES-BPO, which is narrower than the one used in the Philippines or in this article, since we define it to include software services.

¹⁸ Sources: various, including NASSCOM and own research (Tschang, Amsden, and Sadagopan, 2005).

	firms are growing by acquisition as well as by organic means, and by operating in smaller cities	also growing by expanding into other large cities
Cost vs. quality of labor force	Strength: Large labor pool allows firms to scale more easily. Indian firms are also very good at process and IT-related work.	Limited strength (niches): Philippines have a more limited labor pool, with strengths in English (to a limited degree). Telecom costs are lower than India's, but labor costs are comparable to or higher than India's.
Current focus on capabilities	Strength: Focus on scaling, processes, skills and acquisition of domain knowledge (especially in BPO)	Limited strength: Current focus is on the rapid expansion of call centers (i.e. scale), and not necessarily on depth.

On the whole, India has broad strengths in many areas of capability and other factors. This stems from the main differences between the two countries: the greater maturity of the Indian IT industry. However, this maturity may also be a reason for the high labor turnover, which can in turn affect the quality of service. By the same token, the Philippines' lower turnover may be due to its not mature state.

Another advantage that India holds over the Philippines is the breadth and depth of its specializations. This may be related to another area of difference, which is India's ownership structure. India has a number of strong domestic companies in various ITES sectors, particularly in BPO and animation. The Philippines has no more than a handful of strong domestic firms, each limited either by its financial strength, size, or capability. On the other hand, India has a number of large firms in each of the ITES sectors. Many Indian firms, especially software service providers, are financially very strong, and have a strong skills base and processes.

The Indian-owned companies are reportedly facing obstacles, including the recent tendency of MNCs to open their own captive centers or shared services in India, the difficulties in satisfying some call center clients (partly because of the demanding nature of those clients' customers), and the political backlash against outsourcing in the US and other countries, which has the potential to affect not only India but also the Philippines. To adjust to this, Indian firms are trying to increase their value added by focusing on increasing quality and improving their processes, by moving into other types of work such as BPO, by using their software services capabilities to leverage on their BPO and other ITES work, and by specializing in industry "verticals" (i.e. application sectors).

The main factor underlying the strength of the ITES sectors is the labor force. India's depth of resources is considerable. However, it is often claimed that Filipinos have an advantage in their better understanding of the US culture and corporate practices than India, and in their "native" English language ability. The Filipino workers' flexibility and ability to relate to their customers have also been cited as positives. All of this can contribute to the better handling of customer interaction work. On the other hand, according to one call center interviewee, Indian workers were better at process and technology work than Filipino workers, and that this might give the Indians an advantage in BPO work (which has less stringent verbal English requirements, but needs a process orientation and domain expertise). However, he believed that the Philippines could still move into BPO, because the pool of people who are good at process but poor at language is larger than the pool of potential call center employees, and domain expertise can be taught. For instance, high value and complex travel industry transactions can be taught to workers. Thus, the Philippines may be able to

scale up quite well in the BPO sector, although not as fast as it did in call centers. Similarly, the talent for doing software and animation are as good in the Philippines as anywhere else.

Text Box III.3

Relative Costs of Labor

According to one local firm, software development and call center costs in the Philippines may range anywhere from about the same as to higher than India's.

- According to one source, Indian wages are 10 to 15% lower than Philippine wages.
- Another interviewee noted that labor costs are very similar in India and Philippines.
- A third estimate suggested that the difference in cost can be about \$1.50 to 2 USD per hour/person higher in the Philippines than in India.
- A fourth interviewee believes that the base labor rate in the Philippines is a bit higher than India's, but the fully burdened labor rate may be about the same, because of the various subsidies like transport and food that Indian firms provide to their employees.

Since the Philippines will not be able to compete with India on the cost of labor, or in the absolute quantity of available labor, this suggests that the Philippines should focus on improving the quality of its workforce.

Why Sources of Beginning Expertise Will Not Translate into Future Expertise

While for many other industries, expertise has to be built up over time, the Philippines has been fortunate in that call center work is rather rudimentary, making the expertise relatively easy to acquire. Most of the knowledge may be picked up from clients themselves, who all have specific products and processes. In other areas such as BPO, MNCs have brought in the technology or practices themselves. The impact of factors like MNCs on the Philippines' fast start in many ITES sectors cannot be underestimated. Third party call center operators like PeopleSupport have to depend on the skills and expertise of their US call center operations when setting up their Philippine operations.

However, given the current de-industrialization occurring in the East Asian electronics sectors, the Philippines may not be able to rely on multinationals as engines of expertise development and knowledge transfer forever, and it will have to develop ways of building its own sources of expertise, namely through its own domestic enterprises. Expertise is increasingly important for multinationals at the high end of work, as shown by India's development of high end BPO work. Other countries will continue to develop their human resources and their firms, and may even lure Filipino workers. The Philippines' tendency to treat its own workers merely as agents for generating and repatriating foreign currency also does not necessarily contribute to its ability to build stronger domestic firms. Unfortunately, as the Philippine animation studios have already found out, the dissolution of several key studios in the 1990s also assisted India, when unemployed Filipino artists were hired into Indian firms to help boost their production and creative abilities. This should be a lesson to the Philippines to either "use them or lose them". The rise of animation sectors and major private and state investments in those sectors in Singapore and other neighboring countries (which also hope to bank on Philippine workers) also shows that the Philippine government has a long way to go to match policies. In this sense, the greatest threat to the Philippines and its ITES industry may be itself.

3.4. Opportunities

The overall demand-side opportunity, that is the worldwide growth in ITES spending, was outlined earlier in section 1.4. As noted earlier, this is tempered by the fact that there is also growth in service industries in many countries.

