Chapter I

Introduction

1.1 Overview of the chapter

This introductory section is designed to describe how the chapter is organized. The purpose of this chapter is to provide relevant background regarding the concept of knowledge process outsourcing (KPO) and the relevance of taking up the topic of research along with specifying the objectives of the study. Section 1.2 explains the concept of globalization of services while a wider understanding of the concepts of outsourcing and offshoring is covered in Section 1.3. Section 1.4 provides an overview of the emergence and meaning of KPO as it has evolved and also makes a clear distinction between business process outsourcing (BPO) and KPO. Further exploration of the issues regarding India as an outsourcing destination and its evolution and journey to KPO is explained in Section 1.5. Section 1.6 discusses the need and importance of the study whereas the objectives of the study and their achievement through survey tools are addressed in Sections 1.7 and 1.8 respectively. Section 1.9 highlights the conceptual and analytical framework of the study and the final section of the chapter details the organization of the study into different chapters.

1.2 Globalization of services

Globalization and rapid advancements in information and communication technologies have brought about profound change and transformed the way the world economy operates. The business world of today does not bear any resemblance to the way it used to operate in the last couple of centuries. The famous example of pin production by Smith (1776) succinctly describes the production techniques followed in England in the late eighteenth century. It took one man to draw out the wire, second to straighten it, third to cut it, fourth to point it and so on. Thus, it took 18 distinct
steps and as many differently competent hands to complete the process. The philosophy of production at that time hinged on specialization and most of the processes were concentrated in close proximity to save cost and time. For most part it was the final product that was transported across. International trade resulted in case the consumer belonged to a different nation. This description of manufacturing and trade remained apt for nearly two centuries (Grossman and Rossi - Hansberg, 2006).

Around the late thirties Ronald Coase, a professor at the University of Chicago and a Nobel Laureate in Economics, in a paper titled *The Nature of Firm*, propounded a theory that efficiency lay in grouping workers together in a firm rather than operating as separate segments as it reduced ‘transaction costs’ i.e. the costs incurred in making an economic exchange (Coase, 1937; Singh, 2002).

By the late nineties the situation changed dramatically. A revolution in the world of information and communication and transportation changed everything - more so the economics of business. The very theories of specialization and geographic concentration were all reversed and for the better. It was no longer prudent to perform all activities under one roof rather it made more economic sense to keep parts of businesses apart as distances between seized to matter. Instantaneous relay of detailed information and instructions through the electronic medium about the work that needed to be performed enabled organizations to break up tasks in time and space in the most efficient manner (Grossman and Rossi - Hansberg, 2006) and also tap external providers for a whole new range of services in a more cost-effective way (Singh, 2002).

Several trends precipitated this increasing globalization of services. It began with the shift of manufacturing activities to low-wage economies and was logically followed by the shift of the service sector from the developed to the developing
countries. With technology eliminating the distance barrier national boundaries became insignificant to growing businesses. The opening up of markets in the former Soviet Union and in Eastern Europe, closed in the earlier times, paved way to enormous opportunities for service providers to extend in these regions where their expertise was considered vital and the Uruguay Round of General Agreement on Tariffs and Trade (GATT) negotiations eradicated several impediments to service exporting. With development and prosperity came the demand for more services often required on a global scale and/or not available locally (Annual Report of the President of the United States on the Trade Agreement Program, 1996; Lovelock and Yip, 1996). The process is continuing and Baldwin (2006) called it as the ‘second unbundling’ wherein not only the need to perform most manufacturing stages in close proximity to each other was no longer required but also the swift spread from factories to offices resulting in offshoring of service-sector jobs had already taken place. Robertson (1992) described this phenomenon of globalization as the compression of the world and the strengthening of consciousness about it as a whole.

The American journalist Friedman (2005) describes ten forces that have ‘flattened’ the world in scenic terms. Among them are the fall of the Berlin Wall, birth of the internet, the development of work flow software, open-sourcing, outsourcing Y2K, offshoring, supply-chaining, insourcing, in-forming (internet searching) and advances in digital, mobile, personal and virtual communication technologies. Clearly two of these flatteners envisioned are outsourcing and offshoring.

1.3 Outsourcing and offshoring

Outsourcing is not a new management paradigm rather it is more than 200 years old with roots in the era of the industrial revolution (Economic Times Intelligence Group
Since its origin in eighteenth-century England, it has been a popular practice in various industry sectors especially gaining momentum in the latter half of the 1980s and 1990s in the growing service sector (Ang and Straub, 1998; Cheon et al., 1995; Quinn and Hilmer, 1994; Reyniers and Tapiero, 1995; Whang, 1992).

Joseph O. Okpaku in the Global Outsourcing Report calls outsourcing as the quintessence of true globalization, a phenomena that has brought with it new opportunities for the growing economies where the vast talent pool was lying and waiting to be tapped. This has worked both to the advantage of the receiver and the provider. It is a reality here to stay and has brought with it a hitherto unimagined threat and competition from the developing world (Minevich and Richter, 2005).

Grossman and Helpman’s (2005, p. 135) statement that “we live in an age of outsourcing” concisely points out the acceptance and relevance of outsourcing in today’s business scenario.

