

A STUDY ON THE POTENTIAL OF BRAZIL AS AN OFFSHORING SERVICE HUB

Paulo Roberto Gião

PhD candidate - Graduate Business Administration Program
Universidade de São Paulo – USP - University of São Paulo- Brazil
giao@uol.com.br

Moacir de Miranda Oliveira Júnior

Professor – Postgraduate Business Administration Program
University of São Paulo - USP, Brazil
mirandaoliveira@usp.br

ABSTRACT

The transfer of part of or an entire value chain to a low-cost site—a practice known as *offshoring*—has expanded across various countries in the world. Initially, companies began outsourcing their services to developing countries solely to reduce costs, but today, they also continue this practice in order to have access to a qualified workforce. The goal of this study is to identify Brazil's potential as a service provider for other countries. To this end, a comparison was established between the characteristics of Brazil and India, taking into consideration the drivers that transformed the latter into today's primary offshoring nerve center. It was verified that despite worldwide acknowledgement of the creative and professional capability of Brazilians, the percentage of fluent English-speaking people is insufficient to allow for the expansion of call centers, back-office services and other kinds of offshoring in Brazil.

Key-words: Offshoring, outsourcing, comparative study, Brazil, India.

UM ESTUDO SOBRE O POTENCIAL DO BRASIL COMO PÓLO DE *OFFSHORING* DE SERVIÇOS

RESUMO

A transferência de parte ou de toda uma cadeia de valores para um local com menores custos – denominada *Offshoring* - tem se expandindo por vários países do mundo. A princípio, as empresas terceirizavam serviços para países em desenvolvimento para reduzir custos, hoje, também o fazem para ter acesso à mão-de-obra qualificada. Neste estudo, objetiva-se identificar o potencial do Brasil como provedor de serviços para outros países. Para tanto, estabeleceu-se uma comparação entre as características do Brasil e da Índia, levando em conta os *drivers* (direcionamentos) que a tornaram o principal pólo de *offshoring* de serviços da atualidade. Constatou-se que, embora a capacidade criativa e profissional do brasileiro seja reconhecida internacionalmente, o percentual de pessoas com fluência em língua inglesa é insuficiente para expansão de *call centers*, *back-office* e outros tipos de *offshoring* no Brasil.

Palavras-chave: Offshoring. Terceirização. Estudo comparativo. Brasil. Índia.

1 INTRODUCTION

Service offshoring has been expanding in various parts of the world. Having outsourced services in earlier years to take advantage of low labor costs in developing countries, companies now do so to have access to qualified labor.

Although this is a recent trend, service offshoring has altered the conception of a firm's value chain, given the fragmentation that may occur due to this outsourcing process.

Services are activities that do not give rise to physical products, such as: call center (CC) functionalities, the development of systems for internal use or sale to other firms, projects, conceptual development of new products, and also more sophisticated research and development (R&D) activities.

A number of firms from developed countries have transferred these types of activities to firms in other countries, which, in turn, use the opportunity to become international without incorporating elements characteristic of some models, including the installation of factories abroad and the existence of expatriates within the company.

Although some studies do not present Brazil as a country with the potential to carry out this type of activity because of the language spoken in the country and the country's technological structure, A.T. Kearney Consultancy Group ranked Brazil fifth in its Global Services Location Index in 2007, behind India, China, Malaysia and Thailand, but before Mexico, Singapore, South Africa and Canada, the latter being countries that do not experience language-related problems because they have adopted Spanish and/or English. Moreover, Canada has an excellent technological structure. Thus, the following research questions are established: What are the drivers that made India, Ireland and South Africa world hubs in service offshoring? Does Brazil have the potential for this kind of activity?

This study's bibliographic review describes the main actions taken in India that have led to its being considered today's primary service-offshoring hub. The study projects how service offshoring will behave in India until 2012, and, based on the main drivers identified, compares India and Brazil to estimate Brazil's performance potential in service offshoring.

The main methodology used was the analogy between the characteristics that turned India into an offshoring hub and similar data observed in Brazil, and also, based on this information, the creation of two scenarios and an extrapolation through the year 2012.

2 THEORETICAL FRAMEWORK: SERVICE OFFSHORING

Simply put, offshoring consists of transferring business functions abroad, particularly to emerging economies. Currently, however, this trend has taken other paths. If firms initially adopted offshoring only aimed at hiring low-cost labor to implement standardized IT processes, they now do so to have access to qualified professionals able to conduct more complex activities such as product development engineering, projects and R&D (Lewin & Manning, 2007).

Robinson and Kalakota (2004) define offshoring as the migration of part of or the entire value chain to a place where services are provided at lower costs. This migration is based on maintaining personnel costs as well as integrating information and communication technology which, led by great advancements in IT and telecommunication, enabled the transfer of call center operations to emerging countries with low labor costs.

Bardhan and Kroll (2003) mention two outsourcing waves in the US market, the first involving blue-collar manufacturing jobs, and the second the white-collar service sector. In many industrial sectors, the offshoring of US industries and the respective loss of blue-collar jobs are attributed to the globalization of activities or the partial outsourcing of production to developing countries like Taiwan, China, South Korea and Malaysia. The software industry was, however, the first to transfer services abroad as a white-collar activity, particularly to India.

In the 1990s, the rapid growth of the Internet and transnational telecommunication networks as well as the liberalization of emerging markets created prime conditions for a major burst of offshoring.

Service outsourcing is much simpler and faster than manufacturing outsourcing because it requires fewer resources and less space and equipment. For this reason, Bardhan and Kroll (2003) alert: jobs involving sitting at a table, using a telephone and working with a computer are at a serious risk of being transferred to another country.

The growth of the offshoring process has captured the attention of large universities and governments interested in identifying the nature of this process and its impact on their economies. A recent survey conducted by Bain (Gottfredson et al., 2005) showed that 82% of middle-and large-sized firms in Europe, Asia and North America have outsourcing agreements of one kind or another, and that 51% of them use third parties in other countries (offshoring).

According to estimates by McKinsey and NASSCOM (2007), the international trade of IT services and/or IT-support-related services would reach \$1 trillion by the end of 2008. On a similar order of magnitude, the European IT Observatory (2004) and Gartner (2004) estimated that the IT international market would reach, respectively, 894 and \$663 billion in 2003 (UNCTAD, 2004). A number of these transactions occur among members of the same corporation located in other countries, but part of this trade takes place among contracted hired (outsourced) companies.

Offshoring represents a threat to some and an opportunity to others, because transferring production or services to emerging countries means reducing jobs in developed countries (Levine, 2004). For the last five years, many companies in North America and Europe have used this strategy (offshoring) to reduce costs, thereby becoming more efficient and gaining a stronger competitive advantage.