Clients and their Dual Country Strategy

While India has the most dominant ITES industry in Asia, the opportunity that the Philippines faces is that a number of clients wish to diversify their country risk by putting facilities in both countries. Regardless of the cost basis, many senior American corporate officials have noted that they have a strategy to hedge their political and country risks by locating operations in both India and the Philippines. MNC call centers such as Sykes and Sitel are examples of such firms. Other MNCs such as Amex, Citibank and Dell may locate captive centers (or shared services facilities) in both countries. This “win-win” scenario suggests that as long as the industry is growing, the Philippines will be able to compete quite satisfactorily with India, and possibly with other countries as well.

Furthermore, no one emerging country has as many advantages as India, so assuming that each country’s advantages remain the same relative to the others’, the fact that every country has a mixed basket of capabilities and advantages may at least equally favor the Philippines with clients that adopt a dual country strategy, given the Philippines’ fairly strong human resources.

The opportunity to the Philippines should also be viewed in a dynamic sense. Being one of the first movers in the ITES industry in Asia, the Philippines has the opportunity to build a set of strong capabilities that can serve as sustainable sources of competitive advantage, as well as barriers to entry.

CHAPTER IV

ACTIONS FOR THE STRATEGIC GROWTH AND DEVELOPMENT OF THE ITES SECTOR

We will now discuss in more detail the kinds of strategies that can be followed to ensure that the Philippine ITES industry can sustain its growth amidst the increasing competition.

It may be helpful to first review a historical case of an industry’s rise (recognizing in fact that the true reasons behind the rise of industries, software industries included, are sometimes difficult to discern). In India’s case, the software industry’s success involved some combination of private sector capability, latent potential, government funded resources, international opportunities, and foreign investments, all occurring at different times or in select circumstances. Thus, India’s early software industry started from domestic resources, which were eventually built into world class capabilities. In recent years, foreign investment flows have been important to the creation of India’s BPO industry (McKinsey and Company 2003), but locally-owned BPO firms are also increasing in number and capability, due to investments from domestic software firms. In each of these factors, strong linkages were formed, if not at a social level, then at a level of transnational operation, or in terms of

connections to markets. In this sense then, a broader way of thinking about the system as a whole, and a focus on the linkages within it, can help us to better understand how to improve the situation in the Philippines.

The Improvement of Firm-Level Capabilities and Linkages

The Philippines will need to simultaneously devise strategies to compete for future ITES business. In light of the problems, threats and opportunities we highlighted earlier, several areas of improvement are needed, as shown in the table below. These are divided into issues that are more related to firm-level capabilities, and areas that more directly involve linkages. However, even the firm-level capabilities which are not linkage-specific can be improved by linkage-related mechanisms and policies, as shown in the table by the possible role of partnerships.

Table IV.1. Upgrading Strategies for the Philippines

Issue	Specific Actions	Enabling policies or mechanisms
<i>Firm-level Capabilities</i>		
4.1. Human resources	Improvement of human capital through educational sector curricula and other reforms (e.g. to increase relevance to industry)	Government focus on education; Industry partnerships with education sector; Linkages with foreign universities
	Companies acquiring facilities (and access to labor) in other countries	Companies with a regional/global focus
4.2. Firms' capabilities	Upgrading internal capabilities (e.g. software engineering, R&D) through certification, training, development of resources, and organizational development	Promoting awareness of process needs; Government promotion of awareness of process, R&D; Partnerships across different actors (i.e., government, firms, universities)
4.3. Management of companies	Improving entrepreneurship and management in sectors; Linking entrepreneurs with technical people	Government assistance to SMEs
4.4. Financing	Improving availability of financing for startup and growth of enterprises	Government and industry efforts to encourage financial sector and cross-sector investments, and joint ventures; Government subsidies and assistance (e.g. contracts)
<i>Linkage-related Issues</i>		
4.5. Foreign investments (that bring expertise, capital and other opportunities)	Improving the environment for foreign investments	Government action to stabilize the macroeconomy, reduce corruption, and provide signaling mechanisms of commitment (e.g. co-investments)
4.6. Linkages with (and access to) international markets and clients	Developing contacts with clients; Increasing international visibility of the industry	Government assistance for attending trade fairs; Visibility through industry associations and overseas Filipinos; Activities of expatriates, foreign partners and investors

4.7. Domestic industry linkages and clusters (so that firms can collaborate to provide comprehensive capabilities)	Building of strong complementary firms to give industry a more comprehensive base of competencies (e.g. software firms working with BPO firms)	Government to provide a catalyst; Lead firms' assistance; Local MNCs acting as clients
	Sharing of information/coordination of efforts across firms	Formation of a more powerful industry association to coordinate responses and share information
	Cross-sectoral spillovers (economic benefits, knowledge etc.)	Strengthening of other related sectors; Formation of partnerships and collaborations between the ITES and other sectors

4.1. Human Resources

Educational Sector

The main issue affecting the low end is the need for sufficient numbers of better skilled labor (including language capability). Thus, as suggested in the earlier analysis, investments have to be made in training a sufficiently large, low cost labor pool. The continued growth of the ITES labor force will require significant educational reform. No Southeast Asian country can measure up to India's software services industry and its large pool of university-trained IT workers. Corporations are looking to the Philippine government for leadership in this area. Maersk feels that shared services will continue to grow in the Philippines, as long as the government continues to support them. A stronger focus on proper training could help, but rather than just training in IT, training involving a broader general education would be more beneficial.

Beyond the need to expand educational opportunities, one of the key issues in the education sector is to reform the curricula, pedagogy, and learning objectives (e.g. types of skills to be acquired) in order to meet the challenges of ITES work, including higher value added forms of it. Some curricula needs are to:

- Help to coordinate and standardize curricula, as well as to improve retention and graduation rates.
- Think through the needs of business process and other new kinds of work.
- Train personnel in state of the art technologies and software, e.g. animation training in Flash and 3D animation techniques.