Outsourcing has been regarded as a type of prearranged outside provision with another enterprise for the delivery of goods and/or services that would in the past have been obtainable in-house (Domberger, 1998; Elfing and Baven, 1994; Finlay and King, 1999; Kliem, 1999). It can be defined as “. . . the purchase of a good or a service that was previously provided internally” (Elmuti and Kathawala, 2000; Lankford and Parsa, 1999; Smith et al., 1996; Swink, 1999). Kraker (1995) refers to outsourcing as looking for new suppliers and ways to procure the delivery of raw materials, goods, components and services by utilizing the knowledge, experience and creativity of suppliers not used formerly. Ramachandran and Voleti (2004, p. 50) define outsourcing as “. . .transferring certain value contributing activities, processes and/or services to the premises of one’s own or an agent primarily to save costs and/or for the principal to increasingly focus on its area of key competence”. Acquiring part
services from outside the main unit is outsourcing. When that service involves any aspect of management of a particular business, business process outsourcing (BPO) occurs (Brown and Wilson, 2005). Gartner (2003) describes BPO as the giving out of one or more information technology (IT) - intensive business processes to an external supplier who manages the selected processes based on defined and assessable performance metrics. Outsourcing is therefore a very powerful tool wherein organizations have to their disposal global assets to be used effectively and efficiently (Farrell, 2004).

Traditionally outsourcing was a means to lower the costs of production and processes and even today economies of scale are cited as a major motivation to outsource (Kakabadse and Kakabadse, 2005). Another reason cited is that it improves quality as the provider is a specialist in a key area (Cassidy, 1994; Embleton and Wright, 1998; Raynor, 1992). Different researchers have laid emphasis on various additional drivers behind the growth of outsourcing viz. cost reduction and a strategic shift in the way organizations are managing their business (Winkléman et al., 1993); market forces and technical considerations (Gupta and Gupta, 1992); strategic and technological issues and cost (Welch and Ranganath, 1992); outsourcing non-core processes (Chalos and Sung, 1998); enhancing existing competencies and building new ones because of continuing long term relationship between client and vendor (DiRomualdo and Gurbaxani, 1998) and government policy and political stimulation, globalization and the knowledge economy, technology and corporate strategy (Hillary, 2005).

Outsourcing initially began with large organizations phasing out all of their data-centric operations with an objective of achieving significant cost arbitrage (Pfannenstein and Tsai, 2004) and remained as the tangential of corporate activity and
companies were happy to send out activities that were non-essential or unimportant (Singh, 2002). The exodus began with labour intensive manufacturing jobs, and went on to include low value-added services. Medical transcription, data entry, simple call centre functions (National Association of Software and Services Companies (NASSCOM), 2003) and transaction processing like fund transfer - credit cards, mortgage handling, insurance policy administration and electronic banking, helpdesking (Barnes, 2005) are some examples of jobs that left their countries for the developing ones. The success at the lower rung of the ladder gave confidence to migrate to more sensitive and visible aspects of businesses as customer service, research and development (R&D), and manufacturing (Greco, 1997; Liebeskind et al., 1996). This trend is not only continuing but gradually has evolved and expanded to jobs requiring more and more knowledge work related to tasks which are more non-routine and nearer the core of a business (Barnes, 2005). To further stress on this aspect, Singh (2005) observes that a business that started with data conversion and medical transcription in 1997 and progressed on to rule set processing, customer interaction and basic problem solving is now set to deliver a widening range of expert knowledge services.

The array of outsourcing possibilities has since grown rapidly and critical activities have come under its sphere. Today these services include engineering design, intellectual property research, financial, business and market research, legal services, remote education and many more.

Offshoring means having the outsourced business functions performed in another country. It essentially involves moving business processes to a low cost location, usually overseas. It can be seen in the context of production or services offshoring.
Offshore outsourcing has become a fundamental armament in the arsenal of business strategies as organizations continue to look for means to stay competitive (Sarkar, 2007). Brown and Wilson (2005, p. vii) define offshore outsourcing or offshoring as “…the procurement of goods or services by a business or organization from an outside foreign supplier, basically to gain the benefits of labour arbitrage”. According to Robinson and Kalakota (2004) the basic drivers of offshore outsourcing have been continuous cost pressure on US and European countries, rapid decline in communication and computing costs, dramatic improvements in internet reliability and functionality, more offshore suppliers with better capabilities, high quality onshore suppliers offering offshore services, access to low-cost, high-quality employees, especially for labour intensive tasks and a business model that has been proven by successful pioneers such as General Electric (GE) and American Express. Aron and Singh (2005) emphasized that offshoring has come of age and is now an integral part of the organizational plan to harness the best of information, knowledge and expertise - geographical boundaries have blurred on the way up the value chain.

1.4 Knowledge Process Outsourcing (KPO) - Emergence and meaning

Knowledge is vibrant, dynamic, mobile, time-sensitive, the most pre-eminent, hunted and talked about resource often considered not only to be more important than money rather also responsible for its creation.

We are living in a society which devotes its intellectual and technological capital towards its own future. In an economy of unforeseen changes and acute uncertainty the only means to have a competitive edge is through knowledge (Nonaka, 1996). With the growing importance of information and knowledge economy, it has become one of the most valuable and critical resource for competitive advantage not only at the level of the firm (Quinn, 1992; Sveiby, 1997; Teece, 1998)
but also at the level of nations (Organization for Economic Co-operation and Development (OECD), 1996; Ungson and Trudel, 1999; World Bank, 1998). In India, intellectual power has always been regarded superior to material wealth and referred to as true emancipation - *vidyaa saa vimuchyate* (Gopalakrishnan, 2007).