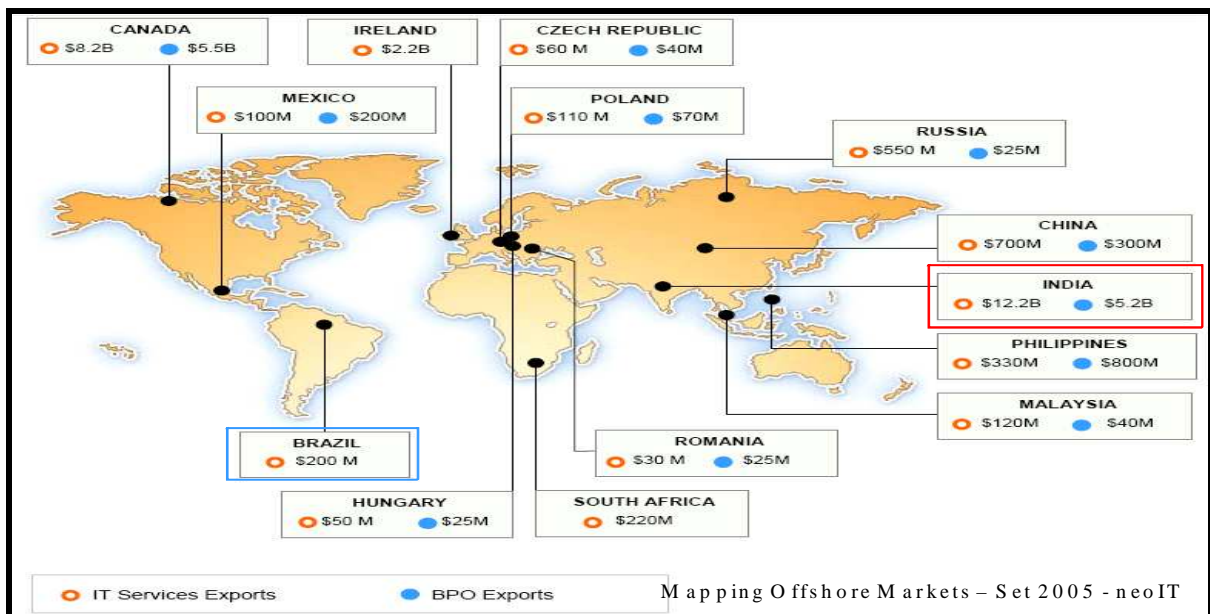


Figure 1: Service billings generated by selected countries

Source: NeoIT (2005)

Within this scenario, as shown in Figure 1, India has set itself apart in service offshoring with billings of some \$17.5 billion, followed by Canada and Ireland with \$13.7 billion and \$2.2 billion, respectively (neoIT, 2005). China also stands out with \$1 billion, showing that, at least so far, its strong capacity lies in manufacturing production and not in service provision.

Because it is an emerging country and the largest service-export hub, this study considers India the main point of reference from which to analyze Brazil's level of attractiveness. To understand what makes a country or region interesting for service offshoring, it is necessary to identify the drivers mentioned in the literature that attract this activity. Farrell (2006) highlights the following drivers:

- ✓ workers' cost, infrastructure, among other factors.
- ✓ availability of abilities and quantity of workers
- ✓ environment, support from local government, regulation, political stability, quality of life, etc.
- ✓ potential market
- ✓ quality of infrastructure, telecommunications, IT, energy and transportation

According to Power et al. (2006), the main drivers are these:

- ✓ access to resources and knowledge
- ✓ focus on essential competences
- ✓ cost reduction
- ✓ global dissemination of knowledge
- ✓ IT sophistication
- ✓ emergence of labor force with global knowledge

According to Robinson and Kalakota (2004), the drivers for a rapid growth of service-and-production offshoring are as follows:

- ✓ continuous cost pressure on US and European firms
- ✓ rapid decline in expenses associated with communications and IT
- ✓ significant improvements in Internet reliability

- ✓ an increase in available offshore suppliers with better capabilities
- ✓ access to low-cost, high-quality workers
- ✓ a business model that has been proven successful by major firms such as GE and American Express.

As one can observe, the above-mentioned authors consider cost reduction one of the important factors for service offshoring. Figure 2 compares the costs of *onshore* (within the country) and *offshore* operations. Low-cost labor cost reductions are the most significant, reaching 70% of the total expenses incurred by onshore operations. Figure 2 also demonstrates that other costs emerge when firms transfer operations to other countries.