It is not clear what kinds of curricula changes, and even more important, learning objectives, are suitable for dealing with the diversity of work that can be encountered, and as the work evolves. At a minimum, the work appears to require improvements in the general quality of logical-analytical thinking skills, as well as communication skills. For instance, amongst new curricula in Singaporean universities and polytechnics are programs for specific sectors such as animation and videogames, as well as IT-type programs that emphasize multidisciplinary work, new kinds of integrative thinking and problem-solving ability, and strong industry practicum. This requires changes throughout the system, including not only curricula, but the pedagogy, content and learning objectives.¹⁹

¹⁹ Institutions in Singapore have also sought to benchmark these against emerging or best practices worldwide (Tschang, 2003)

To accomplish this, it will be valuable for the different parties to work together. Partnerships between the business and private educational institutions have been very useful mechanisms in India. The links between industry and the fairly recent private Indian Institutes of Information Technology (in Bangalore and Hyderabad) are very close, with industry providing financial support, assistance in curricula development, and teachers. In the Philippines, there have already been numerous instances where call centers, animation studios, and other ITES firms have worked with universities, e.g. to develop curricula focused on call centers' needs. For the most part, this still occurs at a basic level, e.g. focusing on English language training.²⁰ On the other hand, training for BPO can be much more in-depth, but improvements in education have yet to occur in any significant way. In software development, firms such as Accenture have noted that there will be a growing need to improve graduates' familiarity with processes and structure within projects, and that current graduates lack an intuition of real world problems and techniques for developing solutions. Clearly, all these will require increased interactions and linkages, not just at institutional levels, but at the faculty levels.

Firm-Level Actions: Multi-Country Strategies for Sourcing Human Resources

Text Box IV.1

SPI's Global Network for Sourcing Resources

A good example of multi-country sourcing is SPI's network of offices, which spans different countries, including 13 subsidiaries and affiliates across Asia, production facilities in the Philippines, India, Vietnam, China, and sales offices in the US and Europe. SPI started with its base in the Philippines, but has established a network of multi-country sites, depending on the needs of the field. SPI's philosophy is not to be "country-centric", that is, its goal is to create a capability over different countries, depending on what's necessary and available. This strategy implicitly involves developing linkages across the countries. For instance, SPI purchased an Indian company in Pondicherry to handle the high end of scientific journals, and has also used a subcontractor in Calcutta. SPI also owned (but later spun off) eTelecare, a Los Angeles-based call center. In part, this multi-country dimension also reflects SPI's clientele. Its 200 clients are all overseas. One of their major clients is Lexus-Nexus, one of the largest information repositories in the world. Another big client is Elsevier, the Dutch publisher of books and journals. Over three years, SPI put 30 million pages online for Elsevier's Science Direct online journal holdings. The effort was ramped up in six months, and reached one million pages per month, with a 99.99% accuracy rate.

At least in the case of SPI, following from that of other MNCs, multi-country investments and linkages can be a very viable strategy to achieve growth aims. In order to achieve sizeable proportions however, financing needs and prudent management need to be ensured. This appears to be SPI's strengths. The firm also views two other resources as essential (from a firm management perspective): quality processes, which can be put into place, and trained or trainable labor.

As discussed in the box, SPI's multi-country strategy allows them to develop production units in countries on the basis of their comparative strengths in human resources, or to acquire enterprises with such capabilities already developed. Indian software and animation firms are operating in the Philippines in a similar way.

²⁰ The call center academy (CCA) was set up to develop short curricula for training, but given the considerable constraints on its resources, as well as the fact that call centers tend more to meet their own needs for training in-house, the CCA has fallen back to working with the universities as well.

Other examples of such multinational enterprises are the Indian call center operator Daksh (which was just bought by IBM), which has opened a facility in the Philippines, the various large Indian software services firms like Sassken and Infosys operating in China to take advantage of the Chinese market, and Huawei, the large Chinese telecommunications equipment maker, which opened a large software development facility in Bangalore.

4.2. Upgrading of Firms' Capabilities

One important issue is the upgrading of firms' capabilities, especially as needed for higher end work. Some of these can be facilitated by partnerships between firms and other entities, including educational institutions, industry associations or specialized associations with the technical know-how (see text box IV.2), and the government.

Process and Specialized Expertise

The traditional progression for ITES companies has been to start with rudimentary work, and then to move up the value chain. This is particularly true of sectors such as software development, animation or BPO. In software, moving up the value chain is commonly associated with an improvement in processes, as measured by the Software Engineering Institute's (SEI) Capability Maturity Model (CMM). In addition, SVI's software development model has evolved much like the Indian firms' model, which was to start with onsite work at the client's worksite, then to move the work offshore (back to the Philippines); in addition, another form of upgrading has been to move from doing partial projects to doing whole projects, and to work over the fuller software cycle, e.g. to do software maintenance and upgrading. They are currently certified at the CMM level 3, which is fairly advanced, but are still far from the process standards set by Indian firms (many of which have reached level 5). While they do not feel that CMM level 5 is necessary for their work, and in fact, increases the cost of work, they are seeking such certification in light of the need to "demonstrate" competitiveness.

Text Box IV.2

Software Process Improvement as an Example

Software quality levels: Indian companies are already well matured on quality processes (with well over 50 companies now certified at CMM level 5, compared to 2 in the Philippines (including the US-based RCG) and 1 in China) and are moving beyond this.

Software process quality improvement goes beyond individual skills, to how firms can organize their capabilities to deliver better quality at higher productivity. According to RCG, many local companies need some guidance in this. In fact, some governments have actively sought to develop software quality expertise, and have organized and invested large amounts of financing in quality improvement. Supporting institutions can also be important for this. For instance, Korea, which tends to produce software for its own internal use (i.e., as an "intermediate product") has expended considerable sums on a software engineering institute similar to the original SEI at Carnegie Mellon University. Other countries and their institutions are developing variants of such strategies in order to support their software industries. International software process improvement networks (SPINs) are active in numerous countries from India and China to Pakistan and Colombia, but so far, not in the Philippines.¹

In sectors such as software development, BPO and call centers, the issue of process quality appears to be one for management to resolve internally, and is less susceptible to government intervention.

In areas such as software development, upgrading strategies at the level of the firm clearly involves not only organizational processes, but also deeper specialization in technical areas and the abilities to apply this to different domains, as well as the ability to work on broader and complex systems.