Davenport and Prusak (2000, p.5) give the most comprehensive definition of knowledge as “…a fluid mix of framed experience, values, contextual information, expert insight and grounded intuition that provides an environment and framework for evaluating and incorporating new experiences and information. It originates and is applied in the minds of the knowers. In organizations, it often becomes embedded not only in documents or repositories but also in organizational routines, processes, practices and norms”.

Davenport (1994, p.134) also defines a process as, “… simply a structured set of activities designed to produce a specified output for a particular customer or market. It has a beginning, an end and clearly identified inputs and outputs. A process is therefore a structure for action, for how work is done. Processes also have performance dimensions - cost, time, and output quality and customer satisfaction – that can be measured and improved”.

*Currie et al. (2008, p.95) define a knowledge process as “… a sequence of intellectual activities involving analysis pattern recognition, design, judgement, which converts unstructured and poorly defined inputs into a well defined, often original output”. They further propose a few characteristics of a knowledge process as being analytical, involving complex and professional/intellectual decision making, having extensive and complex domain knowledge, requiring professional and highly intelligent staff, processes and resources which are unstructured and not easily automated, involving work of a dynamic and ad-hoc nature and presence of a creative
element. According to Aron and Singh (2005) a knowledge process can be judged as one which is not easily codifiable since it is not possible to clearly lay down all the existing conditions, scenarios and situations in such work. Such processes require exercise of expert human judgement and discretion in interpreting the information. This further makes presence of domain and functional knowledge essential for correct application.

Today offshoring has pushed the world beyond the information economy towards a global, knowledge based economy where knowledge is being shared and collaborated worldwide and is becoming specialized into several segments (Minevich and Richter, 2005). In the early 1970s the economist Daniel Bell predicted a post-industrial age wherein knowledge would become the foundation of economic growth and productivity and growth would take place essentially in white collar and professional jobs (Bell, 1973). Thus, just as growth in the computer industry evolved the central mainframe computer to mini-computers and individual personal computers to laptops to blackberries, with information and communication technology acting as an enabler, the trajectory of growth of outsourcing as a strategy and a significant management tool especially with regard to issues of organizational competitiveness over the last decade has been noteworthy notwithstanding the momentary hit due to the global economic meltdown.

What began from manufacturing outsourcing, progressed to information technology outsourcing (ITO) and BPO and elevated to a somewhat elite branch of outsourcing known as KPO.

KPO is the offshoring/outsourcing of high-end knowledge intensive processes requiring considerable domain expertise which necessitates a shift of execution from standardized processes to processes that demand superior analytical
and technical skills as well as decisive judgement (Evalueserve, 2004a). According to Michell (2005, as cited in Currie et al., 2008, p. 96), “KPO is the transfer to a third party of complex and highly variable activities requiring intellectual decision making”. Rocsearch’s (2006) definition of the knowledge services outsourcing industry involves not only companies offering outsourcing services for high-end knowledge work but also services that deliver enhanced customer value. They consider knowledge service companies as those offering solutions or services that could be, in some cases, intrinsic to the core competency or business strategy of the client. Wangikar (2006), Principal, Inductis considers KPO as a broad term which encompasses a large variety of activities, domains and skill sets. It usually needs further qualification to describe what one does/needs i.e. analytics, business or equity research. He further adds that it is not all ‘process outsourcing’. Clients mostly engage the KPO service providers for ‘outcomes’ or decision recommendations with significant business impact and not just ‘processes’.

Yet another description of the distinct nature of KPO has been given by Banerjee et al. (2007, p.4) as “…getting high-end, value-added work done by resources whose co-location with the end client is not necessary, where the effort is people-intensive, and the end product is arrived at through rigorous methodologies. Because this type of work requires a high level of judgement, subjective analysis and interpretation, the end results can vary from practitioner to practitioner”.
They further highlight the different nature of KPO by giving the constructs as depicted in Table 1.1.

Table 1.1: Description about nature of KPO

<table>
<thead>
<tr>
<th>Nature</th>
<th>Detailed explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Person and judgement-driven</td>
<td>It is people-intensive in that much of KPO work requires insight and analysis based on skills, experience and judgement. The results and the recommendations are driven by judgement rather than by rules.</td>
</tr>
<tr>
<td>Process provides a guideline</td>
<td>Processes/services in a KPO are performed based on skills, domain knowledge and intellectual capability. A process can provide only a guideline but not a deterministic set of rules.</td>
</tr>
<tr>
<td>Process is complex</td>
<td>The process is complex, requiring many steps. It calls for interpretation, analytical skills, reasoning and the exercise of judgement.</td>
</tr>
<tr>
<td>High level of skill required</td>
<td>It requires people with higher education and/or specialized and differentiated knowledge and skills.</td>
</tr>
<tr>
<td>Inclusive</td>
<td>KPO is inclusive. Unlike BPO, where an entire process is offshored, KPO usually entails offshoring part of the larger process (e.g., financial research and analysis). By its very nature, the team involved in KPO is global.</td>
</tr>
</tbody>
</table>


1.4.1 Knowledge process outsourcing (KPO) Vs. Business process outsourcing (BPO)

The possibilities in the outsourcing field has enlarged and progressed over the years as providers have moved beyond call-centers and routine data crunching tasks towards higher-end services.

