Outsourcing Services to India: A Review and New Evidences

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[Abstract] While the manufacturing of goods has been off-shored from the U.S since the early 1980s, the off-shoring of services started much later. China became the off-shoring hub for manufacturing and India for services. In this paper, we focus on the nature of growth and the motivation towards the off-shoring of services to India. The future of services off-shoring from the U.S to India, along with its challenges, will be explored. Figure 1 is from Blinder (2009) and presents a typology for offshorability of services. Table 1 presents some major service offshoring corporations as of 2010. Table 2 categorizes the literature to date. After analyzing the available evidence, we conclude that in the long run, 1) off-shoring presents a win-win for both nations and 2) it presents significant opportunities for worldwide growth of entrepreneurship in both the U.S, India, and beyond.

[Keywords] outsourcing services; offshore; market; economic growth

Growth of Emerging Markets

It is interesting to note that the so-called emerging markets (China, India, Brazil, Mexico, Russia, and others) accounted for more than 60 percent of the manufacturing output in the eighteenth century. However, the industrial revolution of the nineteenth century helped Europe establish its dominance in global manufacturing with its share of 60 percent. With two world wars fought on European soil, the U.S became the new global leader in manufacturing in 1955 with a 45-percent share of the world market. In the twenty-first century, the emerging markets are expected to regain their past dominance in manufacturing with a share exceeding 40 percent.

The ending of both the cold war and China’s isolationist policy helped China join the U.N and, then, the WTO. These events, in turn, helped China position itself as the major off-shoring hub for U.S manufacturers. A series of WTO agreements reduced trade barriers between nations and accelerated the productivity growth in the U.S by stimulating global production networks (Doh, 2005; Slaughter, 2002). During the last 20 years, total employment in the manufacturing sector has increased in China while it steadily decreased in the U.S. Relatively higher wage/benefits, as well as a focus on the higher value-added manufacturing products (requiring automation), are the culprits adding to the decrease in manufacturing employment in the U.S. Manufacturing in the U.S, however, produces a value of output per hour worked of almost $50 as opposed to $10 in China, thus netting productivity gains for U.S manufacturers. Kraemer, Dedrick, and Dunkle (2010) found that of the 403 U.S firms studied, 43 percent were doing part of their new product development offshore, thus indicating the spread of the off-shoring concept way beyond the final production of component parts.

The Impact of Globalization

There have been at least three waves of globalization. The first wave took place in the latter part of the nineteenth century when companies looked abroad for new export markets, while the second wave came after the middle of last century when companies moved their manufacturing operations to developing countries looking for labor-cost savings. The third wave of globalization – off-shoring of services, again, looking to save labor cost, extends the second wave one small step (Lapid, 2006; Bryson, 2007).
The Growth of Offshoring in Services

Service off-shoring by U.S. firms is steadily growing, though the overall levels are much lower than that of the manufacturing that is sent offshore (Jensen, 2009; Bunyaratavej et al., 2010; Bhagwati, Panagariya & Srinivasan, 2004; Bhagwati, 2005; Blinder & Krueger, 2009). This may be due to the nature of service delivery because of its inseparability and heterogeneity. The political issues, such as the difficulty of getting visas for people (versus permits for moving products between countries) and availability of skilled human resources in low-wage countries, are compelling issues (Bardhan & Kroll, 2003; Lewin, Massini & Peeters, 2009). Service off-shoring has a significant positive effect on productivity in the U.S as a whole. Off-shoring material inputs, also, have significant positive interactive effects on U.S productivity growth (Amiti & Wei, 2005).

Overall, firms engaged in service off-shoring are able to achieve lower costs by seeking low-wage locations (such as India) and consolidating operations while generously investing in the necessary training and development of people in low-wage countries to assure quality outcomes. Hence, despite significant savings in wage-related costs, the average net gain reportedly is still approximately 30 percent (lower wages offset by developmental costs).

We expect the offshoring of services to continue well into the future as U.S firms look for ways to reduce cost and increase global competitiveness (Brainard & Litan, 2004). For instance, employment opportunities in the telemarketing industry are expected to grow in India primarily due to offshoring efforts of foreign-based firms. Telemarketing is listed as repetitive and not a desirable occupation in the U.S. In countries such as India, the work of a telemarketer is an acceptable career choice. Thus, not all of the offshoring of work is done only to lower the cost of labor. Some of it is being done because of necessity. In the coming years the financial, medical, and software industries in the U.S must upgrade their information systems, and the U.S simply does not have the manpower to do so at a globally competitive cost. For example, recent healthcare changes may require 3,000 hospitals and 400,000 doctors to offshore some of their IT work to India so that it gets done both under budget and on time.