R&D

One area that was not mentioned by most of the firms that we interviewed was that of research and development (R&D). While software development conventionally does not depend directly on the fruits of advanced or *basic* research (e.g. computer science findings), *applied* R&D is considered to be a key upcoming area for Indian software firms, especially for those that are getting into embedded systems, advanced software processes, and contract R&D work. As such, Philippine firms would still be wise to conduct “technology road map and R&D needs assessment” exercises to ensure that they do not miss out on any trends.

Other Capabilities

In call centers and BPO facilities, the upgrading of capability could involve a similar organizational improvement in quality and processes. One example is the degree of quality control or checking used in the work. It is quite common in India to find multiple levels of checking done on transcription services (including supervisory checking), or quality control checks on phone calls. In order to conduct such checks, trained supervisory staff are needed. In a sense, this also provides a career ladder for entry level operators.

At the same time, the acquisition of domain knowledge or expertise in a client’s area of business (or on the clients’ internal business processes) can also help improve a firm’s capability. The box below shows the kinds of capability that companies such as SPI which are involved in content-rich BPO have developed. Call centers have also advanced their capability in a variety of ways, usually through the transfer of headquarters expertise (as discussed earlier), or the acquisition of clients’ knowledge. It is possible that the client- and industry-specific nature of this domain and internal process knowledge can help firms because they create higher barriers to entry.

In other areas such as software development and animation, the technology, processes, and professionalism are more difficult to acquire. For animation, artistic training is a basic necessity, but the early studios and the expatriates who ran those first studios helped foster a great knowledge of production processes in the industry. New technologies have also lowered the barriers to entry in animation as well as increased productivity. For instance, Flash, a cheaper software technology originally developed for the Internet, but increasingly adapted for commercial digital use, is increasing productivity as well as making animation capability more accessible to the smaller studios. Using Flash, a traditional show that would have needed 60 animators to create, now only needs 11 animators. Many of the studios including Top Draw and PASI are working with Flash, with both Top Draw and PASI being well into their first Flash cartoon series.

Text Box IV.3

An Example of Upgrading in Content-Rich BPO

SPI provides a good example of upgrading in BPO. SPI started with data entry and typesetting, then moved up to digitization of information, and finally, to the “structuring” of information. Clients are also starting to look at the Philippines as a “content manager” – something SPI is positioning itself to do. SPI focuses on sectors where it can build and leverage on deep domain expertise, such as academic and other publications, legal, health, and finance. Domain expertise is a necessary part of content-rich BPO. While content management may not appear to involve much more than the scanning and archiving of documents in specialized areas, domain knowledge and the accuracy of language are vital. As an example of litigation support work (legal transcription), the first thing that law firms will do for clients is to freeze all the content in a case. SPI will take all that frozen content and use a markup language to add “intelligence” to the content, i.e., make it searchable. SPI believes it may be the best at content management such as this. However, despite its broad range of activity, SPI is still a niche player. It tries not to compete with the larger IT providers such as IBM global services, EDS, or even India’s Wipro for that matter. There are various other ways in which firms can develop a competitive advantage over their competitors.

SPI noted that one key to their BPO business is process, which involves not only the actual data transcription and manipulation, but also the checking and rechecking of the work. Quality partly comes from the in-house training and processes put in place.

Finally, SPI also views IT services as something that complements and transforms its BPO specialty. This is a linkage that the ITES industry may have to recognize as a whole, in order to deliver productivity improvements. The security of intellectual property or data that has been outsourced can be a major concern with clients, so SPI has also put a number of safeguards in place.

4.3. Management of Companies

Finally, as noted earlier, some sectors require improvement in their level of entrepreneurship, and in the growth of stronger and better managed companies. Technical people are sometimes not the best for running businesses, coming up with applications of technology, or creating business models out of their technology.²¹ This may be vital to certain sectors, such as animation and software development, that traditionally have weaknesses in this area.²²

This will also require improving access to financial and other resources (a topic covered under the section on linkages). The building up of large firms is often considered a critical step in order to compete with large firms in other countries for sizeable clients or contracts. In the case of India, strong large firms have been associated with the formation of clusters or concentrations of firms. However, putting firm size before sustainable growth and the upgrading of capability is not necessarily a good practice. The Chinese government has sought to grow larger software firms, but in some cases, attempting to grow large firms from weaker state-owned enterprises has only exacerbated the problem. Similarly, there have been cases of Indian and other firms growing too rapidly by inflating their stock in equity markets,

²¹ This has been our experience in interviewing people about the experiences of spin-offs from national labs in Singapore.

²² Although entrepreneurship is said to be learnt best by experience and not through classroom teaching, some academics claim that entrepreneurship can be taught, albeit carefully.

only to get into trouble later because of improper business practices, or when their growth of resources and capabilities outstrips their actual ability to acquire work.

4.4. Financing

As noted earlier, domestic firms suffer more from financing issues than the well endowed multinational firms. However, it is the domestic firms that form the backbone of India's software industry, and that have become the largest employers and likely decider of the industry's fate. Thus, it would be a mistake to assume that multinationals can comfortably replace domestic firms. The government can play a central role in bringing various actors together, but may also need to investigate the need for new kinds of instruments to help banks or other financiers to assess and ensure loans to budding software and other ITES companies. In countries like China, investments in the software industry come from a wider array of "venture" sources, including local electronics manufacturers, universities and even utility companies (Tschang and Xue, 2005). There may be scope for more approaches like these in the Philippines.

In the Philippines, investors from unrelated sectors may not have clear ideas about the risks and rewards of investing in the sectors, and may be more risk averse especially when "easy to target" investment opportunities like property development are available. Thus, there appear to be gaps, or linkages, missing in how other sectors can bridge their capital to the ITES sector. This may be one area to explore better.

