Trends Impacting Global Services Offshoring: Will India Remain the World Leader?

Suresh Gopalan and Zagros Madjd-Sadjadi

Abstract—**The presence of a number of factors has positioned India as the leading offshore destination for services. This dominance is increasingly challenged by many countries that have emerged as competitors to India. Global offshoring dynamics is impacted by a number of key factors such as demographics, access to an extensive talent pool, nearshoring & reshoring, and a portfolio approach to offshoring services. To remain competitive, India must invest in its urban infrastructure and education to grow the talent pool.**

Index terms—**Global services offshoring, offshoring to India, emerging offshoring trends.**

I. Introduction

Outsourcing takes place when a firm decides to seek the help of an external entity to produce a product or complete a service if it can be done at a lower cost and greater efficiency [1]. Outsourcing includes the practice of offshoring. Offshoring involves completing activities in locations that are external to a nation's geographical boundaries [2]. The focus of this paper is solely on offshored service activities-it excludes manufacturing.

According to Nobel Prize winning economist Ronald Coase, the choice of whether a firm will procure from inside its walls or go to the market to secure products and services depends on the transaction costs concerned [3]. Transaction costs serve as a "wedge" between the price that the selling firm receives and the price that the acquiring firm pays. Whereas goods have often been traded between firms at great distances, the international selling of services has only come into its own recently due to the dramatic decline in the cost of telecommunications. Just as the universal shipping container which can be delivered by sea, rail and road revolutionized the international shipment of goods, the Internet has similarly reduced costs of global service procurement [2].

With an estimated 51% of the global market share for Information Technology (IT) and Business Process Outsourcing operations (BPO), India has a dominant lead over other countries that offer similar services [4]. In 2008, IT-BPO sectors represented an $80 billion global industry-by 2020 it is expected to grow to $500 billion [7].

The initial wave of BPO services that were offshored was considered as "low end" involving minimal skills-sets and data transmission costs [1], [5]. These included fielding routine customer requests at call centers, processing insurance and payroll forms, medical transcription, data processing, records management etc.

Recently, there has been a significant growth in the demand for Knowledge Based Processing (KPO) services which involves higher-level skill sets and education as well as more intensive data processing [5]. This includes sophisticated product development, research and development, financial analysis, advanced legal research, reading and analyzing MRI and X-ray data, clinical medical trials, architectural drawing, quantitative modeling and market research, customized software development, data mining, etc. [6]. Many of these activities are being undertaken due to the expansion of the capabilities of the Internet, which allows vast quantities of information to be moved virtually instantaneously at nearly zero marginal cost [2].

The paper is organized as follows: There is a comprehensive discussion of India's strengths and weaknesses. This is followed by a profile of select countries that have emerged as competitors to India. Four trends that are likely to impact global offshoring are identified. Finally, we conclude by offering our perspectives on India's long-term competitive position by looking at various steps that have been adopted by the private and public entities.

II. India's Ranking And Value Proposition

India ranks first in A. T. Kearney's Global Services Location Index report [8] with a total composite score of 6.91 followed by China (6.29) and Malaysia (5.98). The index score is based on three major categories: financial attractiveness, people skills and availability, and business environment. In a different survey conducted by A. T. Kearney, India is ranked #3 in the 2010 Foreign Direct Investment Confidence Index and has stayed as one of the top 5 destinations since 2005 [4].

The presence of a number of key strategic factors have accounted for India's formidable position in the services offshoring industry. They factors have to be viewed as a *gestalt*, as the value provided comes from the collective entity-not from one or two factors.

With approximately 3 million graduates entering the work force each year, the Indian labor market provides access to a talented human resource base for the BPO and KPO sectors [5]. Most Indian graduates are fluent in English-a key prerequisite that addresses U.S. based customer expectations [9], [10]. The numbers of private universities have increased

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in recent years adding to the supply of graduates-especially in the areas of science and engineering. The cost differential is significant due to lower labor costs of operating in India. Experts estimate that salaries for a number of positions based in India are 50-70 percent less than if they were based in the United States [5], [9].