KPO as opposed to BPO is the new mantra and it is not just the first letters replaced. BPO is entirely rule based while KPO is purely judgement based where human prudence plays a fundamental role. There is no predefined problem-solving technique in such cases entailing ability which comes from knowledge (Agarwal, 2005). At one end of the continuum are easily manageable, transferable standard skill sets in data collection and reporting formats while at the other are high-end research
oriented projects that involve extremely sensitive and protected insights into corporate business strategies (ETIG & Knowledge @ Wharton, 2004). As the formerly Vice-President, NASSCOM, Sunil Mehta emphasized that it is not the simple application of rules to data but its logical interpretation. According to him the difference lies in ‘getting’ the result and ‘arriving’ at it. The former involves feeder capabilities while the latter requires judgement and knowledge (Zachariahs and Pandaya, 2005a). According to Pricewaterhouse Coopers (PWC) and Confederation of Indian Industry (CII) (2005) KPO is not a mere extension of BPO, neither is it about delegating or sending away processes; the idea behind KPO is the global availability of skills along with sharing of knowledge across borders. This is made possible by a global delivery team which supports and guides strategies for an organization’s core processes in order to focus on core competencies.

To further emphasize and explain the difference Table 1.2 highlights some of the important points of distinction between BPO and KPO as under:

**Table 1.2: Distinction between business process outsourcing and knowledge process outsourcing**

<table>
<thead>
<tr>
<th>Basis of difference</th>
<th>BPO</th>
<th>KPO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evolution in India</td>
<td>Mid 90s</td>
<td>Late 90s - Early 2000</td>
</tr>
<tr>
<td>Coinage</td>
<td>Unknown</td>
<td>Person (Ashish Gupta, Chief Operating Officer (COO), Evalueserve)</td>
</tr>
<tr>
<td>Nature</td>
<td>Transaction – intensive</td>
<td>Knowledge – intensive</td>
</tr>
<tr>
<td>Decision-making/type of process</td>
<td>Rule-based, structured process</td>
<td>Judgement-based, absence of a structured process</td>
</tr>
<tr>
<td>Core philosophy</td>
<td>Exclude processes (send them away)</td>
<td>Include talent (create a global delivery team)</td>
</tr>
<tr>
<td>Offerings</td>
<td>Commoditized and fixed price solutions for e.g. transaction processing, call centres, voice and e-mail based support</td>
<td>Customized and value based solutions for e.g. intellectual property research, legal research, medical research, biotechnology research</td>
</tr>
<tr>
<td>-----------</td>
<td>-------------------------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Infrastructure and tools</td>
<td>Basic telecommunication facilities, internet and other online support</td>
<td>High end communication infrastructure, good search engine and data mining tools</td>
</tr>
<tr>
<td>Relationship with client</td>
<td>Arms length client vendor relationship</td>
<td>Client involved during the entire execution process, partnership</td>
</tr>
<tr>
<td>Focus</td>
<td>Size, volume and efficiency</td>
<td>Depth of knowledge, experience, judgement and skills of professionals</td>
</tr>
<tr>
<td>Scalability</td>
<td>Less time to reach scale</td>
<td>Substantial time to reach scale</td>
</tr>
<tr>
<td>Project size</td>
<td>Large projects as compared to a KPO</td>
<td>Smaller compared to a BPO</td>
</tr>
<tr>
<td>Protecting intellectual property rights</td>
<td>Not as important and complex as in a KPO</td>
<td>Particularly important and complex</td>
</tr>
<tr>
<td>Legal and licensing issues</td>
<td>Less complex procedure</td>
<td>More complex procedure</td>
</tr>
<tr>
<td>Risks</td>
<td>Identification and alleviation of risks less complex compared to a KPO</td>
<td>Identification and alleviation of risks more complex compared to a BPO</td>
</tr>
<tr>
<td>Perception about growth prospects for an employee</td>
<td>Offers jobs (2-3 year arrangement)</td>
<td>Offers careers</td>
</tr>
<tr>
<td>Perception about salary of an employee</td>
<td>Low compared to a KPO</td>
<td>High compared to a BPO</td>
</tr>
<tr>
<td>Perception about work</td>
<td>Repetitive jobs</td>
<td>Intellectually motivating work</td>
</tr>
<tr>
<td>Availability of skills</td>
<td>Easy</td>
<td>Comparatively difficult to procure</td>
</tr>
</tbody>
</table>

**Source:** Compiled from Banerjee *et al.* (2007); Dogra *et al.* (2005); Evalueserve (2007a); PWC and CII (2005) and industry sources.
To further illustrate, Figure 1.1 provides an example of distinction between services that come under BPO and KPO respectively considering three separate areas.