4.5. Foreign Investments

Foreign investments are crucial to the development of many sectors and can bring much needed capital, learning opportunities (e.g. technology and knowledge transfers through employee training in and exposure to the MNCs' best practices), and easier access to markets. It is important to explore the improvement of foreign investments by alternative ways, such as by joint ventures and possibly even public support (e.g. government co-funding). In countries like China, Singapore and India, joint ventures have been a powerful mechanism. For instance, a joint venture that started from a Citibank subsidiary started I-flex – a banking software product maker which is India's most successful software product company (Tschang, Amsden and Sadagopan, 2005).

Since there are many government initiatives that can be undertaken to improve the foreign investment climate, this is discussed more extensively in the next section on policies.

4.6. Linkages with International Markets and Clients

The ITES industry can also benefit from strengthening Philippine firms' presence in and access to international markets. While much of this still requires the building up of reputation and branding by the firms themselves, there are also opportunities for the government and industry associations to assist firms by providing a broader umbrella that promotes the industry as a whole.

The Role of Firms

Firms themselves can also do this by opening up branch offices in the major markets. This is a common aspect of the larger Indian software services firms, which located

marketing offices in the US headed by senior leadership (to manage relationships with clients), and which are now opening up branch offices in all their major international markets, and regional markets such as Japan, Singapore and China.

The Role of Foreign Investors and Talent

As was seen in the animation sector, there is some role for foreign investors and expatriates residing in the Philippines to connect the companies they head or assist to overseas markets that they may be familiar with. An example of this was the case of Top Draw Animation, whose expatriate management sought to exploit his global connections with clients. A similar story occurred recently with another Manila-based (3D) animation company whose US-based managers moved to secure funding and contracts in the U.S.

The Role of Overseas Filipinos

While foreign expatriates have played key roles in Philippine-based animation companies and call centers, there are also opportunities for Filipinos working overseas to contribute. While most non-resident Filipinos are professionals rather than entrepreneurs or company heads, given that there are so many Filipinos abroad, and there is precedence for this involvement, it would be unwise not to explore the possibilities. As one Filipino software development firm noted, most of their US contracts came by way of Filipinos working in the US.

It has been observed generally that the openness of the economy facilitates both good effects (e.g. learning opportunities for people and firms) and bad effects (e.g. people being lured to other countries) (Arora and Garmbardella, 2005). While the latter effect can be ameliorated by returnees who possess valuable knowledge, connections and capital, these relationships are not conclusively proven (Kapur and McHale, 2005). The evidence is at best case by case, and the overall results are country-dependent. Indian software workers in the US had a large “demonstration effect” on sales and projects for the Indian software firms, but their overall effect back in India is not conclusively shown. On the other hand, inter-personal linkages have been important for Taiwan as Taiwanese engineers in the US helped create linkages between the US and Taiwan’s electronics industry, and were instrumental in setting up the first Taiwanese firms (Saxenian 2002).

4.7. Strengthening of Domestic Industry Clusters

Clusters

There are various advantages that accrue from having industrial clusters, but these must be carefully thought through in the case of ITES. There are of course many types of “industrial districts” or clusters that could emerge from the sum of the different types of linkages and interactions present within each (Markusen 1996). Being a service industry, the ITES industries for the most part do not have supply chains like those of the manufacturing sector. As noted earlier, they do not necessarily have the same kinds of linkages that some clusters have between industries and universities, or between firms. This requires some thought as to how to develop or strengthen firms with various types of capabilities and domain knowledge. There are at least two kinds of linkages within clusters that can be generally explored with the ITES sectors.

- At the level of technical capabilities, there is the issue of complementary capabilities across the ITES sectors. For instance, software capabilities can be leveraged to provide productivity and other gains to the other ITES sectors. This possibility was noted by various interviewees, and is already commonly known to happen in India. Secondly, there is the issue of developing complementary capabilities within a sector. Usually, highly comprehensive firms will be needed to provide a full range of services to any given customer. However, smaller firms could theoretically also collaborate within a network to provide a more comprehensive menu of capabilities to clients. This could be the case in the software sector, where firms that are too small to work with one another on larger projects can work together in some form of alliance. In reality, the larger firms may have to take on the responsibility of coordinating, or even making use of, the smaller firms' capabilities. Firms like Accenture, RCG and SVI do recognize that local niche players play an important role and can provide "valuable elements (for the former) to cooperate with". In light of this, those firms have started to develop ties or to use the work forces of the smaller local software firms that have skills in other technical areas that complement the larger firms' capabilities.
- Another way to generate opportunities is for local multinational firms or the government to provide business opportunities to domestic ITES firms. For instance, the business-to-business e-commerce firm Bayan Trade has been developing the auction market for local suppliers and buyers to transact with each other. By doing so, it can help local industries become more efficient in securing resources, and local industries might help it. In a similar way, the animation industry could use more support from local television studios, e.g. helping to develop local markets and distribution channels for local animation productions.

Finally, the industry cluster can benefit firms within it in other ways:

- Some of the more traditional aspects of agglomeration –national labor markets, knowledge spillovers, and specialized suppliers can still be important factors to the growth of the ITES industry.
- Clusters can also provide a country with a reputation as a good place to invest (Koh, Koh and Tschang 2004). Clusters like animation and call centers are examples where the country branding effect is already starting to take place in the Philippines. Lead firms have also played important signaling and advisory roles in clusters. This has happened with the leading Indian software companies. MNCs also do this, with Texas Instruments' setting up of the first MNC offshore development center in India helping to draw additional firms into the country. In the Philippines, the first MNCs in each BPO domain, such as Caltex in petrochemicals and AIG in insurance, have the potential to play this role.

Industry Associations

Related to a strong presence in international markets is the role that non-market actors such as local industry associations can play in promoting the industry's capabilities and presence. India's software association – NASSCOM – plays a vital role in promoting the Indian software industry overseas, as well as in helping to formulate effective industrial responses to issues domestically. While NASSCOM is for the most part a private organization, it has also teamed up with consulting firms and the Indian government to

develop a strong advertising effort. NASSCOM also collects and disseminates data from the industry. Institutions can also serve as important venues, e.g. for addressing specific issues such as process improvement, or helping to coordinate responses at an industrial level to various issues.