The population of elderly Americans is estimated to double in the next 20 years, and this fact requires more medical services to be outsourced as demand outstrips supply. It has been observed that cost savings is the primary reason for offshoring. However, in fields such as radiology, the real benefit is the reduction in time taken for patient diagnostics. Indeed, the need to diagnose and treat the sick in a timely fashion is paramount, since, at times, such efforts are lifesaving. By offshoring clinical services like radiology, hospitals can reduce the workload pressure on radiologists, shorten turnaround time for patients, lower the cost to insurers, and, hence, ultimately reducing the premium consumers and employers have to have to pay (Yu & Levy, 2010).

Many U.S companies are long overdue for a systems upgrade. A plethora of U.S firms refuse to institute system-wide changes until the existing system crashes. Many times, offshoring is the only option to get the work done on time and at lower costs. Even the U.S auditing profession is embracing off-shoring of certain accounting services previously considered sacrosanct. Increased reporting and compliance requirements mandated by the Sarbanes-Oxley Act of 2002 provided the much-needed impetus for the off-shoring of accounting services. The cost of an Indian chartered accountant is less than half that of the U.S equivalent. After all, many audit procedures are relatively easy to standardize, and the off-shoring of nonjudgmental audit procedures frees U.S based auditors to focus on higher value-added audit procedures. Audit procedures requiring little judgments and routine tax preparations are prime candidates for offshoring. However, that will entail the transmission of proprietary information to foreign entities, thus creating several challenges to be overcome, such as negative public perceptions, protecting client confidentiality, and managing possible litigations.

Other novel approaches in the use of off-shoring include: a) the pursuit of delinquent accounts receivables that would have been written off otherwise; b) the efficient disposal of consumer problems/complaints; and c) the successful marketing of financial services to lower net-worth customers (Bardhan & Kroll, 2003; Lewin, Massini & Peeters, 2009). There are a number of services that probably can never be off-shored, including those requiring direct personal interaction with consumers (dental hygiene) and those involving criminal justice (Metters, 2008; Yu & Levi, 2010; Hollinshead & Hardy, 2010; Haden,
Based on a careful examination of the off-shoring literature, we have identified some of the enabling conditions for services off-shoring: 1) the skill required to perform the service must be transferred quickly and inexpensively to a lower-wage country without offsetting quality; 2) the contact required with the customer can be nonphysical and, hence, is less significant; 3) the service has high information content (tutoring) versus low information content (therapeutic massage or brain surgery); 4) the service is easily delivered through existing telecommunication devices; 5) higher occupational wage differences between the home of the offshoring firm (U.S) and the host country (India); 6) there are lower entry barriers (governmental bureaucracy or competition); and 7) the availability of a skilled (younger) population.

Hence, it is important to note that some of the jobs created offshore would not necessarily have been jobs actually created in the home country (U.S). This may reflect (1) the relative cost differentials between the home and host countries, and (2) that these jobs are often regarded as undesirable (repetitive scanning of documents), yet are sought after in a developing nation (India).

**Micro-Level Analysis of Offshoring: The Perspective of the Individual U.S Firm**
Offshoring of services can help improve productivity of U.S firms. The obvious area is the back-office activities (e.g., billing or accounts receivables) that can be seen as front office work for a service company located in a developing country (e.g. India). Firms can achieve lower costs by offshoring work directly to lower-wage nations or indirectly by partnering with firms specializing in offshoring. These firms, as a result, will obtain higher efficiencies through consolidation of their operations across multiple clients. While published estimates of cost savings vary, the average net savings is about 30 percent, which is extraordinary for an individual firm by any measure. For U.S firms, offshoring can ensure survival, help improve customer service and is undertaken to enhance the competitiveness and to increase profitability. Individual consumers benefit from lower prices. The developing nation will slowly move resources to higher value-added activities, thus ensuring long-term prosperity. It has been observed that for every one dollar committed to offshoring by the U.S firms, there is about $1.50 in value created for the U.S economy as labor is redeployed from lower to higher value-adding activities. After all, cost focus is an established form of firm competitiveness in the U.S market (Michael Porter – Competitive Strategy). Offshoring, when it yields cost reduction without hindering either quality or speed, becomes a standard tool for U.S firms to deploy whenever and wherever possible (Jensen, 2009; Hollinshead & Hardy, 2010; Di Gregorio, Musteen & Thomas, 2009).