Indian vendors have a high degree of familiarity with Western business practices [11], [12]. They are highly experienced, sophisticated and globally savvy. As their expertise spans a number of areas, they offer bundled value-added services from routine tasks to others of a relatively higher order [13]. The time zone differences between India and United States enable a seamless transfer of work and where it can be done round the clock if needed. Indian firms have global delivery centers in Hungary, China, Argentina, Brazil, Mexico, Singapore, Uruguay, and the United States. Their presence in multiple locations enables them to take advantage of human resource talent and the ability to deploy work to locations where they can be completed effectively and efficiently [13]. Multiple locations offset the prospect of fears of data security or work disruption.

The Indian business environment is robust with a strong public-private partnership. The central and various state governments have undertaken a number of measures to facilitate the location, education, training, and on-going support for the services industry [11], [12], [13]. The National Association of Software and Service Companies (NASSCOM), is a powerful organization that has shaped public policy including key legislations impacting service firms. Recognizing that operational capacity has nearly reached saturation point in Tier I cities, NASSCOM has spearheaded efforts to expand the scope of service operations to Tier II and Tier III cities. India's vibrant democratic system and independent judiciary are seen as additional pluses that support intellectual property rights and individual rights [14].

This combination of talent, experience, environment, location(s) and cost-savings collectively provide a value proposition that cannot be easily replicated or copied.

III. Factors Eroding India's Value Proposition

The Indian labor market has been displaying some signals that are cause for concern. The first trend has been the gradual increase in salaries over the years that has somewhat dented the cost savings advantage [10]. In part, this increase in labor costs has resulted from a "sellers" market resulting in an intense competition for employees with the right skill-sets [9]. Human resource experts have noted that that overall, employee loyalty is low, attrition rates are high, and poaching key employees by competitors is fairly common [6]. While it is too early to conclude that there is an acute labor shortage, industry watchers predict that 3 million graduates per year is an insufficient number to sustain a 51% global market share in the services industry [7].

Tier I locations in India have reached a saturation point. If growth has to be sustained, there has to be a major shift in establishing operations and recruiting talent from India's Tier II and III cities [7], [14]. This transformation is possible if massive investments are undertaken to improve urban needs for transportation, power, water, education, and health care. Overall, urban planning and investment in India has been inconsistent and undertaken in a reactive manner [15]. Travel time can be onerous due to poor quality of roads and many service centers operate their own fleet of buses to provide transportation to their workers. Frequent power cuts require firms to have their own in-house generators for providing electricity to their facilities. Indian democratic process often slows decision making, as the needs of various stakeholders have to be considered. Corruption is seen as a corroding influence on the overall Indian business climate.

Due to the variance in the quality of education provided, many graduates are not immediately employable [1], [10]. Too often, they require additional training and education before they can make a meaningful contribution—this increases the cost of operations [13]. A study of over 80 locations in India by McKinsey found that costs increased and performance decreased after a threshold of 3000 employees are reached in any location [16]. Off-shore providers demonstrate scale of activities by having a large work force—but after reaching a certain threshold, size becomes a decreasing asset negatively impacting cost and effective delivery.

Recently, there have been some high profile U.S. firms like Dell and Delta that have terminated their Indian service operations due to perceived customer dissatisfaction [1]. These incidents have focused the spotlight on offshoring activity in general, and on the quality of Indian labor force in particular.

IV. Emerging Global Competitors

Space considerations preclude us from discussing all of the various countries that compete with India for providing global services. Our discussion profiles a few key countries in each region that are adept at providing similar services [11], [13].

A. Asia

China with its large and well-educated work force and excellent infrastructure emerges as a formidable competitor. The country graduates hundreds of thousands of young people who join the workforce each year. The Chinese government is keen on increasing the global market share for BPO-IT services and has undertaken many reforms in the education sector to boost enrollment and instruction. More Chinese institutions are providing instruction in English-its usage has significantly increased [17]. Urban infrastructures improvements are impressive-significant investments have been undertaken in transportation, communication, office space, health care, and education [15].

However, the one-child policy and the associated reduction in the birth rate have rather dire consequences for the long-term stability of the Chinese economic model. China has a rapidly declining population and by 2025, 28% of its population is estimated to be 55 or older [14]. Its labor force is projected to begin to shrink within the next decade and it will be unable to maintain its current trajectory of growth [18]. The Chinese labor market movement is restrictive. The *Household Registration System* requires even well-educated individuals to reside where they were born or were educated, despite having marketable skills [19]. The legal system is seen as weak when it comes to protecting intellectual property rights [20]. The traditional Chinese focus has been on manufacturing; despite the recent adoption of English, Chinese graduates possessing English fluency are still unavailable in large numbers to cater to the services industry [4], [8].