The Philippines is still lagging India in forming strong institutions to help its industries, but changes are in progress. The newly formed Business Process Association of the Philippines (BPAP), which represents call centers, BPO and other ITES sectors, is one such effort. The association is comprised of two previous associations, and hopes to become the Philippines' equivalent of India's NASSCOM, by unifying the marketing and policy aspects of the ITES industry. Other sectors have their own associations, e.g. the Philippines Animation Council, an industry association representing about 15 of the small animation studios. There is a feeling in the industry that more can be done to promote the Philippines' brand name. Associations such as these, or the government, could help in this regard.

Spillovers

It is worth highlighting the role of spillovers in general. Economic spillovers are clearly possible when certain improved sectors end up benefiting the ITES sectors, or even other non-ITES sectors. An example is the education system. The improvement of animation for the animation sector might end up supporting or even improving the videogames sector, which is what happened with Japanese animation talent (Aoyama and Izushi, 2003). A second type of spillover is that of the knowledge spillover. This is said to occur as firms co-located in the same region end up sharing information through employee communication and the movement of employees. Both of these can provide clusters with additional advantage, but their effects are quite hard to predict in advance, and knowledge spillovers are often too intangible to be measurable.

Cross-Sectoral Linkages

One key to the growth of the new economic sectors will be the complementary capabilities *across* sectors which allow for interdisciplinary work, technological fusion and the like. This is technically not a spillover, since it involves active interaction and collaboration in multidisciplinary teams and organizations. This is especially true in sectors like the new media sectors, where the fusion of content, technology and other fields regularly take place. For example, videogames require a combination of technology (programming), art, animation, game design, sound expertise, and increasingly, voice acting and other dramatic arts.

CHAPTER V

POLICY RECOMMENDATIONS

As shown in Table IV.1, the government has a role to play in supporting the development of many of the mechanisms needed to enhance the industry's growth. Generally speaking, a mixture of policies, institutions and infrastructure are necessary to help support any industry. While there are direct actions that the government can do to support the ITES sector which are akin to those used by other East Asian governments in past industrial policies, many issues are particularly important to the ITES sectors, such as

telecommunications infrastructure (including lower cost and universal access), specific skills within human resources development, and legal and regulatory frameworks for intellectual property protection.²³ In our assessment, the Philippine government has clearly already played a role in some of these, but much can still be done. Some specific government actions relating to the issues in Table IV.1 are as follow:

Policies to help improve firm-level capabilities and resources:

- **Labor:** The labor pool with its characteristics of cost, quality and level of preparedness are perhaps the most important competitive advantage for an ITES industry. Thus, while the government has been focusing on education, in light of the fact that the Philippines puts a lower proportion of resources into education than many other countries in the region, education should become a top priority for a greater degree of planning and deliberation.
 - The government can assist in coordinating some of the curricula development and implementation. For instance, in the area of software development, the government and its educational institutions can help improve software curricula to focus on business needs.
 - Already, other governments are seeking to compete in the same and higher value spaces than the Philippines through massive investments. For instance, Singapore's government has backed its universities, polytechnic institutes, and even the semi-autonomous art schools with new infrastructure, equipment, and funds for teaching new programs in animation and videogames. Higher education alone has received billions of Singapore dollars in new funding in recent years.²⁴
 - Links to overseas universities can also help to shore up domestic institutions' capabilities and reputations. This strategy is widely pursued in Singapore's tertiary education institutions, albeit at high cost.

- **Firm-level Capability:**
 - Government assistance could involve either awareness building and coordination efforts, or at one extreme, the government funding of skills and process improvement institutions (e.g. software engineering) that are closely linked to industry. Similarly, the government or industry associations can keep track of the degree of R&D being conducted by the ITES firms in other countries, particularly in sectors that increasingly depend on new technology deployment as their competitive advantage.
 - In the software development and animation areas, the government can also help smaller companies directly through small and medium enterprise (SME) schemes to help smaller companies to improve their management, and quality

²³ "Government's ICT Report Card", *Enterprise*, July 2003.

²⁴ Just at the tertiary level, this includes \$100 million to MIT for an alliance with two local universities, \$90 million (which makes up 90% of the total) to one of the main fine arts academies to set up a new campus, and over \$200 million in endowments and well over several hundred million dollars in infrastructure for a new management university.

assurance and other processes. On the other hand, governments obviously cannot do everything well. In India, government agencies have not been known to be good at advising and improving SMEs, especially the faster moving high tech startup firms.

- **Management:**

- While this is more of an internal problem, policy can help if there are areas of management education which are lacking. The government could then help institutions in developing new programs (e.g. the Singapore government's funding of entrepreneurship programs and incubators in the universities).
- The government or other institutions can also assist entrepreneurs by ensuring the channels for linking would-be entrepreneurs and technical people.

- **Financing:** A lack of financing and investment is still holding back firms in certain Philippine ITES sectors from progressing.

- To improve local financing, especially in sectors like animation that do not have strong lead firms, the government needs to focus on improving the opportunities for financing. One start could be to increase the information flow between the ITES sectors and their likely financiers, and to streamline procedures for providing loans. A simple scheme to improve firms' visibility to potential investors would be a government or industry effort to publicly recognize the better performing or higher quality companies. The Chinese government often provides this sort of publicity to its top firms. While China has a very large market which may need such signaling mechanisms, given the lack of knowledge that financial institutions have of these new sectors in the Philippines, this kind of recognition mechanism might be a beginning for bridging the information gaps.
- Governments can directly support firms by providing opportunities for work in the software and other ITES sectors. E-government is one prime area, e.g. Equaria - one of the more successful startups in Singapore - is an e-government software firm which has large government clients in Singapore, but has also successfully gone into overseas markets.
- Other countries' governments have extended assistance into other areas, such as government procurement policies. The Chinese government's use of preferential procurement and other policies have certainly increased the market for software from certain firms in areas like operating systems and security software (Tschang and Xue, 2005), but this has not necessarily strengthened those companies for competition in the private sector.
- One means of remedying this is for the government to step in with direct funding of industries. There are certain risks with direct government funding or support of firms, not the least being the risk of trying to "pick winners", or the risk of corruption and nepotism getting in the way of merit-based or fair outcomes. Thus, this is not necessarily the optimal solution, but it has also worked in certain cases. For instance, government funding of the arts sector

has been proven successful in the case of the Australian film industry. In a similar way, Singapore is now actively funding the artistic and technical sectors, in its current efforts to develop a media and info-communications hub embed a number of different types of linkages within them.