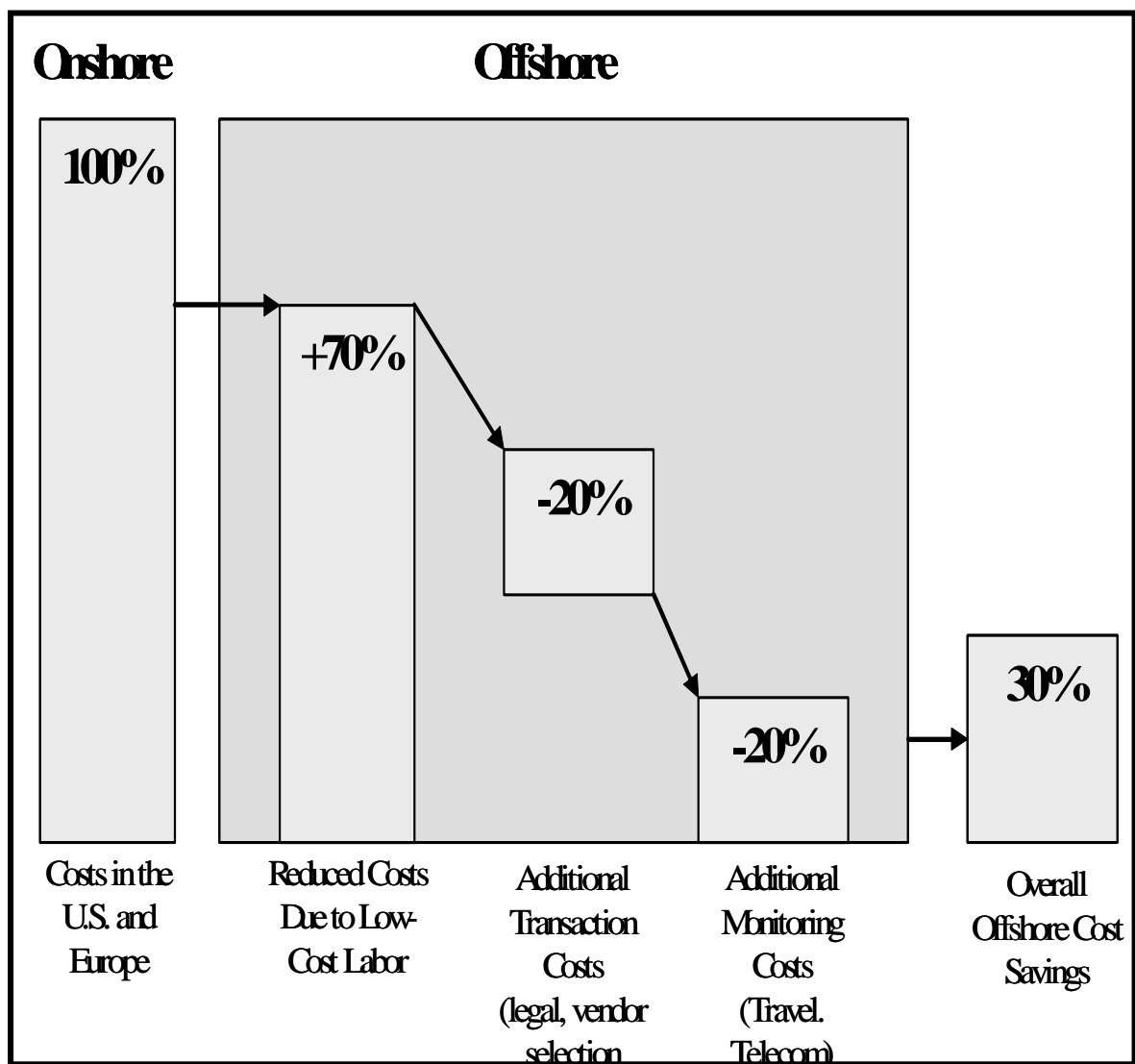


Figure 2: Savings related to operations offshoring

Source: Robinson and Kalakota (2004)

Table 1 shows an important side of service-offshoring activity, insofar as it further examines the issue of salaries, presenting the reference values for salaries of call center programmers and operators. It is observed that, in India and China, programmers get \$7,500, whereas in the United States they receive 65,000 on average. It would be possible to hire almost ten programmers in India or China for each programmer allocated in the United States. The situation of call-center operators is similar.

Table 1: Average salary for call center programmers and operators in selected countries

Typical annual salary ranges for offshore professionals

	Programmer (2-3 yrs. experience)	Call Center Agent (2-3 yrs. Experience)	Programmer AVG.
India	\$ 6,000 to \$ 9,000	\$ 5,500 to \$ 7,000	\$ 7,500
China	\$ 5,500 to \$ 9,600	N/A	\$ 7,550
Philippines	\$ 6,500 to \$ 10,900	\$ 7,600 to \$ 9,200	\$ 8,700
Russia	\$ 7,000 to \$ 13,000	N/A	\$ 10,000
Ireland	\$ 21,000 to \$ 28,000	\$ 16,000 to \$ 25,500	\$ 24,500
Mexico	\$ 18,000 to \$ 23,000	\$ 3,000 to \$ 15,000	\$ 20,500
Malaysia	\$ 8,700 to \$ 12,800	N/A	\$ 10,750
Brazil	\$ 9,000 to \$ 16,000	N/A	\$ 12,500
Vietnam	\$ 2,850 to \$ 4,100	N/A	\$ 3,475
Singapore	\$ 27,300 to \$ 34,600	\$ 22,300 to \$ 28,400	\$ 30,950
Canada	\$ 25,000 to \$ 50,000	\$ 18,600 to \$ 28,300	\$ 37,500
United States	\$ 45,000 to \$ 85,000	\$ 25,000 to \$ 40,000	\$ 65,000

Note: Salary range depends on supplier (tier 1, 2, or 3) and City of Operations (tier 1,2, or 3)
 Source: NeoIT (2005)

Even though some overhead results from operating abroad (transaction costs) and also a possible technical lag among professionals of various countries (although this grows smaller and smaller), firms can provide some types of services by hiring one or several people, and still save money. Table 2 presents further examples of differences of remuneration between the United States and India.

The availability of professionals in the most varied skill areas, in various countries, is also an important factor in attracting service offshoring. The Deutsche Bank (2004) reports that whereas only 25,000 IT professionals graduate each year in the United States, India graduates 120,000, and China 250,000. According to Gottschalk and Solli-Saether (2006), the same occurs in relation to the training of engineers: whereas 90,000 engineers are graduated a year in the United States, China graduates 350,000.

Another relevant factor for most offshoring operations is the availability of people proficient in the English language. In analyzing the movement of offshoring activities, Kinnear (2005) cites a survey conducted in 1989 that identifies the following as attraction factors for IT and IT-related service offshoring: English-speaking labor force; degree of literacy; costs with low and competitive salaries; and a good communication network with the United States and Europe, among others. According to the data from this survey, in 1989 the Philippines ranked third in the world in quantity of English-speaking people.

Also, according to an article published in *The Economist* (2003), the Philippines make a good destination for service offshoring because 300,000 inhabitants speak English and graduate each year. Despite this fact, it is difficult to compete with India, where 2.2 million people graduate every year and 80% speak English.

As Gartner (2002) states, India is the dominant country in service offshoring, a fact credited to the existence of over 900 firms that develop software, 70,000 new IT graduates every year, and many of these professionals' fluency in English.

Table 2: Comparison between the man/hour cost for some job positions, in the United States and in India (2002-2003)

OCCUPATION	EUA	INDIA
Call center operator	\$ 12.57	< \$ 1,00
Legal assistant	\$ 17.86	\$ 6.00 - \$ 8.00
Accountant	\$ 23.35	\$ 6.00 - \$ 15.00
Financial analyst	\$ 33.00 - \$ 35.00	\$ 6.00 - \$ 15.00

Source: http://www.berkeley.edu/news/media/releases/2003/10/29_outsource.sht.

Newman (2006) relates that Microsoft chairman Bill Gates—willing to benefit from the facility and competitiveness acquired by these countries—intends to double his company’s workforce to 7,000 Indians and invest \$1.7 billion in India. The author also mentions that IBM added 10,000 workers in its facilities in India, and that this number could be 50,000 at the end of 2006.

3 METHODOLOGY

In order to reach the intended goal, the following methodology was conceived and applied to the study. A literature review was conducted to characterize the offshoring process, differentiate products and services, identify the drivers that led India to stand out as the main service provider compared to other countries, and trace the profiles of some Indian firms that specialized in the offshoring process. The identification of what firms in some countries are accomplishing shows which services already have been outsourced and which can still be outsourced to other countries. Figure 3 presents a systemic diagram of the survey.