Malaysia and Philippines are also rated as attractive locations to establish offshore operations [8], [21]. Malaysia is seen as possessing a stable political environment, favorable business climate, high-quality labor force that is less expensive than Western countries. While Philippines enjoys close cultural affinity with the United States and its labor force has a high degree of English language fluency, the political and business climates are rated less favorably than Malaysia. Thousands of Filipinos are employed in call-centers where the prevailing wages are significantly low relative to the United States [21].

The primary limitation in both Malaysia and Philippines is the availability of large numbers of highly-skilled employees who can transition from basic BPO to more advanced KPO type operations. Indonesia and Thailand are perceived to be low in overall attractiveness due to poor infrastructure, and insufficient levels of science, engineering, and technical graduates who are fluent in English [8].

B. Central and East Europe

The trends in Europe show that the “old” EU countries such as Austria, Germany, France, and the United Kingdom have increasingly offshored services to the Baltic states of Latvia, Lithuania, Estonia and Central and Eastern European countries such as Czech Republic, Hungary, Slovakia, Bulgaria, Poland and Romania [22]. The European Union membership has resulted in a similarity of standards, procedures, and a tax policy.

These factors combined with a significant wage differential, excellent infrastructure, well-educated multi-lingual work force, closer geographic proximity and greater cultural understanding of European customers have made offshoring services more attractive to the countries identified earlier [23], [24].

The primary issue continues to be the availability of a relatively small labor pool due to the small size of these countries. While the graduates are well-educated, they are unavailable in large numbers to achieve both economies of scale and scope when considering global operations. Additionally, the initial advantage due to lower wages is decreasing. Increasing costs due to currency appreciation and wage inflation have adversely impacted profitability [23].

C. Latin America

Mexico, Chile, and Brazil are all identified as the most attractive locations in Latin America for offshoring services [4], [8], [25]. Of these countries, Mexico is rated as the best location for a number of reasons that follows [26]. Mexico is a member of the *North American Free Trade Agreement* which includes the United States and Canada. Its labor costs are low relative to Chile, Brazil, and many countries in Eastern and Central Europe. Mexico is closest geographically to the United States-the largest single country to offshore services. Same time zones and high frequency of air travel make it easier for Mexican service providers to communicate with their U.S. based customers. The presence of a bilingual workforce fluent in both Spanish and English is a big plus when dealing with the increasing Hispanic population in the United States [25]. Mexico’s attractiveness is marred by political instability, safety issues that have risen with the war with the drug cartels, disruptive events, rigid labor laws, and a shortage of talent with more advanced skills.

Chile is seen as one of the top 10 global destinations for offshoring [25]. The workforce is well educated and there many bilingual speakers fluent in English and Spanish. The country has enjoyed a stable political system with a sound currency. Chile boasts a world class telecommunication infrastructure and combined with competitive labor costs (at least 45% less than the United States), and a favorable business climate it is seen as an attractive alternative to Mexico [25]. Its biggest limitation is the small size of its population and consequently its labor pool [27].

Brazil has the largest economy among Latin American countries. With respect to offshoring attractiveness, Brazil’s strengths are its world-class telecommunications infrastructure, low operating costs, size of the domestic market, and availability of IT vendors [28]. However, as the primary language is Portuguese, the ability of offer services in English is limited. Also, Brazilian educational system produces more engineers than “generalists”. Finally, the international exposure is relatively limited.

V. Global Trends

In this section, we identify four trends that will shape the global offshoring services industry. First, services based offshoring is an emerging industry and has been in existence only for the last 10-15 years-its growth potential is tremendous [1]. Offshoring technology and business process outsourcing represents the introduction phase of the offshoring cycle [8]. As newer technologies emerge, the types of services and the countries offshored to will expand. Supply chain dynamics in developed countries will continue to evolve in response to the rapid growth [29].