**Macro-Level Effects of Offshoring Services: Host Country Perspective**
A developing country such as India can benefit immensely from reaching out to multinational firms to encourage them to consider India as a premier offshoring haven. Governments at all levels can promote the country by arranging informational tours to proudly display their newly created technology parks and to educate foreign companies on the many new tax incentives for offshoring services that create jobs in those countries.

The benefits for host countries include higher export earnings, more new jobs, enhanced skills for the masses, and improved national infrastructure. The spillover benefits include those acquired by employees of newly formed offshoring firms that transfer to the rest of the population. The list of transferable skills include knowledge of computer hardware/software, foreign languages, software development, a strong work ethic without a sense of entitlement, communication, project management, competing abilities, and a workforce that want to succeed and please. In summary, emerging nations gain from offshoring of services from developed nations because of the increased opportunity for employment and training for their people to significant improvements in national infrastructures, such as highways, internet access, and telephone and other communication facilities (Yu & Levy, 2010; Bunyaratavej, Hahn & Doh, 2008; Dutz 2007; Kaka, 2009).
Macro-Level Effects of Offshoring Services: Home Country Perspective

Offshoring services definitely have the potential to deliver substantial benefits to the home country (U.S.), i.e. the nation from which the offshoring strategy originates. Chief among the benefits are: increased competitiveness of the nation in the world market, greater adaptability to global business opportunities, enhanced productivity, and better returns on investments. For instance, delinquent accounts receivables can be pursued more aggressively using inexpensive labor available in a developing nation (e.g. India), which, otherwise, must be written off as uncollectable. Up to 5 percent of the accounts in the health care field fall in this category. Substantial increases in the percent solved of the consumer problems have been reported primarily due to cost-effective offshoring efforts.

Because of cost savings, financial services firms have been able to extend the range of their services to previously under-serviced low-income groups. In the past, the high cost of these services would only permit the wealthier clients to be serviced. The ultimate consumers in the home country directly benefit from offshoring by paying much lower prices for products and services.

Offshoring, indirectly, forces public policymakers and corporations in the home country to shift resources (factors of production) into higher value-adding activities and to develop technologies, essential for the nation’s longer-term prosperity. It has been estimated that every one dollar committed to offshoring by U.S firms has resulted in an extra 45 cents in value created (for the U.S) by rechanneling labor from lower to higher value-adding behaviors. Service offshoring, therefore, can offer several benefits to the home country (U.S): greater global competitiveness, increased productivity, lower inflation levels, higher return for investors, and enhanced trade performance (Tejaswi, 2011; Amiti & Wei, 2005; Blinder, 2009).

The Case of Offshoring Services to India

It is probably true that offshoring of some radiology related services to India (via the Internet) may mean slightly less income for U.S-based radiologists who currently make an average of say $250,000 versus perhaps $25,000 for an Indian radiologist. In the long run, however, such offshoring will have substantially higher net gains across the wider spectrum of world’s population (note: the U.S spends 16 percent of its GDP on healthcare as compared to Cuba which only spends 3 percent, while the average longevity of a Cuban is about the same as an American, though the infant mortality in Cuba is significantly lower).

No doubt, the expansion of offshoring will continue to displace some U.S service workers, but it is certain to help significantly more people in a developing nation, such as India. For instance it has helped to create a number of “call centers” employing thousands of people in Indian urban areas, including Bangalore, Chennai, Pune, and New Delhi. It has also generated demand for U.S brands (Chevy, Ford, Ipad, Iphone, Microsoft, and Dell) by increasing the buying power of the middleclass in major urban centers of India). Significant offshoring of services by U.S firms, in essence, has provided a chance for many Indians to sharpen their skills in the English language, public relations, marketing, and sales. It has also helped scores of Indians to develop a strong sense of independence and work ethic, often associated with the American workers. The U.S. has exported these skills and values so that India can return the favor by exporting its growing service industries (Helms, 2005).