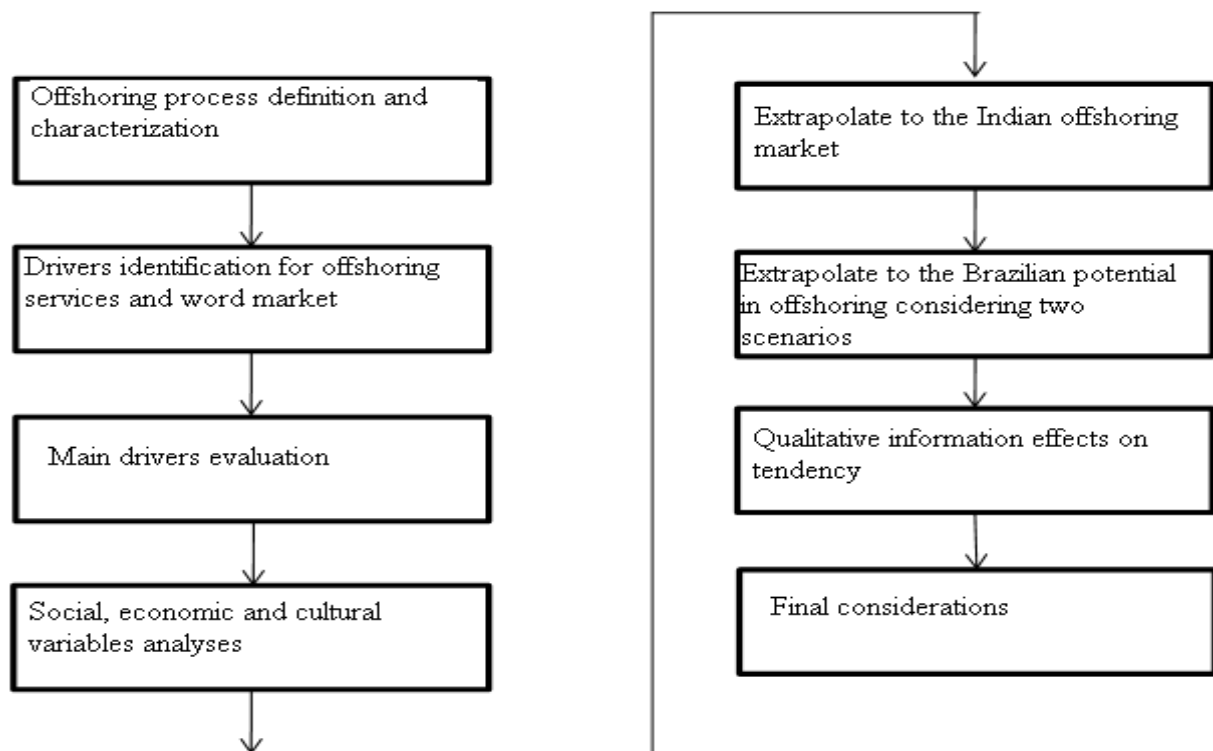


Figure 3: Systemic diagram of the methodology used

Source: Created by the author

Variables were categorized as related to Brazil's and India's economy; politics; education; and technological, social and cultural infrastructure, so as to identify and compare elements that can support the drivers for attraction of offshoring. Updated information was sought concerning the time horizon set for this work, 2012.

Because of the performance presented and the quantity of information available, a calculation by extrapolation was initially performed with the primary data relative to India. Next, a calculation by extrapolation was performed with the data referring to Brazil, and two scenarios were traced based on the identified main drivers.

After these steps, calculations by extrapolation were performed for service offshoring in both countries. At this point, qualitative information obtained becomes very significant in its impact on the model, lest the study be limited to the simple definition of a tendency line. Two other lines are added to the initial tendency, able to be identified as a more optimist and a more pessimist case. The steps of estimates and extrapolation not conducted due to the lack of some variables were considered limitations in this study.

4 ANALYSIS, OBSERVATIONS AND PROJECTIONS

4.1 GENERAL ANALYSIS

The theoretical framework presented here demonstrated that what leads a country to be a service offshoring hub is a set of economic, social, and cultural variables as well as telecommunications and IT infrastructure (internal and external). It also identified India as the biggest service offshoring hub today. For this reason, India served as reference for calculating extrapolations for Brazil.

Table 3 presents a comparison between Brazil and India in terms of physical and economic data as well as indicators of the capillarity of information technology and telecommunications. The data in blue represent the higher the better; data in red represent the higher the worse.

Columns 3 and 4 represent, in absolute numbers, the quantity of inhabitants corresponding to the chosen indicators. One can observe that, although presenting many percentage indices better than India's, Brazil is overcome by India's absolute values due to India's population of over one billion people.

The first point analyzed the GDP, similar in both countries. According to Ernest and Young (2006), although Brazil's GDP is bigger, India's has grown at superior rates and will soon overcome Brazil's. A report by Goldman Sachs (2003) estimates that, in 2010, Brazil's GDP should reach \$668 billion and India's \$929 billion.

Brazil's current per-capita income is five times higher than India's, and even the forecasts made by Goldman Sachs (2003) do not show India's per-capita income surpassing Brazil's (in 2050, Brazil: \$26,592 and India: \$17,366).

Table 3: Brazil and India—selected population, economic, social and infrastructure data

SELECTED DATA	BRAZIL		INDIA	
Population (thousand)	183.913		1.087.124	
GDP (million US\$)	882.500		805.700	
PR capita income (US\$)	3.225		626	
% Services in GDP	64		54.1	
Poverty (% US\$ 1 per day)	7,5	13.793	34,3	372.884
% Urban population	84	154.487	29	315.266
% Birth rate	2		2.4	
% Mortality rate	7		9	
Life expectancy	71		64	
People with HIV (thousand)	660		5100	
% Literacy rate	88	161.843	61	663.146
% fixed lines	22.3	41.013	4	43.485
% cellular lines	26	47.817	2	21.742
% PC per person	7,4	13.610	0,7	7.610
% Internet users	10,2	18.759	1,7	18.481
% TV sets	36,9	67.864	8,2	89.144
FDI entry (2004) Bi	18.166		5.335	

Source: UNCTAD and others (2005)

Some of India's social problems are more serious than Brazil's, but, despite this fact, India is the main service offshoring hub. India's poverty and mortality rates, for instance, are worse than Brazil's. Whereas 7.5% of the Brazilian population survives on less than one dollar a day, in India 34.3% of the population is below this poverty line. These 34.3% represent over 370 million people (double the population of Brazil!) who need to be rescued from this condition, which requires heavy public and private investments.