**Figure 1.1: Gradual migration from low-end (BPO) to high-end (KPO) offshoring**

**Examples of three distinct areas – intellectual property (IP), insurance and equity research**

![Diagram showing the comparison between BPO and KPO services]

**Source:** Adapted from Singh and Sengupta (2003); Evalueserve (2004a) and Gupta (2008).

### 1.5 India as an outsourcing destination – Its evolution and journey to knowledge process outsourcing (KPO)

India emerged as one of the fastest growing economies in the world during the 1990s. The main reason was the rapid growth of the service sector, one of the most important segments of Indian economy which grew at the rate of 8.1 percent per annum from 1993 to 2003 against 6.7 percent per annum from 1983 to 1993. The sector as a
percent of its gross domestic product (GDP), increased from 28 percent in 1950 to about 51 percent in 2003 (Dogra et al., 2005; Evalueserve, 2004b). It contributed nearly 63 percent of the GDP in 2007-08 and has come to play progressively more important role in the economy accounting for 59.6 per cent of the overall average growth in GDP in the last eight years between 2000-01 and 2007-08 (ibef.org, 2010). Further as per Dun & Bradstreet (2009-10) in its ‘Economy Outlook 2009-10’ report the services sector will retain its importance in GDP and its contribution is expected to reach 58 percent in 2009-10. India’s IT software and information technology enabled services (ITES) sector is one of the major components of the Indian service sector. In the last few years India has placed itself at a leading position in the outsourcing segment (Dogra et al., 2005; Evalueserve, 2004b) and exports for the IT and BPO sectors are expected to touch United States Dollar (USD) 60 billion-USD 62 billion in 2010-11 (NASSCOM, 2009).

AT Kearney, McKinsey Global Institute (MGI), Forrester and Gartner Inc. have consistently ranked India as the most preferred sourcing destination in various surveys and more than fifty percent of the Fortune 500 companies offshore their work to India (NASSCOM, 2006). When outsourcing first emerged in the US in the early 1990s, it quickly became the most widespread and most conflict-ridden form of shaping up the corporation. There was immense criticism of it being a thoughtless way of cutting costs and a manipulative way of displacing unionized and other expensive employees of an organization. Despite the premature judgements and controversies about outsourcing, it soon began to be acknowledged as a smart and intelligent way of working (Singh, 2002). Till the late 1990s, most of the outsourcing work was handled by companies and centers in the United States (US) and Europe (Singh and Jayashankar, 2002).
The scripting of the emergence of India as the favoured outsourcing destination started almost at the same time. With the US and Europe experiencing recession the need for companies to slash costs whilst retaining service quality by outsourcing certain part of their business grew manifold. The concomitant rise of the telecom and internet sector in the vibrant economies of India, China and the Philippines with bountiful skilled and expert human resources, fast becoming expensive and scant in the older economies, only boost up the process and made the arrangement important and attractive for both customer companies and the service providers. A stable legislative and economic framework with the communication infrastructure in place and ticking by then, a large English speaking talent pool waiting to bloom, the irresistible attraction of low labour costs, and the just appropriate time difference with the West for such endeavours further facilitated the process. Indian software companies had already made their mark which was a strong reason for choosing India as a favorable BPO destination.

India has the world’s second largest reservoir of engineers, scientists, managers and skilled persons and the largest pool of IT manpower with nearly more than 50 percent fairly proficient in English. Nearly 200,000 engineers, 45,000 management graduates, 120,000 doctors, 9,000 PhD’s and 2,100,000 other graduates and 300,000 post graduates pass out of 380 universities and 13,150 colleges in India every year (Kelly Services, 2006). Further, the National Knowledge Commission (NKC) has suggested the creation of 1500 universities by 2015 as also the eleventh five year plan (2007-2012) aims at setting up of 8 new Indian Institute of Technology (IITs), 7 new Indian Institute of Management (IIMs), 20 new Indian Institute of Information Technology (IIITs), 5 new Indian Institutes of Science (IISs), 2 Schools
of Planning and Architecture, 10 National Institute of Technology (NITs), 373 new degree colleges and 1000 new polytechnics (NKC, 2008).

Coupled with the above mentioned reasons, India’s huge talent pool in varied streams is now seen as one of the most powerful reason for making it a promising destination for KPO.

Outsourcing began in India with the renowned multinational GE setting up its facility in Gurgaon in the mid 1990s. American Express also started back-end operations in India in the mid 90s (Aggarwal, 2007; Singh and Jayashankar, 2002). It’s success over the past many years is clearly reflected in its transition from IT and ITES to KPO (Dogra et al., 2005). Table 1.3 provides a brief overview of the evolution of the Indian IT-ITES sector to KPO sector.

**Table 1.3: Transition of Indian IT-ITES sector to KPO sector**

<table>
<thead>
<tr>
<th>Basis of difference</th>
<th>IT-ITES</th>
<th>BPO</th>
<th>KPO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year of origin</td>
<td>1990s</td>
<td>1998</td>
<td>2000</td>
</tr>
<tr>
<td>Market size in 2003 (in USD billion)</td>
<td>21.5</td>
<td>2.78</td>
<td>0.72</td>
</tr>
<tr>
<td>Compounded annual growth rate (CAGR) : (2003-2010) (in percent)</td>
<td>27.5</td>
<td>30.6</td>
<td>49.5</td>
</tr>
<tr>
<td>Share in Indian service sector (in percent)</td>
<td>7.03</td>
<td>0.91</td>
<td>0.24</td>
</tr>
<tr>
<td>Share in global market in 2003 (in percent)</td>
<td>1.6</td>
<td>36.1</td>
<td>55.8</td>
</tr>
<tr>
<td>Share in global market in 2010 (in percent)</td>
<td>NA¹</td>
<td>45.2</td>
<td>70.6</td>
</tr>
</tbody>
</table>

**Source:** Knowledge Process Offshoring – A ‘win-win’ situation, Dogra et al., 3 May 2005, p.1.
Tighter emigration norms, shortage of highly skilled knowledge professionals in the developed nations, changing demographics (ageing population), cost-efficiencies, reduction of time-to-market for services and products, access to domain knowledge and resting of intellectual property with the buyer of KPO services have been identified as the key demand factors responsible for fuelling the KPO growth. The supply factors that gradually pushed it further are commoditization of BPO services, less competitive pressure due to fewer players, better margins, economies of scope and availability of all types of services through a single vendor (Dogra et al., 2005; Evalueserve, 2004a).