Policies to Promote Specific Linkages

- **Foreign Investments:** as noted throughout, the government needs to bring down the cost (i.e. risk) of doing business in the Philippines by way of improving macroeconomic stability and anti-corruption practices.
 - Tax supports such as those accorded to PEZA zones have already been well developed and are well received (80 percent of BPO companies were located in PEZA zones). By one estimate, the bulk of the set up costs (90%) is accounted for by telephony and infrastructure. After that, 70% of the costs are labor. In light of the Philippine government's fiscal problems, the government might look at whether there are other "in kind" assistance schemes that it can develop to assist corporations that do not cost as much.
 - Multinational investments can also be promoted by having the government play a more active role to ensure that the appropriate packages, including incentives and resources, are available to help MNCs to realize returns on investments. Other governments in the region are also actively seeking foreign investments. At one extreme, there is the "Singapore-style" approach. The Singapore government recently convinced Lucas Film to locate its first full non-US animation facility in Singapore. This is expected to generate about 300 jobs.²⁵ Part of the package involved the government co-investing in the new venture. While these government investments by themselves are not critical for attracting foreign investors, the integration of some of these into a package of broader measures can show commitment and help to tip the foreign investors' decisions.²⁶ All this requires a comprehensive understanding of what drives MNCs to locate, and of how to design specific but comprehensive (benefits) packages, including commitments to human resource development, to attract investments.
- **Linkages with international markets:** The fostering of visibility and connections with overseas markets can also be better promoted by government agencies.
 - The BOI and the ITECC (commission on ICT) are already helping to market the Philippines by linking firms with clients and global markets, e.g. assistance in representing firms at trade fairs, the existing policy umbrellas such as the

²⁵ The government apparently convinced Lucas Film that it was committed to developing animation talent in Singapore, and that Singapore could become a hub for regional talent to flow into. It should be noted that the government has well-developed investment arms and semi-autonomous enterprises that are able to help facilitate these co-investments.

²⁶ The Singapore Government has six subsidy schemes, including two that allow up to \$250,000 Singapore dollars for feature films and digital content development (e.g. games), and one by the Singapore Film Commission that provides up to \$500,000 Singapore dollars for co-produced feature films. These together with capability and market development schemes are intended to raise the media industry's proportion of GDP from the current 1.56 percent to 3 percent (Media Development Authority of Singapore).

Canadian-Philippines content co-production treaty, and links between Singaporean capital and post-production with Philippines studios, are all areas that can benefit from government support.²⁷

- Other linkages: As noted earlier, many types of linkages can support the development of markets. As an example, Singapore has been fairly successful in bringing back some animators with foreign experience to help start or advise new startup animation companies.
- **Linkages and Clusters:**
 - Clusters: Clusters of firms can ensure that the complementary capabilities for supporting future growth in the ITES sectors exist. There is a need to think holistically about the various ITES sectors, rather than as individual sectors that each need to grow independently, or even at each other's expense. In relation to the development of clusters, the government can assist by helping the industry to think through and plan the development of clusters, either of complementary networks of firms and their capabilities, or the supporting institutions.
 - As for complementary capabilities *across* sectors (which allow for interdisciplinary work, technological fusion etc.), the government can continue to ensure that the various supporting sectors – education, potential domestic clients, overseas Filipino experts, and so on – flourish and develop strong links to the ITES and other sectors.

Reforming Government Agencies

- **Staffing:** In general, to carry out any of these programs, the Philippine government will have to increase their staffing in divisions handling the information-communication technology or ITES sectors by a large multiple. The effectiveness of the Philippine government bureaucracy is hampered by instability of assignment, low compensation levels and a lack of meritocracy (World Bank, 2005). The ITES division appears to have far too few staff to do their current jobs. The amount of coordination, gathering and management of knowledge needed to bring the ITES industry to the next level will, at a minimum, scale up at the same rate as the growth in the industry's size.
- **Reorganization:** One additional possibility is to consider having one agency designated as a form of “super agency” with the power to help broker inter-industry linkages (e.g. cross-sectoral investments or co-investments with foreign firms). The Singapore government's Economic Development Board (EDB) does this with foreign investments, and has the power to coordinate other ministries and to ensure that all procedures are streamlined to provide investors with minimal difficulties.

²⁷ For instance, the government has been fairly supportive of the animation industry in the last couple of years, organizing groups to attend the major TV and film festivals in France and elsewhere. PASI also helped pushed hard for and got the government to sign a co-production treaty with Canada, where the Philippine studio can invest in kind, up to 20% of the cost of production. For this, PASI also has to right to distribute the product to some of the territories in Asia.

CHAPTER VI

SUMMARY AND CONCLUSIONS

In summary, we can say that the ITES industry has an opportunity to play a profound role in the Philippines' economic development directly and indirectly through spillovers. The Philippines has thus far relied successfully on its basic human resources, including its language capability, cultural affinity for the West and mindset advantages. However, the way forward involves competing with other countries both at the low and high ends of the work. To address this, the industry needs to develop a very comprehensive strategic mindset and strategy for upgrading its capabilities.

To preserve its advantages on work at the low end, the Philippines needs to improve several basic areas where it is traditionally deficient, including the environment for foreign investment, the educational system (to ensure a higher quality labor force across the board), and so on.