The rates regarding literacy, fixed and mobile lines, PC per person and Internet users are better in Brazil than in India in percentage values. The penetration of telephone lines in Brazil is 22.3%, whereas in India it is only 4%. In absolute numbers, however, Brazil has a little over 41 million accesses, whereas India counts 43 million.

The problems in Indian society are much more serious than Brazil's concerning health, economy and technological inclusion, as well as religious issues. Brazil's economic, social and infrastructural situation is superior to that of India. According to these indicators, Brazil should be a more attractive offshoring hub than India.

In analyzing the newly released Human Development Index (HDI) of the United Nations (2007), we observe that Brazil ranks 70th, whereas India ranks 128th. This index is composed of three sub-indices—life expectancy, education and GDP—which are, respectively, 0.779, 0.883 and 0.740 in Brazil and 0.645, 0.620 and 0.591 in India. In this respect, it is also clear that Brazil enjoys better conditions than India, even concerning the education index.

Thus, what seems to be the great differential of India over Brazil, a little outside the margin of the literature presented, is cheaper workforce, quantity of available professionals and the English language. Besides that, India as a whole is not a country totally ready and dedicated to service offshoring, but it presents clusters (specific regions) with all (or almost all) of the characteristics identified in the literature. The Deutsche Bank (2004) makes this distinction when it states that 85% of the billings from exports in IT services originate in thirteen urban clusters. This is important not only between countries, but also when countries or continents are grouped. One such example is shown in the study by A. T. Kearney (2007), which proposes a ranking for countries in service offshoring, but, in taking South American countries into consideration, it places the Spanish

language as this region’s main attraction factor, in detriment to Brazil’s presence which, at least in economic terms, represents 50% of the region.

Finally, with relation to the mother tongue, great differences are observed: Brazil has only Portuguese as its official language, whereas India has 22 official languages—among which English is not found—and also 844 dialects. It is hard to understand which the official languages in this country are and how they are defined. In fact, it is so hard that there is a Department of Official Languages (DOL) within the Indian government’s Ministry of Internal Affairs. However, due to British colonization until 1947, English is spoken by most of the population and used as a business language.

4.2 EXTRAPOLATIONS FOR INDIA

Figure 4 depicts the data observed for service offshoring in India over the 1998–2007 period, according to survey conducted by NASSCOM (2007). One can observe that the quantity of people involved multiplied almost tenfold over a ten-year period. The contribution of this activity to the GDP was also multiplied by 4.5 over the same period. All this shows the potential that offshoring may have in the internationalization process of a country, with the additional advantage that the country explores the external market while retaining wages and workers in the national territory.

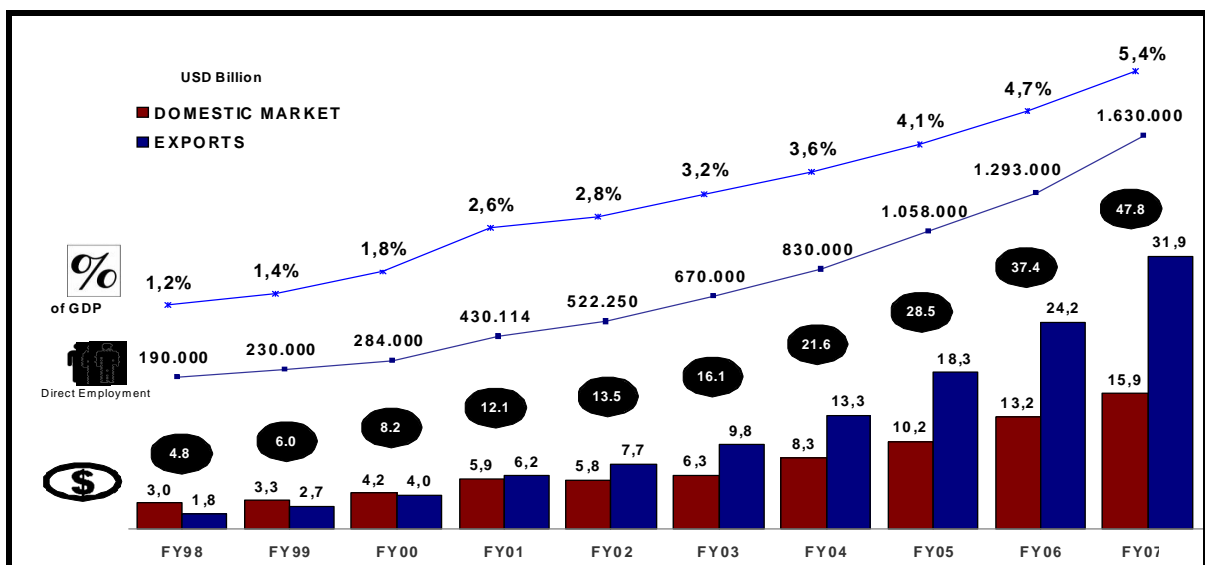


Figure 4: Evolution of the service offshoring market observed in India

Source: NASSCOM (2007)

Finally and most importantly, the blue and red bars represent the revenues generated in the decade presented. The service export market is twice as big as India's internal market, and this revenue is above \$31.9 billion for the year 2007. The curve shows an exponential growth in service exports, and for this reason they are also considered in the extrapolation.

Figure 5 presents the extrapolations made for the Indian market, with three extrapolation curves, considering linear, exponential and third-degree polynomial growth. In the three cases, R2 values were higher than 0.9, showing that the three could be used, but that better refinement would lead to more justifiable scenarios. Even so, qualitative observations are necessary to better qualify to or disqualify the extrapolations. The linear trend curve presents the lowest R2 value, 0.966, and the inclination observed in the data collected would be lost, with the straight line basically considering the 1998–2004 period, and the equivalence between an exponential and a linear behavior would be hardly perceptible. In practically neglecting the years 2005 to 2007 in the extrapolation, the exponential growth is compromised, and even an estimated value for the year 2008 is inferior to that of 2007. For this reason, despite having a relevant R2 value, this tendency would characterize the growth behavior that occurred in the revenues with service offshoring.