Banerjee et al. (2007) consider changing dynamics in the workforce i.e. an ageing workforce in the West and young generation of working population in the East coupled with significant cost saving opportunities by clients in KPO deals compared to ITO and BPO per resource as the critical success factors responsible for growth of KPO. Sen and Shiel (2006) categorize drivers of KPO growth as economic, technological, political, strategic and risk related. Cost is definitely an important driver. While drafting and filing an application in the United States Patent and Trademark office (USPTO) costs about USD 10000-15000, offshoring even a part of the process to India cuts the cost to half. The cost difference is illustrated by the fact that a Masters in engineering with 5 years experience draws USD 7000 a month in the US and only USD 1200 a month in India (Evalueserve 2004a; Majumdar, 2004).

Another important and relevant contributory factor is quality and information security. Since the inception of the industry in India, players within the country have been focusing on these factors to align themselves with international standards such as Six Sigma, COBIT (Control Objectives for Information and Related Technology), SEICMM (Software Engineering Institute's Capability Maturity Model), PCMM
(People Capability Maturity Model), CMMi (Capability Maturity Model Integration) and ESCM (eSourcing Capability Model) and total quality management (TQM), along with highly commended security standards from International Organization for Standardization (ISO) series including ISO 17799 and ISO 27001 (NASSCOM, 2005). While mere quality certification does not guarantee work from clients nevertheless with physical, legal and information security issues becoming exceedingly important, BPOs / KPOs are getting more conscious of quality standards required by them to win client confidence and continue in business. According to Evalueserve (2004a) processes executed within the KPO domain require higher quality standards because the stakes for the clients are high and there is apprehension regarding their quality due to their origin from low-cost destinations. Regulations though still remains a front where they need to brace up with international laws such as the Sarbanes-Oxley Act, the Healthcare Insurance Portability and Accountability Act (HIPAA), United Kingdom (UK) Data Protection Act, Fair Debt Collection Practices Act (FDCPA) and United State-European Union (US-EU) Safe Harbour Agreement 2005, Gramm-Leach-Bliley Act (GLBA) which can affect Indian vendors in the future (Dogra et al., 2005; Evalueserve, 2004b; Singh, 2004).

According to Aggarwal (2007) the initial years of outsourcing of knowledge work in India remained tepid with only a few recognized players in the field and the distinction between KPO and BPO came to light when Ashish Gupta, COO, Evalueserve, coined the term ‘KPO’ in October 2003 to emphasize the difference in the kind of services his company provided from other BPO activities. The years from 2000 to 2005 were the growth years for KPO during which niche service providers established offshore knowledge centers in India, making it a leading destination for KPO (Tandon, 2006).
KPO companies have transformed the scenario of ITES industry and some examples of areas of KPO include (IP) research, equity research, insurance research, financial data mining and modeling, business and market research, engineering design and development services, animation and graphics for entertainment, computer aided simulation, legal content and services, medical content and services, remote education, writing and content development, pharmaceuticals and biotechnology research, research and development (IT and non-IT areas) and network management.

Customers of KPO services in general comprise market research agencies, consulting firms, investment banks, financial institutions, legal firms, telecom, and engineering/design, automotive companies and corporate planning departments of large enterprises. Foreign small and medium enterprises too consider KPO services to cater to their high-value project-specific activities. The companies doing this knowledge intensive work include both start-up small players as well as global giants (Tejaswi, 2005).

1.5.1 India vs. Other outsourcing destinations

There are several other countries besides India that are fast emerging as key players in both BPO and KPO space for both IT and non-IT services.

China like India is considered to have a favourable geographical location which enables 24x7 support followed by Philippines. Their respective governments also have industry friendly policies to promote growth in the sector compared to Russia which still follows old laws and tax regime. With regard to IT salaries in USD, India seems to have the lowest salaries ranging between USD 5375 to 8960 per annum compared to countries like Israel or Ireland which fall in the high bracket zone. From the viewpoint of cultural compatibility and proficiency in English
language, Canada, Ireland and Israel rule the roost. India remains a strong contender due to its vast English speaking talent pool and offer of widest range of outsourcing services (Evalueserve, 2004a, 2005a).

Budhwar et al. (2006a, b) and Dogra et al. (2005) summarize the main factors contributing to the strong growth of the Indian outsourcing sector as people and location attractiveness. With India possessing capabilities to provide services in various sub-areas of KPO, countries such as Russia, Philippines, China, Israel, Ukraine, Poland, Hungary and South Africa are also being considered as favourable destinations for providing KPO services in different domains (Aggarwal, 2007). A study by the Baring group predicts that Mumbai, Kolkata, Gurgaon, Bangalore, Hyderabad and Noida respectively would prove to be hot spots for KPO activities in India due to their strengths in either availability of vast talent pool, economical living conditions, connectivity or good infrastructure (The Economic Times, 2005). This distinction of the India’s knowledge base coupled with its success as a robust and favourable outsourcing destination is ushering in a KPO revolution that promises to change the face of the businesses of the world and place India’s knowledge industry at the zenith.