Attractiveness of India for Offshoring of Services from the U.S

There are many emerging markets among the developing nations of the world, such as India, China, Brazil, Malaysia, Mexico, South Africa, the Philippines, Taiwan, Thailand, Poland, and the Czech Republic. These nations seem to be committed to a continuous supply of technically skilled people to meet the growing demands of the labor market, worldwide. The key to offshore site selection is the combined criteria of availabilities of resources, cost-effectiveness of such resources, and the quality of outputs. Among the most commonly cited reasons for selecting India for offshoring include the proportionately high number of English speakers who are willing to do quality work for much less than comparable work in the US or by people in other countries throughout the world (Taylor & Bain, 2004). The offshoring of bookkeeping services and tax preparation services to India can save around 50 percent
for U.S firms. The popularity of India is underscored by the fact that even some state governmental agencies have offshore several of the U.S public services to India. Among the developing nations, at present, India is the preferred destination for offshoring of U.S services (Levina & Su 2008; Kotlarsky & Oshri, 2008). Among the reasons include the following:

- Presence of number of service partners (e.g. Infosys, Wipro, TCS) that can meet or exceed set ISO standards for worldwide service quality
- Availability of English-speaking people with a positive work ethic and accepting of lower wages
- Telecommunications infrastructure that meets global standards
- Faster turnaround times and the ability to offer round-the-clock services
- Support of the Indian Central Government for foreign investments in the sphere of offshoring by way of enacting many investment friendly laws and taxes
- Active partnering by the various State Governments in India (with offshoring firms) to ensure access to needed facilities, power, banking, local suppliers, and other resources

Is Offshoring Win-Win or Win-Lose?

There is a prevailing misconception in the U.S that in this offshoring game, the home country (U.S) loses and the host (India) wins. One study, however, recently reported that for each dollar in services activity offshore by U.S companies to India, the Indian economy gains around 33 cents, while the gain for U.S is much more (McKinsey Report). The benefit to India is in the form of salaries paid for services being offshore, profits earned by providers of offshore services, and taxes generated. The benefit to U.S firms is in the form of decreased final cost of products/services produced, increased sales/profitability, and the assurance of long-term survival through enhanced competitiveness.

Critics in the U.S have argued for years that offshoring services is a zero-sum game in which jobs created in host countries are equal to the jobs lost in home countries. Clearly, this cannot be true. Data-imaging work is an example of a highly labor intensive job that will not get done but for offshoring. For instance, law offices would be cluttered with thousands of files rather than neatly arranged with a few CDs containing all the data, thereby, increasing the ease of access and cutting real estate costs. A similar argument applies with regard to increasing research efficiencies due to searching a database rather than going through volumes of printed matter. These efficiencies are, indeed, due to the offshoring of data-imaging work. Hence, many of the jobs created offshore would not have been realized in the home country (U.S) due to the presence of significant cost differentials; also, many such offshore jobs are often regarded as undesirable in the U.S, but they are attractive in India. In summary, jobs offshore to India are sustainable in India (due to lower wages and the willingness of people to do the mundane work), while the same task would not be desirable or acceptable to the U.S labor market (Cooper, 1968; Sauvant, 2004).

Types of Offshorable Services from U.S to India

While certain corporate services such as billing may be easily offshore, a service such as a full-body massage may never be offshorable, at least not without significant costs. We list below some of the conditions services should meet before they are offshorable.

1. Low personal contact required between suppliers and consumers
2. Have high information content
3. There is a high wage differential between service workers between home and host countries.

The following services have been identified in the literature as ideal candidates to be considered for offshoring to India: (Dossani & Kenney, 2007; Kenney, Massini & Murtha, 2009; Coucke & Sleuwaegen, 2008; Manning, Lewin & Massini, 2008)

- audiovisual services, such as motion picture, radio, and television production and
- business services, most notably back-office functions, such as data entry
- wide-variety of call centers
• medical transcription services
• website design services
• higher education services
• health services (diagnostics and radiology)
• data entry and processing
• accounting, auditing, and tax related services
• legal research
• architectural and engineering services
• customer complaint handling
• telemarketing
• software development services

Industry Focus: Offshoring of Legal Processes to India
The average salary of an attorney in the U.S is about $100,000, whereas the average annual salary in India is around $15,000 per year. Legal Process Offshoring (LPO) is a growing trend in the U.S, and many law firms see LPO as an efficient way to cut costs and become more client-centric. The popularity of the Internet, developments in software/data security, the presence of reputable Indian business partners, and increasing availability of qualified law professionals in India have all helped fuel the growth of the LPO in India. It covers a wide range of legal services industry to include the work of lawyers, paralegals, legal secretaries, and litigation support personnel, among others. The origin of LPO was in the data-imaging of legal files, where offshore workers meticulously scan millions of legal documents and create a digital file, which was a product that no one could have considered possible without offshoring. This business of data-imaging of legal files was not even thinkable without the inclusion of the offshoring component in the business plan. Furthermore, it did not necessarily displace any existing U.S. workers.