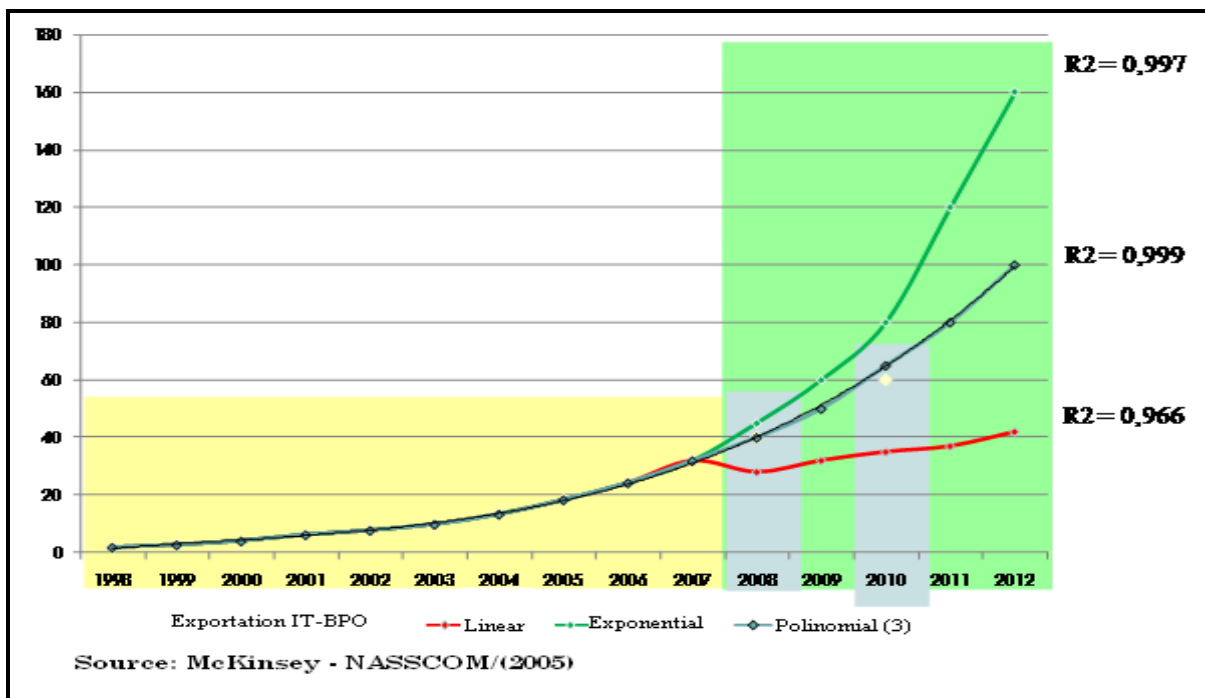


Figure 5: Extrapolations for the Indian market of service offshoring

On the other hand, the exponential extrapolation which also showed a significant R^2 value (0.997) shows a growth five times superior to the value obtained for the year 2007 (160 billion over the 31.9 observed). This growth rate was observed in the first 10 years (1998–2007) of Figure 5. That may even occur, but it shows exactly the problem of exponential extrapolation given by the exponential function for the desired period.

Finally, a third-degree polynomial function was used to better adjust to the behavior that occurred in the 1998–2007 period, although we remain aware that, although it is mathematically possible to adjust a curve to the points, in practice such flexibility is not possible, so its meaning is doubtful, not to say impossible. Fortunately, this curve was positioned between the linear and exponential extrapolations and can serve as a middle term between them.

The assessment of the values of the linear and exponential extrapolations for the year 2012 show a variation in the values of almost four times, from 42 billion to 160 billion. It would therefore be hard to define a future behavior for revenues in service offshoring within such a wide range. In this case, the polynomial extrapolation may be useful.

This being the case, the study uses the value obtained by the polynomial for 2012 (100 billion) as the reference value between the two previous curves, and, to this value, it attributes a 20% variation upward and downward. This interval can be considered as the tolerance or prediction interval, as occurs in engineering projects, in which the tolerance interval varies according to the finality. In electrical engineering, for instance, it is possible to work the calculation of circuits with values by the order of 1%. Due to its commitment to maintaining safety and reducing waste of materials, civil engineering uses a value of 10% in structural calculations.

Because this work deals with variables originating in the behavior of a market with a more flexible forecast, the value of 20% is adopted. Thus, the estimated range of revenues for the Indian market of service offshoring for the year 2012 is between \$80 and \$120 billion. A composition between the extrapolations made and the new ranges defined is presented Figure 6. The extreme values in the range, 80 and 120 billion for the Indian market, will be used in the creation of two scenarios for Brazil.