Second, the shrinking demographics with respect to the birth rate in developed countries point to a smaller labor pool in the years to come [8], [14]. This combined with more restrictive immigration policies tilts the prospect of more service based work heading towards developing countries that have an abundant supply of educated young people. Gaining access to a pool of highly skilled science and engineering talent is seen as a key strategic driver impacting offshoring. The *annual Offshoring Network Survey* results show increasing demand for engineering, product development, and research and development activities [29]. Consequently, there will be a significant shift in the volume of service functions from developed to developing countries that have access to a competent human resource base.

Third, a portfolio approach to offshoring is touted as the next wave [30]. Under this approach, centralized global hubs will be maintained in the home country while multiple service functions will be offshored to two or three locations, in different regions of the world. This approach will reap the advantages of cost efficiency, avoid overconcentration of operations in a few countries, hedge risk, and negate currency fluctuations [30]. The emergence of the portfolio approach favors Eastern European firms offering offshoring services--there may be an increased interest in destinations where English is not the dominant language [24].

Fourth, if the global economic recovery continues to be weak, there will be increased political pressure in developed countries to slow the pace of offshoring. This pressure will be felt the most in the United States which has offshored more service functions than other developed nations [8]. Consequently, a phenomenon called *reshoring* or *closeshoring* is becoming more popular [31].

The first option, *reshoring* involves moving service functions from Tier I to Tier II or Tier III cities in the United States. Generous tax breaks, subsidized loans combined with customized educational programs result in a cost savings of 30%. The second option, *closeshoring* also known as *nearshoring* will see operations moving to the Caribbean and Latin America [25]. *Reshoring* can be limited by the relative smallness of U.S. based Tier-2 cities. For example, a city with a population of 200,000 can supply labor force for one or two IT centers [31].

VI. Conclusion

Global offshoring (services) is expected to grow to a $500 billion industry by 2020 [7]. Experts predict that growth will come from retail, healthcare, government, and from emerging economies that will begin to offshore as they become more affluent. Despite increased competition from countries like China, Malaysia, Mexico and the Philippines, most customers will find it difficult to overlook India's collective value proposition that results from: scale of operations, labor force size, depth of experience, English language fluency, protection for intellectual property, number of vendors, and multiple locations [5], [8]. The Indian workforce will add an additional 136 million by 2020 with a median age of 23 [14]. With over 3.5 million graduates added to the workforce each year, no other competitor comes close to match India's scale of human resources-this factor provides a sustained competitive advantage. However, the quality of education in India has to improve in consistency if the degree of employability has to be increased [5].

Recognizing the advent of the portfolio approach to offshoring such as *reshoring*, and *nearshoring*, Indian firms have aggressively opened offices in North America and many Asian and European countries [4]. These moves offset mounting criticism that offshoring results in loss of domestic service jobs. If U.S. economic recovery continues to be sluggish there will be renewed calls to cap offshoring activities-all the more reason for Indian firms to continue to pursue this strategy.

As technology services become more standardized, Indian firms are rebranding and differentiating themselves as enablers and innovators positively impacting the overall dynamics of global supply chain activities [8]. They are transforming their culture to be seen as solution providers integrating technology and processes to produce client-focused results of a higher scale. These changes are needed to maintain market share in the KPO sector of offshoring [11], [12].

To maintain cost competitiveness and gain access to a deeper labor pool, additional offices and operations are being established in Tier II and III Indian cities [32], [33]. This move will go a long way to counter the perception that India is over-penetrated with a saturated job market. Recent employment trends suggest that 58% of the IT-BPO workforce will be drawn from Tier I and II cities. The move to locate operations in Tier II and III cities will be successful if adequate investment is made upgrading infrastructure including education.

India lags behind China in its urbanization efforts. A recent McKinsey study estimated that India spent $17 per capita per annum on capital investments focused on urban improvements [15]. In contrast, China spent $116 in its urban development programs. The low Indian investment in urbanization infrastructure is an area of concern.

Country-location experts seeking global service deliverables will favor India for all the reasons cited earlier. But Indian labor potential will become stunted, if urban needs are unmet. With an additional 215 million Indians projected to become urban dwellers by 2025, massive infrastructural changes are needed in the transportation, power, health care and education sectors. These infrastructure investments are needed to tap labor force productivity, sustain India's growth trajectory, and brand name. These initiatives require ongoing dialogue and a robust sustained partnership between public (central and state governments) and private firms.

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