1.6 KPO: HR opportunities and challenges - Need and importance of the study

“In the 21st century, comparative advantage will become much less a function of natural resource endowments and capital-labour ratios and much more a function of technology and skills. Mother nature and history will play a much smaller role, while human ingenuity will play a much bigger role” (Thurow, 1991, p. 40).

These words aptly sum up the coming of age of the KPO industry. The increasingly visible landscape of KPO is opening up a world of opportunities for human resources of varied backgrounds in diverse fields, the fulcrum therefore for the
growth and success of this eclectic sector rests on the human resource factor. Knowledgeable people who steer this industry are active drivers of the processes rather than passive riders, therefore the kind of skills and qualities preferred, professionals required, training to be provided, compensation offered and work schedules and environment prevalent naturally become some of the areas of vital concern in this sector. The reason why people join and switch jobs needs to be explored. There is an urgent need to understand what is important to them and what is not, what satisfies them and what does not. Understandably the HR challenges inherent in managing this kind of workforce demand special attention and beat that of any other sector. Attracting just the right kind of people, leveraging and nurturing the expertise and retaining them through the right HR initiatives is the key to success for this industry.

The emerging KPO space in India’s knowledge economy is riddled with ample foreseen and unforeseen human resource opportunities and challenges and despite differing views and projections about its growth and success, the truth remains that there is a need to align and focus on human resources in order to fulfill the promising expectations set for this industry. For this reason their effective organization in terms of both the kind of people required and the challenge of managing them is of great significance both currently and in the future. Moreover given the remarkable contribution of the industry to India’s economy and its success undoubtedly riding on human resources it is only fair and in the interest of the industry that inputs of employees on issues affecting them directly or indirectly be considered and imbibed. The gap between the aspirations and expectations of its asset force and what is actually provided to them needs to be bridged. Interestingly this area of human resources on KPOs remains largely untapped. Having a clear picture of the
extent of HR opportunities and challenges in KPOs through the survey makes it possible to understand and grasp the human resource intricacies which can be useful in providing guidelines in framing policies in relevant human resource areas in near future. This explains the utmost relevance of the present study which explores the HR perspective on opportunities available for human resources, the challenges being faced and simultaneously studying the current HR practices of select companies into KPO in India. Incorporating employee opinion on HRM too presents a wider picture. The value of the present study stems from the fact that it attempts to contribute to emergent literature on KPOs and perhaps is one of the first few to provide a view of the human resource territory of Indian KPOs specifically in terms of the following objectives:

1.7 Objectives of the study

The study aims at analyzing and exploring the HR opportunities and challenges in KPO industry in India, keeping in view the present trend and practices. To meet the broad objective of the study, the following objectives have been formulated:

1. To study and ascertain the HR opportunities in KPO companies in India.
2. To study select HR practices in KPO companies in India.
3. To explore the HR challenges in KPO companies in India.

To be specific the objectives of the study are as under:

1. To study and ascertain the opportunities for human resources in KPO companies in India with focus on exploring the HR perspective
   a) on expectations about qualitative requirements in potential aspirants and related opportunities on offer.
2. To study select HR practices in KPO companies in India.
3. To explore the human resource challenges in KPO companies in India taking into account
   a) HR perspective on various people management challenges
   b) Employee perspective on select HR practices, their attitude towards nature of work and overall satisfaction through an opinion survey.

1.8 Achievement of objectives of the study

1. The first objective has been achieved on the basis of responses obtained through questionnaire on KPO: HR opportunities.

2. The second objective has been achieved on the basis of responses obtained through questionnaire on KPO: HR practices.

3. The third objective has been achieved on the basis of responses obtained through questionnaire on KPO: HR challenges and the employee opinion survey.

1.9 Overview of conceptual and analytical (design and methods) framework of the study

A schematic presentation is prepared (Figures 1.2 and 1.3) to clearly illustrate the two important dimensions (conceptual and analytical) of the present research. The two frameworks clearly elucidate how the present research has been conceptualized (I) and flows logically to provide a map for understanding the design and methods under the analytical framework (II) to demonstrate the achievement of the stated objectives.
**Figure 1.2: Conceptual framework of the study**