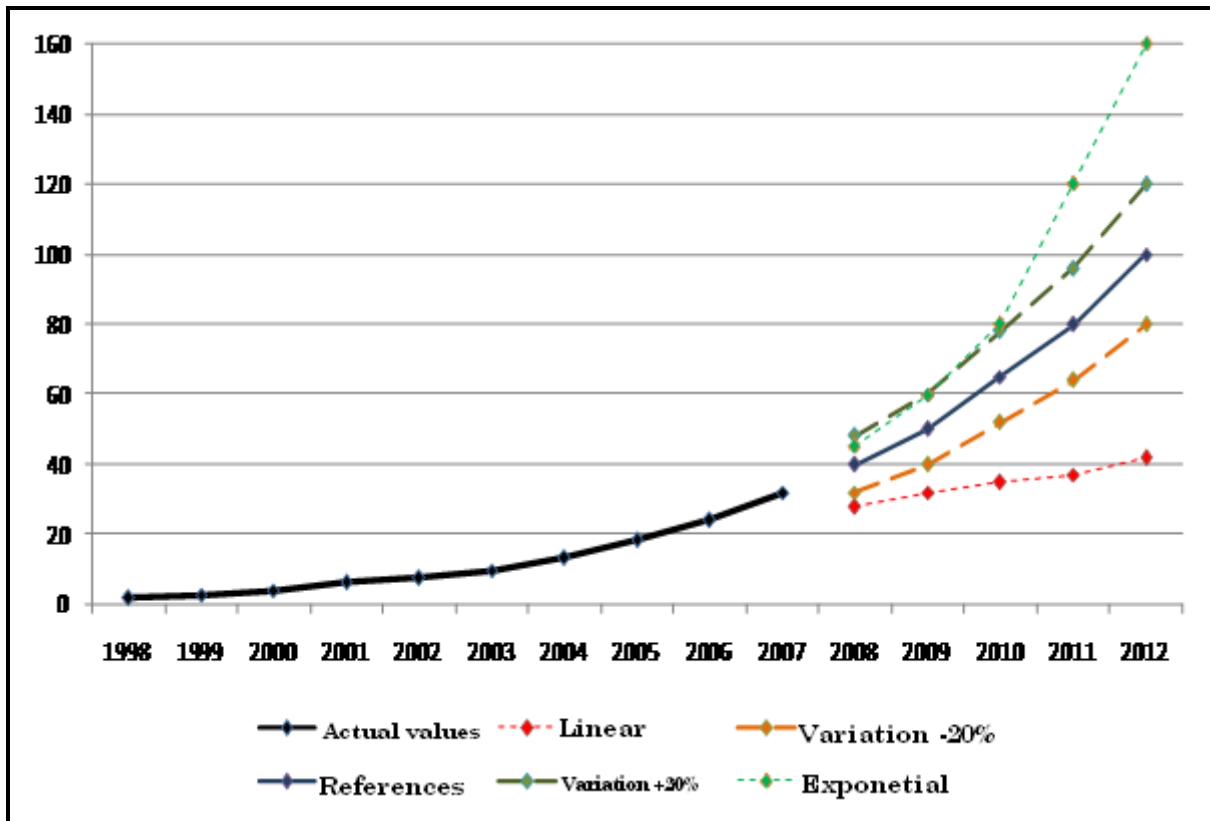


Figure 6: Estimates for the Indian market of service offshoring, including reference values with +/- 20% variation

Source: Created by the authors

4.3 EVALUATIONS ABOUT BRAZIL

The analyses showed that India has qualifications for service offshoring and is very competitive both in terms of competences and labor costs. Brazil also presents competitive salaries in the world scope and stands out for the competence, creativity and flexibility of its workforce, mainly in the field of IT and IT-related services. Thus, the great differential presented by India seems to be a higher competence in the English language, influenced by British colonization of India through 1947, which contributed to this language's dissemination and to a greater integration between India and the rest of the world.

It is therefore verified that the lack of English-speaking professionals can be seen as the highest hindrance for Brazil to compete in the international service market. This corroborates the statement made by the Brazilian Association of Exporters of Software and Services—Brasscom (2007):

New technologies, new opportunities all over the world. But in order to take these chances, it is necessary to prepare. Is Brazil ready for this challenge? The challenge is to address the country's lack of qualifications. Job vacancies are not filled because candidates cannot speak English. India is the main supplier. But because the demand increases at a fast pace—40% per year—Brazil has a large space to fill. "From today until 2010 we need to prepare 100 thousand professionals so that we can export some US\$ 5 billion, R\$ 10 billion. We now export US\$ 1 billion, more or less," relates Antonio Carlos Gil, Brasscom's CEO. There will be no lack of clients. The big problem to reach this point is qualified labor. Today, the companies in the sector need 20 thousand workers and cannot find them. One factory signed two contracts with foreign banks last year. It managed to hire 300 employees, but it still needs another 500. And it is hard to find them. "Our alternative is to develop, the market is asking, it is growing 40% per year, so we have to move now to make this happen," points out the director of the business unit Antonio Claudio do Nascimento. The lack of English-speaking professionals in this area is really critical.

Based on this quote by Brasscom (2007), on the scarce data on Figure 1, and applying the same methods used for India, the expectations for Brazil were estimated and are presented in Figure 7.

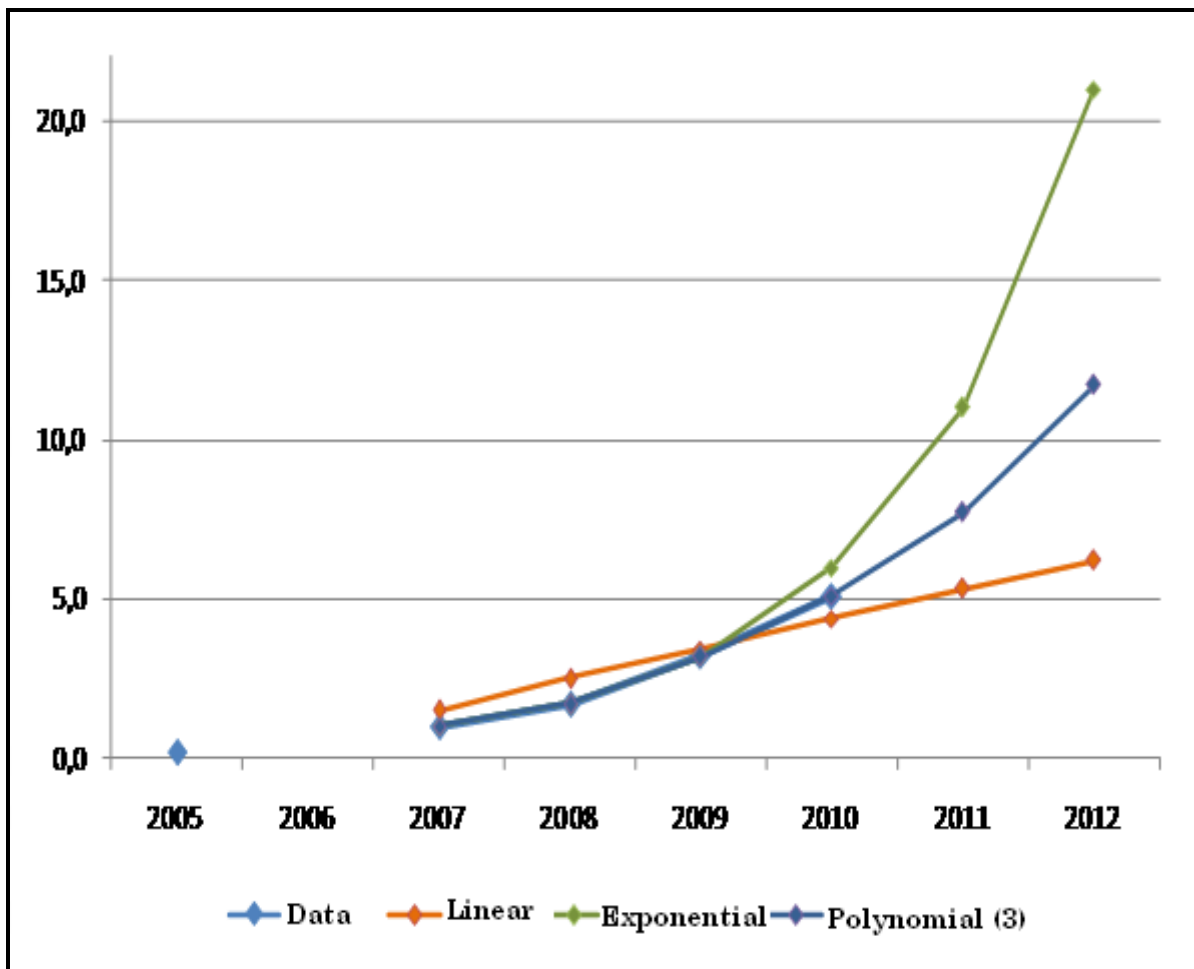


Figure 7: Extrapolations for the Brazilian market of service offshoring

Source: Created by the authors

The data available to measure Brazil's present trend align with R2 for the linear, exponential and third-degree polynomial growth of 0.882, 0.988 and 0.999, respectively. With the same considerations made for the analysis of India, it is possible to use the polynomial line as a reference because it is between the other two, and, in making the same estimates of 20% upward and downward, it would be possible to reach a range of \$9.36 to \$14.04 billion for the year 2012.