A general need for competing at either end, but especially at the high end (which also serves as a barrier to entry), is for the Philippines to develop a strong group of firms that are strong both in the internal capabilities and in their linkages. To become strong, firms need improvements in their human resources; technical, management, and organizational capability; and require supporting factors such as strong industry associations, financing mechanisms, and linkages to foreign investors and clients.

The Philippines may not be able to rely on foreign investors alone for growing its industry. Domestic firms are equally important in the formation of industry, as witnessed by the growth of software industries in many countries (Arora and Garmbardella, 2005). Without these domestic firms, the sources of growth are not as well balanced, and the forces that push the industry to upgrade to the next level of value added may not be there.

The strengthening of the ITES sectors requires an ability to think about linkages very broadly. This includes notions of linkages (between firms and institutions) across continents, industries, sectors (like the education, financial, industrial, and public sectors), and even the ITES sectors themselves. Such linkages would involve fostering stronger ties between firms and their overseas clients, firms and supporting institutions like industry associations, firms and universities (e.g. spin-offs and research collaborations), or between firms in partnerships (Kenney 2000; Tschang and Xue, 2005). Only then can the kind of value added that comes from strong interdisciplinary and cross-sectoral collaborations be realized. Thus, while the traditional notion of linkages appears to play less of a role in the development of the ITES sectors than in traditional industries, and largely relates to the development of clusters of complementary capabilities, the value of other and emerging notions, such as "cluster" or "cross-sectoral linkage" issues, are as vitally important.

The ability to perform work at either end is not exclusive of the other. In order to accomplish both, the strategy will have to be both integrative and comprehensive, as well as detailed and customized to each ITES sector. We have laid out several areas for improvement of the industry, as well as potential government roles, but much more strategic planning and foresight assessment needs to be done at the levels of both the government and the firm. From the government's side, in order to do this, a more systematic and integrative policy

agenda consisting of policies addressed both industry-wide and to aid specific ITES sectors is necessary. To ensure that the policy supports are there, the government will need a substantial if not massive infusion of resources in its own capabilities as well as in its capability to directly assist the industry.

There is a brave new world for industries and government industrial policy, and governments the world over are seeking to explore its potential in relation to emerging high tech, service, cultural and entertainment sectors. There are a slew of new industrial policies being formulated by countries like Scotland and Chile.²⁸ Recent works on the creative or “new productive” class suggest that keeping one’s creative class (Florida, 2005) is as important as allowing it to circulate (Kapur and McHale, 2005). Other works suggest that creative industries have new models of organization of production and no longer develop in the same spatial manner as past industries (Tschang, in progress).

²⁸ Various mimeos, World Bank seminar on *Generating and Sustaining Growth without Picking Winners: Case Studies of New Industrial Policy Organizations*, June 13, 2005..

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ANNEXES

A.1. Interviews Conducted

Shared Services

Maersk

Software Firms

SPI (also call center/BPO)

SVI (also call center/BPO)

RCG

MNC Call Center/BPO

Source One

People Support

Sykes

Animation

Tooncity

Toei

TopDraw

PASI

Miscellaneous

OPTEL (consulting)

Transprocure (B2B)

Philippines Animation Council

Business Process Association

Call Center Academy (training)

A.2. Additional Information

Global IT/ITES Market (2001) in USD Billion

Country	Domestic	Off-shored
Canada	24.4	3.7
Mexico	n/a	0.5
Ireland	1.9	8.3**
E. Europe*	1.7	0.4
Israel	1.1	3.0
S. Africa	0.02	0.01
Russia	0.8	0.2
China	8.4	1.1
India	2.4	7.7
Philippines	n/a	0.3
Thailand	0.25	0.05
Australia	2.1	0.4

* E. Europe incl. Poland, Hungary, Romania and Czech Republic

**Primarily composed of MNC Captives

Source: McKinsey Global Institute, 2003

Note: Numbers indicate total markets for year ended Dec 2001 or March 2002

A.3. BPO in India

Some of the largest and most well-known Indian “BPO” (In the Indian terminology, which includes call centers) companies (i.e., companies operating mainly in India) are shown below. The largest call center is Daksh, which has recently been bought by IBM.

Rank	Company	HQ	Revenue (\$ mill, 02-03)	No. people	Positioning
1	WNS Global Services	Mumbai	56.1	4000	Broad based BPO
2	Wipro Spectramind	New Delhi	41	8500	Broad based BPO, mainly voice
3	eFunds Global Outsourcing	Mumbai	37	3210	Broad based BPO
4	Techbooks	Fairfax, VA, USA	34	1750	Publishing services mainly
5	Daksh eServices	Gurgaon, India	29.5	5000	Customer service

Source: Voice and Data, December 2003.

The issues that Indian companies examine may be representative of what Filipino companies will have to face as they scale up or seek to develop expertise in vertical industry sectors. For instance, WNS started as a British Airways subsidiary, but after gaining independence, has grown both organically as well as by acquiring other companies in the UK and US, and has partnered with other US companies strategically in order to gain more support for winning customers (Voice and Data, December 2003).

ACRONYMS AND ABBREVIATIONS

2D	Two-dimensional
3D	Three-dimensional
BOI	Board of Investments
BPAP	Business Process Association of the Philippines
BPO	Business process outsourcing
CCA	Call Center Academy
CCM	Capability maturity model
CPA	Certified public accountants
DTI	Department of Trade and Industry
HP	Hewlett Packard
IT	Information technology
ITECC	Information Technology E-Commerce Council
ITES	IT-enabled services
NASSCOM	National Association of Software and Service Companies
MNC	Multinational Corporation
MT	Medical transcription
OECD	Organization for Economic Co-operation and Development
P&G	Procter and Gamble
PASI	Philippine Animation Studios Inc.
PEZA	Philippine Economic Zone Authority
R&D	Research and Development
SEI	Software Engineering Institute
SME	Small and medium enterprise
SPIN	Software process improvement network
STM	Scientific-technical-medical
VOIP	Voice over Internet protocol