<table>
<thead>
<tr>
<th>Identification of the theme /topic and its importance (Topic and its importance)</th>
<th>Formulation of the theme/topic in terms of broad /sub research objectives (Purpose)</th>
<th>Delimiting the theme/topic (Scope)</th>
<th>Reviewing related literature (Background for the study)</th>
<th>Defining central concepts used</th>
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<tbody>
<tr>
<td><strong>HR opportunities and HR challenges in KPOs</strong></td>
<td><strong>Analyzing and exploring the HR opportunities and challenges in KPO industry in India, keeping in view the present trend and practices.</strong>&lt;br&gt; - KPO an important contributor to national economy&lt;br&gt; - HR factor indispensable for KPO success&lt;br&gt; - Unexplored terrain and contribution to knowledge&lt;br&gt; - Understand and grasp the HR intricacies which can be useful in providing guidelines in framing policies in relevant HR areas</td>
<td><strong>HR opportunities and HR challenges in KPO companies in India</strong>&lt;br&gt; - <strong>KPOs Profile:</strong> Big/small sized KPOs with varying staff strength and service segments in both National Capital Region (NCR) and outside NCR&lt;br&gt; - To study select HR practices in KPO companies in India&lt;br&gt; - To explore the HR challenges in KPO companies in India&lt;br&gt; - <strong>Backdrop:</strong> Globalization of services, outsourcing/offshoring, KPO - Meaning, emergence, KPO Vs. BPO, India as an outsourcing destination Vs. other outsourcing destinations (KPO context)&lt;br&gt; - HRM with special reference to developing countries and the Indian context&lt;br&gt; - Employee opinion and HRM&lt;br&gt; - CCs and BPOs in the context of HRM&lt;br&gt; - KPO (projections and impact)&lt;br&gt; - KPOs in the context of HRM&lt;br&gt; - Key gaps (justifying the research undertaken)</td>
<td>Both directly or indirectly related to the research</td>
<td>Herein, meaning of the terms ‘HR opportunities’ and ‘HR challenges’, formulated on the basis of primary data collected and analyzed (Phase I study) and further validated through expert opinion from KPOs</td>
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Figure 1.3: Analytical framework of the study

II. Analytical Framework (How?)

<table>
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<tr>
<th>Genre and rationale</th>
<th>Designing methods of measurement</th>
<th>Designing sampling plan</th>
<th>Designing analysis plan</th>
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<tr>
<td><strong>Exploratory</strong></td>
<td><em>Explore the HR opportunities and challenges in view of the present trend and practices</em></td>
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<td></td>
<td>(Phase I study): Structured questionnaire for: Experts in the area of HR of both industry and academia to formulate the meaning of the terms ‘HR opportunities’ and ‘HR challenges’ to be used for the research and find the HR practices to be studied in KPO companies</td>
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<td>(Phase II study): Structured questionnaires at two different levels: Three questionnaires for a representative from the HR department: KPO: HR opportunities KPO: HR challenges KPO: HR practices One questionnaire for the employees: KPO: Employee opinion survey</td>
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<td><strong>Outlines sampling method</strong> For KPOs: Out of the KPOs approached in India based on list compiled by Evaluerserve, Scope-e-Knowledge, Business India (August 29-September 11, 2005) and referrals from KPOs approached, a sample size of 32KPOs was generated based on the willingness of the respondents to participate in the research For HR personnel in KPOs: Within the KPO sampling method is purposive and judgmental based on the HR personnel’s designation and ability to provide relevant information For KPO employees: Based on approachability and willingness to participate by KPOs, and point of contact the concerned individual in HR, a final sample of 157 respondents was used in the research</td>
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<td><strong>Provides justification of sample size</strong></td>
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<td><strong>Validity and Reliability</strong></td>
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<td>• Content validity</td>
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<td>• Construct validity using exploratory factor analysis wherever applicable</td>
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<td>• Reliability and internal consistency using test-retest reliability and Cronbach’s Alpha</td>
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<td><strong>Statistical tools and techniques used</strong></td>
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<td>• Principal Component Analysis</td>
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<td>• Descriptive statistics</td>
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<td>• Importance-Performance Analysis (IPA) used as Importance-Satisfaction Analysis (ISA)</td>
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<td>• Quadrant Analysis and Diagonal Model</td>
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<td>• Paired Sample t-test</td>
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<td>• Independent Sample t-test</td>
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<td>• Analysis of Variance (ANOVA) (for testing of null hypotheses)</td>
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<td>• Content analysis</td>
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<td>• Multiple dichotomy analysis</td>
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*HR opportunities and challenges in view of the present trend and practices*  
- Limited knowledge on the topic  
- Identify, explore and understand important aspects related to the topic
1.10 Organization of the study

The study has been organized into five chapters.

The present, Chapter I provides an introduction to the subject, tracing the genesis and evolution of KPO setting forth the specific objectives of the study.

Chapter II gives a detailed account of the review of literature available on the research topic, specifically in the context of HR opportunities and challenges related directly or indirectly with the subject matter of the study.

Chapter III focuses on the conceptual development and research methodology which outlines a systematic research procedure adopted for conducting the study.

Chapter IV discusses the results on HR opportunities, challenges and practices and the employee opinion survey based on analysis and interpretation of data collected for the study.

Chapter V summarizes the major findings of the study, presents the necessary conclusion and offers suggestions on various HR issues affecting KPOs to the decision makers in the industry. It also makes useful KPO centric recommendations for the academia. A few propositions stemming from the findings are also proposed to be tested in future.

References covering the supplementary material referred during the course of the study are appended at the end of each chapter wherever used. Bibliography and Annexures are appended in the end.
References


Note:

1 As per a NASSCOM-KPMG study, cited in Major IT-ITES hubs in India – A snapshot, India research, September, 2006 Available from: <http://www.tribiz.in/DownloadableFiles/Trammell%20Crow%20Meghraj%20IT-ITES%20hubs%20in%20India_a%20Snapshot.pdf> India’s share of the global IT-ITES services and it spending has significantly increased, with further growth potential from 0.8 percent in 2002 to 4.4 percent in 2012.