These would be the forecasts should the current policy of education and development continue. However, using English language as the main variable, two scenarios could be built for Brazil in capturing the opportunities in service offshoring.

Scenario 1—Continuity: The country will maintain its current economic and world-integration policy with the international market, in a gradual manner and with the products and services it has or which are naturally developed.

Scenario 2—Internationalization: The country will surprise the world as a market without frontiers, to be explored through the qualifications it possesses and others that can be developed to better integrate into world trade, taking the opportunity to offer what the world needs and not what Brazil naturally has. In this case, there will be priority, incentive and seriousness in the teaching and development of the English language as a required condition to explore the world market.

A possible driver for the occurrence of Scenario 2—well anticipated—is the hosting of the 2014 World Cup in Brazil, because this will require more adequacy of the Brazilian infrastructure in all aspects, particularly in competence with the English language, essential to better assisting foreign visitors to Brazil during the event. It is worth keeping in mind that services to tourists will be necessary not only in stadiums, but also in the hotel network, entertainment areas, the travel sector, and within neighborhoods—tourists being likely to take the opportunity to visit other places when they are not in the large centers.

This study had to deal with the difficulty of estimating a reasonable value for the quantity of people who speak English in Brazil. Thus, the percentage of Brazilians with higher education was used. Obtaining this datum was not an easy task either; it was only obtained in the Yearbook of Social and Professional

Qualification of the Inter-Trade Union Association for Statistics and Socio-Economic Studies—DIEESE, published in 2007, according to which, 8,356 people had a college education level in 2004. Considering this number of graduates and imagining that the English speakers are among them, the current service offshoring values were obtained. Thus, estimating a percentage of English speakers becomes a guessing game, insofar as no reference about this point was found in the literature and in the documents consulted.

Therefore, the continuity scenario may take the identified range above for the forecasts about the Brazilian market. To reach the internationalization scenario, it would be necessary to improve language teaching across Brazil. Or perhaps, even prioritizing English over other subjects would be interesting, so that the identified revenue range could be moved as a whole upwards, thereby increasing Brazil's participation in this type of activity.

5 FINAL CONSIDERATIONS

The goal of this work was to identify Brazil's potential as a service provider to other countries. To meet this objective, the study compared Brazil with India, currently the world's major service-offshoring provider.

Though recent literature on the subject points out that economic, political, social and technological issues should be taken into consideration whilst comparing data about these countries, it was found that, in these areas, India has many more problems than Brazil and, despite this fact, consolidates itself as the main exporter of services.

Perhaps the smallest—or best—unit of analysis should not be the country, but the clusters specialized in the activity one intends to develop in these countries, as occurs in the regions of Bangalore and Mumbai in India, and regions connected to São Paulo, Campinas and Hortolândia in Brazil. A cluster can also be understood as a group's knowledge or ability to carry out certain activities. In this sense, fluency in the English language has seemed to be the main attraction factor (driver) for India to position itself as a hub in this type of internationalization.

If, on the one hand, Brazil is recognized for the creativity and capacity of its people and has competitive salaries—although not as competitive as India’s—on the other hand, a minimum percentage of its population is fluent in English.

It is worth mentioning here that, despite this fact not being widely disseminated, service offshoring is present in Brazil, and in some case, explored by foreign and even Indian firms. An interesting case is that of TCS, established in Brazil in 2002 (Embassy of India, 2006). TCS Brazil was created to blend development and IT implementation methodologies of the Indian company with the Brazilians’ creativity, flexibility and market knowledge. This led TCS Brazil to be the first firm in Brazil to obtain the maximum certification (level 5) for IT services: CMMi (Capability Maturity Model Integrated) and PCMM (People Capability Maturity Model). The firm employs over 1,700 IT professionals in development centers located in the cities of Brasília, Campinas and Alphaville (SP). Campinas is TCS Brazil’s second largest global-development center in the world.

This work has aimed to make a forecast for Brazil through 2012, based on international data, mainly from India, and the due comparison that could be made (mainly the shape of the growth curve) for Brazil. In an effort to go further, two scenarios were created for the year 2012, and their respective resulting revenues were estimated.

The first, called Continuity, shows Brazil in its current course, without a stronger emphasis on integration with the world and participation in the new business opportunities globalization presents, so an increase in the number of people who can speak English would be incremental and no effort would be made to change this characteristic.

The second scenario, called Internationalization, would be triggered by the occurrence of the World Soccer Cup in 2014, which would require a higher development of labor qualified in English to service tourists in various locations. In this case, a joint effort between the government and private-sector entities would be necessary to bring competence in the English language to the highest possible number of people. This effort would not be lost because, after the World Cup, these people would be able to work in service offshoring (call centers, back-

office, IT, etc.), and would be in a better position to build capacities in any other requiring English. In being able to access information in English via the Internet, for example, Brazilian citizens would be able to land better jobs with better salaries.

This study has some limitations. The simple fact that it presents future considerations about an activity that is little known and little developed in Brazil generates a reasonable level of uncertainty. Considerable imprecision stems from the estimates made in order to compare the number of English-speaking people in Brazil to those in India. It should be emphasized that it was easier to obtain data about India than about Brazil, which required interpretations and estimates also likely to disseminate error.

Finally, the data obtained about both Brazil and India would have to be confirmed together with responsible sources to prevent them from being “masked” by associations or firms willing to maximize their business or please clients.

These limitations are also sources of instruction for similar future work involving the obtainment, treatment and estimation of projections.

This work should not be understood as Brazil’s attempt to equal or surpass India in the provision of services to other countries. It only assumes that Brazil can be more competitive in the global market in service offshoring through an enhanced development of its capacities, particularly in the English language, just as Goldman & Sachs’s study estimates that India will be the second country in the world in GDP due to its gigantic population and potential consumer market.

This work enabled the articulation of two important learning axes: to forecast Brazil’s participation in service offshoring, and to use tools and techniques so that the forecast could be well made. This study also included the exercise of seeking, classifying, analyzing and filtering information.

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