Strategic Offshoring Options for U.S Firms
A wholly owned subsidiary gives a corporation better control of the offshored activities and makes sure that the established processes are being followed (e.g. IBM, Accenture). This option works well when a firm’s business involves handling sensitive information (healthcare, taxes, security). Higher set-up costs make this a riskier option, as well. Creating a subsidiary in a country like India can be quite complicated due to governmental bureaucracies.

A joint venture is another option in which an U.S firm shares control with an Indian partner by making a substantial investment. In a typical offshoring joint venture, partners benefit from the comparative advantages offered by the other. The Indian partner brings knowledge of the domestic market and governmental contacts, while foreign partners offer technical know-how, management methods, and access to overseas clients (e.g. EDS). The third option in offshoring using a vendor based in the U.S with established facilities in India to execute the work (e.g. Syntel, Covansys). The final option is to employ an established vendor based in India to take of the work on behalf of the U.S firm (e.g. Tata Consulting, Infosys, Wipro). This may be the best option for a U.S firm inexperienced in offshoring services to India (Doh, 2005; Doh, Bunyaratavej & Hahn, 2008; Ensign, 2007; Gupta & Wang, 2009; Zaheer, Lamin & Subramani, 2009).

Managerial and Public Policy Implications
In this paper, we presented evidence that indicates increased service offshoring to India from the U.S. It was argued that offshoring is a win-win-win, for the firm and the nations involved. While the focus of offshoring manufacturing was mainly China, the primary destination for offshoring services is India. This is not surprising given the popularity of the English language, presence of millions of educated youngsters, availability of professional business partners, and a stable/supportive government in India.

We strongly recommend that U.S firms consider offshoring more of their services to stay globally competitive with their offerings. No doubt, such a shift cannot occur overnight. Of course, not all services
can or should be offshored. Only half the engineering services jobs can ever to be offshored, and the other half will remain in the U.S forever (Fortune, July 25, 2005, p. 74). We listed criteria to be used in selecting services for offshoring. The major benefit of offshoring services is clearly the significant cost reductions associated with such a strategy. We outlined several strategies that are available for a U.S firm that is evaluating the possibility of offshoring some of its services to India (Levina & Su, 2008; Metters, 2008; Gartner, 2010; Bharadwaj et al., 2010; Farrell, 2006; Lewin & Peeters, 2006).

It should be noted that offshoring to India is not without its limitations. Working with the Indian government may test one’s patience, and the U.S firm must be prepared to wait it out. Corruption continues to be an issue in some of the states within India. Working with an Indian partner may be an effective way to get around some of these issues. India is growing rapidly, and, hence, caution should be exercised in forming appropriate business alliances. Frequent communications with partners and repeated visits to India are needed to make a meaningful assessment of the developing situation.

Besides the challenge in choosing the proper structure, the U.S firm must reflect on ethical issues surrounding an offshoring decision. The U.S firm must provide advance notice of offshoring to its U.S workers. IBM did exactly this. When IBM decided to expand its offshoring subsidiary in India, it gave the U.S workers the option to relocate to India (or else get laid off from IBM). Other ethical concerns should include dealing with bribery in India, global service standards, worker safety, establishing environmental for Indian operations, creating managerial opportunity for Indians, and being a good corporate citizen in India.

Preparing the U.S public for the upcoming surge in offshoring of services to developing nations such as India should be high priority. Multinational corporations in cooperation with the U.S government should work to accomplish this feat. The U.S higher educational system must respond by significant changes to the curriculum to incorporate methods of providing significant comparative advantages to graduates of U.S. colleges and universities. Even as lower-value added service activities are offshored, higher-value added services are being innovated in the U.S, thus contributing positively to an overall standard of living (Jensen 2009, Bunyaratavej, Hahn & Doh, 2008; Tejaswi, 2011; Garner, 2004).

References


